Hungry Cities Report

Maputo, Mozambique

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1. Introduction

1.1 Overview of Maputo

Maputo is located in the South Eastern African nation of Mozambique. The Indian Ocean lies to the East of Maputo and provides an important means of transportation for this port city. The city was originally founded as a Portuguese military fort was named Lourenço Marques after the early Portuguese explorer (Barros et al., 2014).

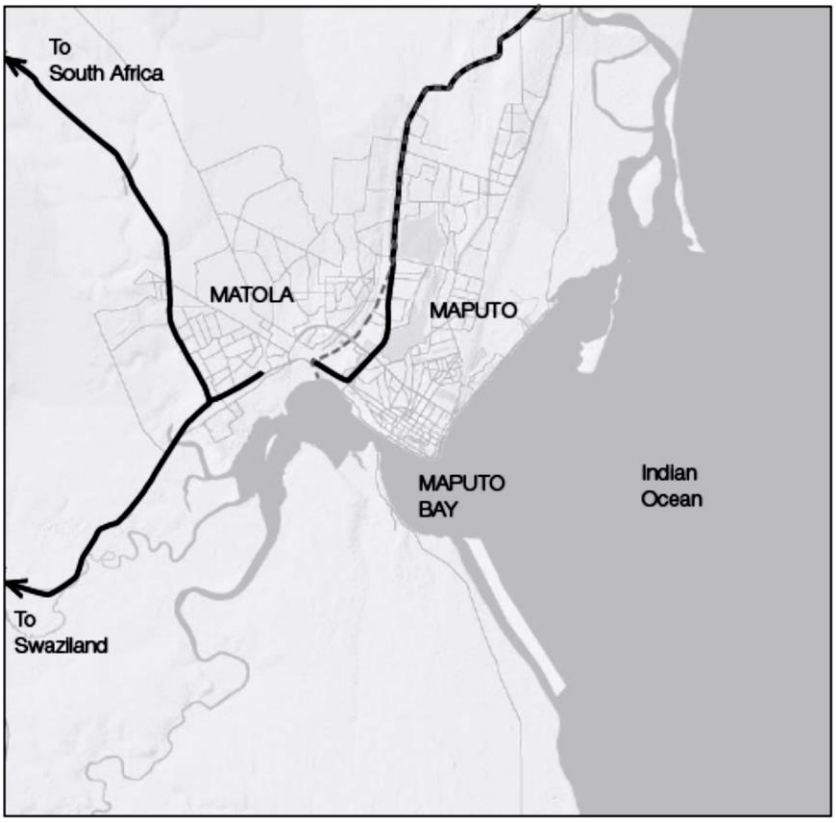

Figure 1. Map of Maputo (Raimundo, Crush, & Pendleton, 2014, p. 2)

1.2 Key themes related to food in Maputo

Maputo is associated with unique food security trends. While the majority of households in Maputo still source their food from markets, supermarkets are an increasingly popular food source. In addition to these formal sources, many households across the city are also engaged in urban agriculture or livestock rearing within the city. This divergent image of the Maputo food system represents the nuanced relationship between formal and informal food sources within this coastal city. The informal/formal divide in Maputo also seems to influence the vulnerability of households to food insecurity and access to key resources like water and electricity.

1.3 Summary of the Hungry Cities Project

The Hungry Cities Project is a partnership across 7 cities around the world. The focus of the project is to better understand the food system, particularly the informal food system, and its relationship to informality and inclusive growth. As a part of this project, survey research is being conducted in each city by partners in the Hungry Cities Project.

1.4 Purpose of the report

This report is a summary of the household food security survey conducted in Maputo in 2014. This report provides an overview of the sampling strategy used in this survey as well as some of the scales measured in this survey. The purpose of this survey, and this report, is to provide background information on Maputo and to inform the future research being conducted in Maputo in the following years of the Hungry Cities Project. In addition, many of these scales were designed to be comparable with other city surveys being carried by the Hungry Cities Project.

1.5 Overview of the document layout

This report contains seven sections. The first section provides an introduction to the Maputo city survey as well as the Hungry Cities project. This section also describes the sampling strategy which was used in the Maputo city survey. Section Two reviews several demographic features of the household sample collected in Maputo. This section includes summaries of the household income and expenditure, dwelling types, household sizes, household member ages, work status, household food responsibilities, food consumption, education of the household members sampled in this survey. Section three provides a summary of the food security measures used in the Maputo city survey. These measures include the Household Dietary Diversity Score (HDDS), the Household Food Insecure Access Scale (HFIAS), and the Months of Adequate Household Food Provisioning (MAHFP). This section also provides cross-tabulations between these measures and other variables associated with household food security (including food price changes, household income, structure, and food hazards). Section four provides descriptive statistics on the survey scales related to food sources, frequency of accessing food from the different food sources covered by the survey, food purchases and opinions regarding supermarkets and urban agriculture. The fifth section of the report reviews the distribution of Lived Poverty Index scores in the sampled household population in Maputo. This section also cross-tabulates this scale with the Household Food Insecure Prevalence score. The final section (section 6), provides sample descriptive statistics regarding social grants (the types and amounts received by the surveyed households as well as the reported uses and significance of those grants to the households surveyed). The report concludes with recommendations and limitations regarding the survey statistics.

2. Methodology

2.1 Overview of the Hungry Cities survey

The household survey was a city-wide survey of both Maputo. The sampling strategy was meant to provide as representative a sample as possible given the logistical constraints for this survey. That said, the representativeness of this survey cannot be guaranteed. Given that the sampling strategy on the ground was systematic sampling (and not true random sampling) further limits the extent to which this data can be interpreted as representative. In summary, while the sampling methods used in this investigation were designed to be city-wide and may be representative of Maputo, it is not possible within the confines of this report to guarantee that representativeness.

2.2 Sample size information

Based on the budget and time available, the survey sampled 2071 households in Maputo.

2.3 Sampled areas of the city

The 2071 households cover all the 19 wards in Maputo. The following map demonstrates the spatial distribution of all the samples. The sampling for this survey only covers districts 1-5 (the remaining Maputo districts were not accessible given the logistics for this survey).

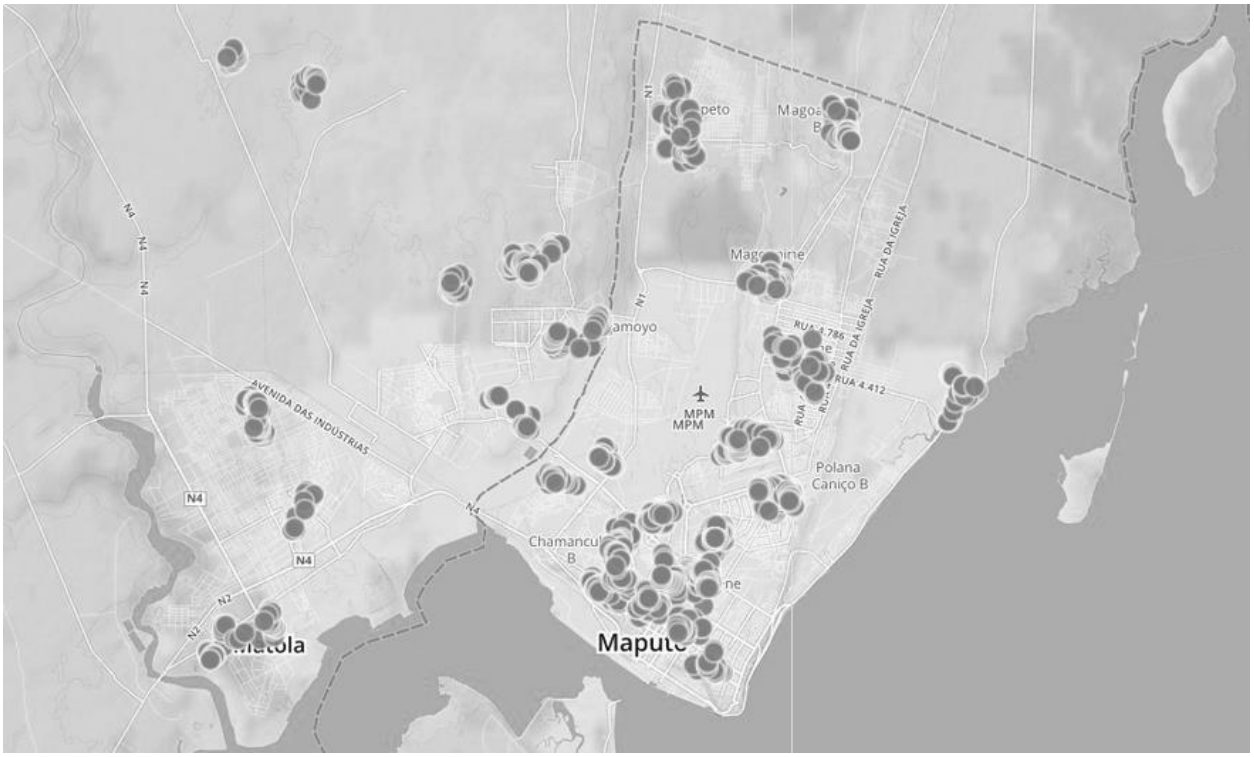

Figure 2. Spatial distribution of surveys in Maputo (indicated by the dotted line)

2.4 Sampling strategy

The household survey was a city-wide survey of both Maputo. The household survey used the Hungry Cities household food security survey which was also the long-form AFSUN survey.

The sampling strategy was a two stage process: first 19 wards (barros) were randomly selected from Maputo. Within Maputo, the sample sizes were determined using stratified proportionate sampling (the sample sizes drawn from each ward was proportionate to the size of each ward relative to the total population of either Maputo). These sample size estimates were provided by a statistician working for the Mozambique government. On the ground, enumerators surveyed every third household along their sampling routes. The starting point and route for each enumerator within each ward was determined by each enumerator team supervisor (ensuring that the routes did not overlap). The enumerator team was composed of 25 enumerators divided into three teams which were led by 3 enumerator supervisors. The entire survey of Maputo was completed in 9 days of fieldwork.

2.4.1 Limitations on Statistical Interpretations

Given the design of the research which informed this report, it is not possible to make any conclusions about causal mechanisms. For security reasons, the survey only took place during daylight hours, which may have affected the kinds of responses received from members of the household (working members may not have been present).

2.5 Section C: Household Roster

2.5.1 Sample Distribution of Household Size

The average household size of our surveyed households in Maputo was 4.83. By household members we are referring to people who eat from the same pot and it includes children, babies and members of the household who are away working (migrants) or for other reasons. That said, we specify that household members must reside in the dwelling for at least 6 months of the year on average.

Table 1. Average size of households surveyed

How many people are members of this household (including children and babies)?					
Mean	*Median*	*Std. Deviation*	*Minimum*	*Maximum*	*n*
4.83	4	2.441	1	20	2070

Table 1. Frequency distribution of household size

Household Size	*n*	*%*	*Cumulative %*
1	79	3.8	3.8
2	211	10.2	14.0
3	373	18.0	32.0
4	391	18.9	50.9
5	351	17.0	67.9
6	239	11.5	79.4
7	171	8.3	87.7
8	108	5.2	92.9
9	60	2.9	95.8
10	35	1.7	97.5

11	12	.6	98.1
12	18	.9	98.9
13	10	.5	99.4
14	1	.0	99.5
15	3	.1	99.6
16	4	.2	99.8
17	0	0	0
18	2	.1	99.9
19	0	0	0
20	2	.1	100.0
Total	*2070*	*100.0*	

The distribution of household sizes in the sampled households in this survey of Maputo demonstrates that 4 was the most common household size in the sampled population. The distribution also demonstrates that over half of the sampled households in Maputo contained less than 5 household members.

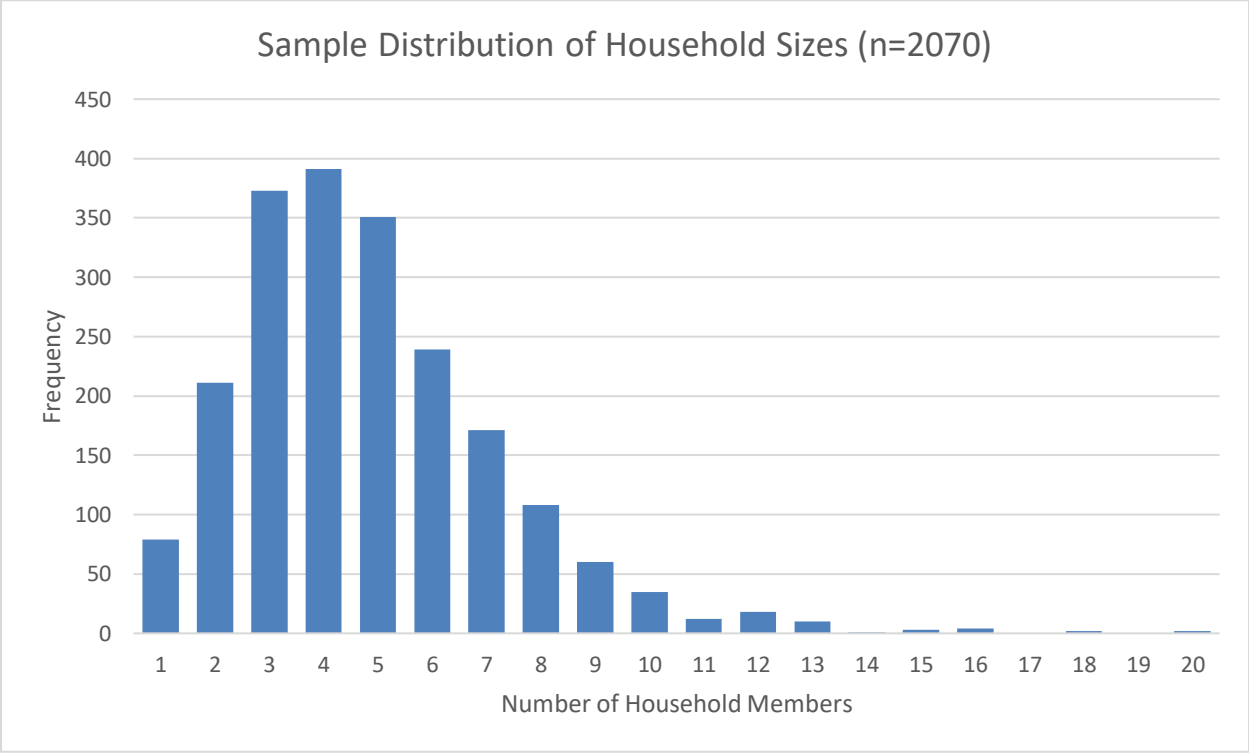

Figure 3. Distribution of household size

2.5.2 Sampled Household Member Age Distribution

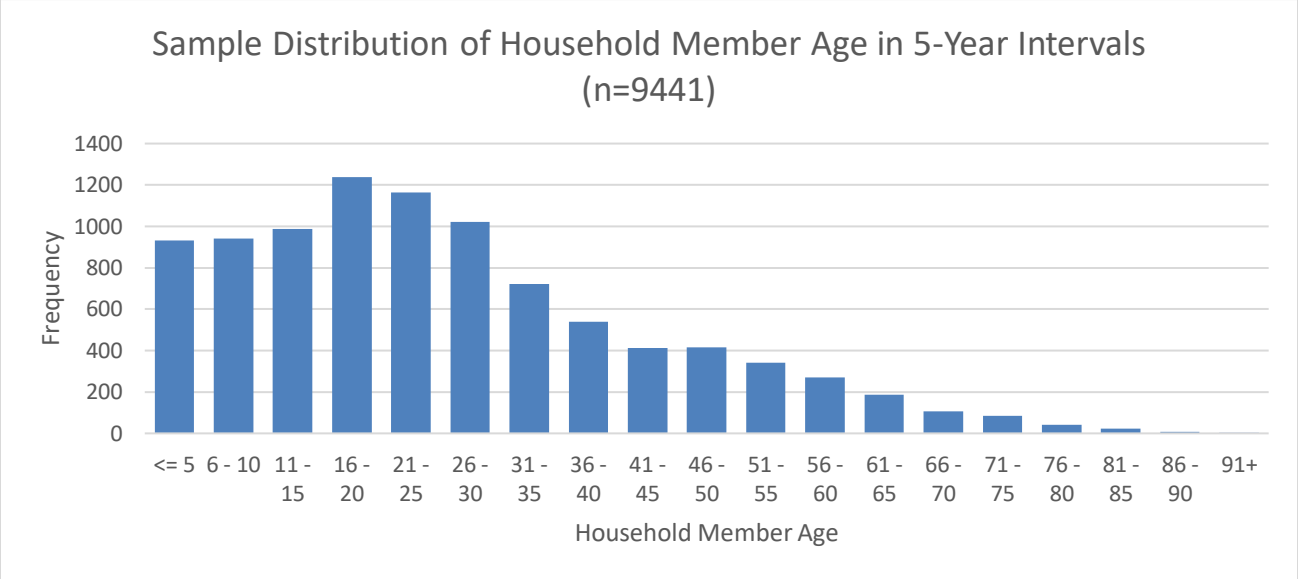

Figure 4. Frequency distribution of age of household members

The household member ages were estimated by the respondent who acted as a representative of the rest of the household. Given that the method with which this estimate was recalled, it is important to keep in mind that these are the reported ages of the household members. The distributed ages of the sampled household members demonstrate that the distribution of the sampled household member ages is skewed to the right with over half the sampled population categorized falling under the age of 25. Within the sampled population, less than 5% were reported to be over the age of 60.

Table 2. Frequency distribution of sampled household member age

Age (5-year intervals)	*n*	*%*	*Cumulative %*
<= 5	932	9.9	9.9
6 - 10	942	10.0	19.8
11 - 15	988	10.5	30.3
16 - 20	1239	13.1	43.4
21 - 25	1163	12.3	55.8
26 - 30	1022	10.8	66.6
31 - 35	721	7.6	74.2
36 - 40	540	5.7	79.9
41 - 45	414	4.4	84.3
46 - 50	417	4.4	88.7
51 - 55	340	3.6	92.3
56 - 60	271	2.9	95.2
61 - 65	186	2.0	97.2

66 - 70	105	1.1	98.3
71 - 75	85	.9	99.2
76 - 80	41	.4	99.6
81 - 85	24	.3	99.9
86 - 90	9	.1	100.0
91+	2	.0	100.0
Total	*9441*	*100.0*	

2.5.3 Sample Distribution of Household Member Sex

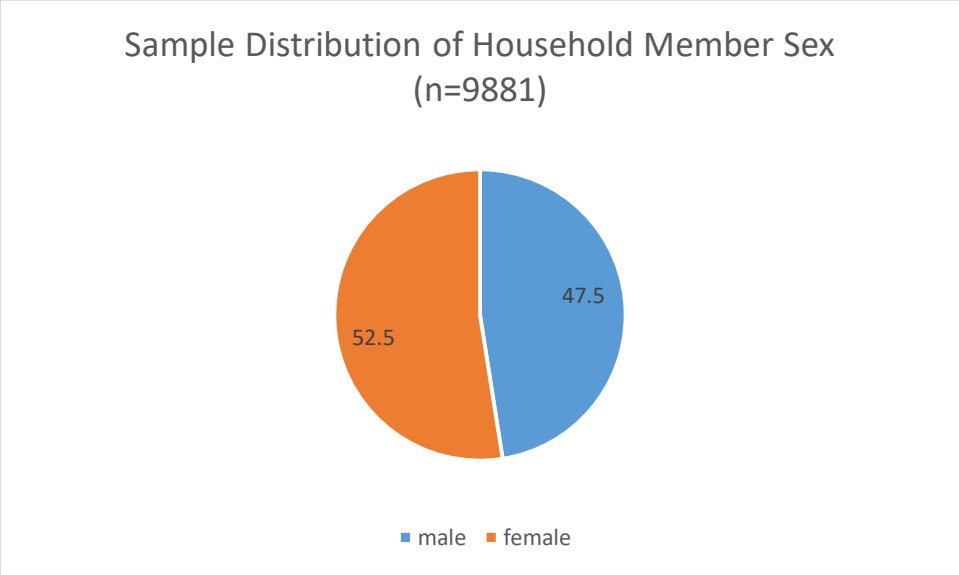

Figure 5. Frequency distribution of the sex of sampled household members

The majority of the sampled household members were reported to be female in this survey. It is important to note that, assuming random sampling in the survey design, an equal distribution of females and males in the population is still likely given the 95% confidence interval of +/- 3 in the survey design. This statistic should therefore be interpreted with care as there is insufficient evidence to suggest that the majority of the Maputo population are either male or female.

Table 3. Frequency distribution of the sex of sampled household members

Sex	*n*	*%*	*Cumulative %*
Male	4695	47.5	47.5
Female	5186	52.5	100.0
Total	*9881*	*100.0*	

2.5.4 Sample Distribution of Household Member Work status for All Household Members Over 18 Years of Age

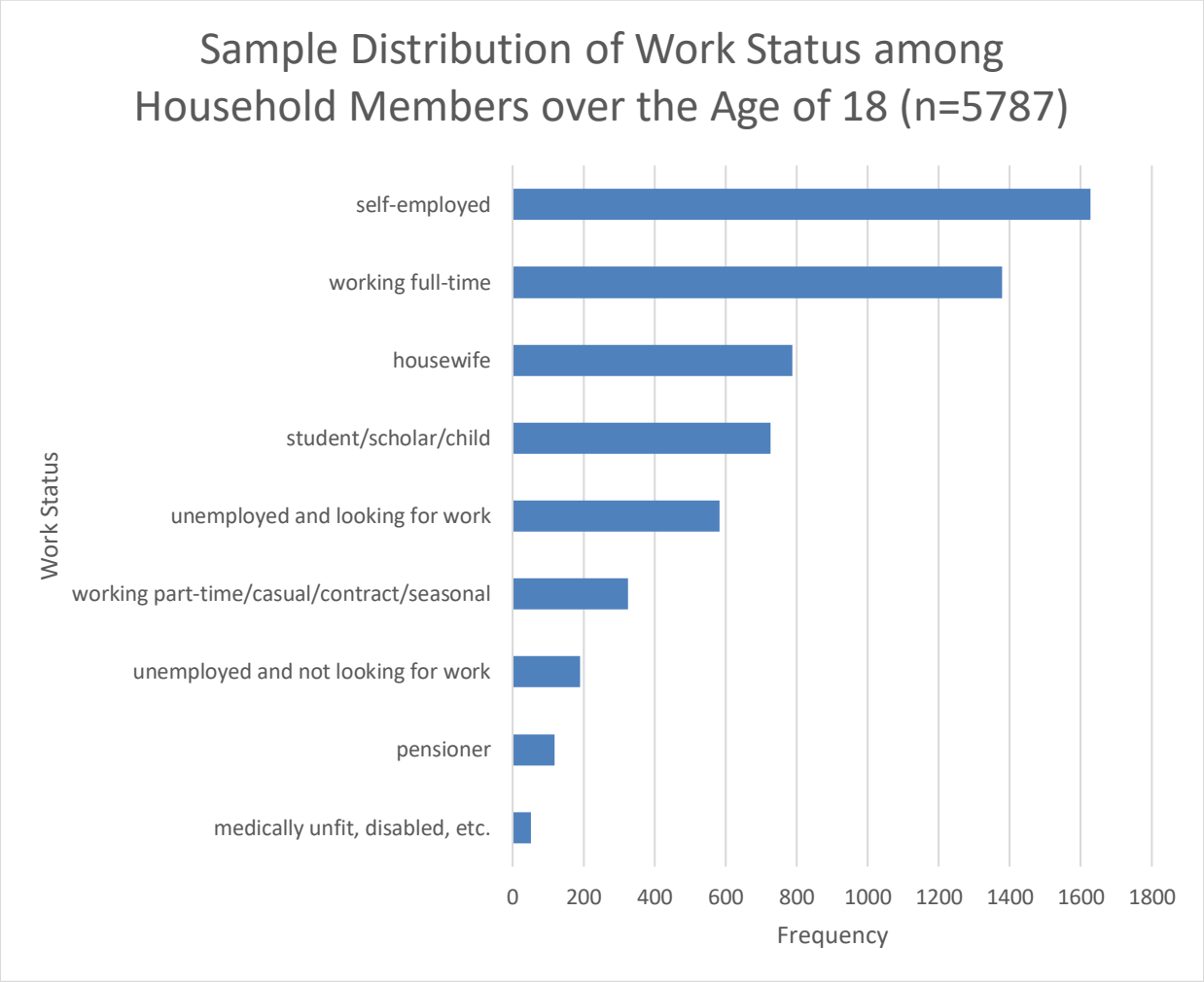

Figure 6. Frequency distributions of work status of sampled household members over the age of 18

Among those household members over the age of 18, the most commonly represented work status was self-employment, followed closely by working full-time. Together, these two work status categories represented more than 50% of the household member sample population. In addition, approximately 60% of the sampled household members were either self-employed or employed full-time/part-time in wage work.

Table 4. Frequency distribution of work status among sampled household members over the age of 18

Work Status	*n*	*%*	*Cumulative %*
self-employed	1628	28.1	28.1
working full-time	1379	23.8	52.0
working part-time/casual/contract/seasonal	325	5.6	57.6
unemployed and looking for work	582	10.1	67.6
unemployed and not looking for work	190	3.3	70.9
housewife	787	13.6	84.5
pensioner	118	2.0	86.6
medically unfit, disabled, etc.	51	.9	87.4
student/scholar/child	727	12.6	100.0
Total	*5787*	*100.0*	

2.5.5 Sampled Household Member Food Responsibilities

Table 5. Cross-tabulation of food responsibilities with relationship to household head

Relationship to Household Head	*Buying food*	*Preparing food*	*Deciding who will get food*	*Growing food*	*Does none of the above*	*Total*
Head of household	1560	713	253	24	320	*1998*
Spouse/partner	916	1055	259	19	49	*1202*
Son/daughter	1236	1428	127	9	2088	*4071*
Adopted/foster child/orphan	0	1	0	0	7	*8*
Father/mother/in law	34	40	2	1	12	*61*
Brother/sister	210	224	27	0	109	*408*
Grandchild	135	215	7	3	974	*1236*
Grandparent	14	17	4	1	23	*46*
Son-in-law/daughter-in-law	20	28	0	0	30	*65*
Other relative	268	358	45	3	289	*725*
Non-relative	9	26	0	2	6	*36*
Total	*4402*	*4105*	*724*	*62*	*3907*	*9856*

The distribution of food responsibilities among the sampled household members demonstrates some interesting patterns. First, the head of the household appears to most frequently engage in buy food while the spouse of the household head most frequently engages in preparing food. The children of the household head also engaged in both the purchase and the preparation of food in the household. Food allocation responsibilities, however, appear to be split between the household head, the spouse of the household head, and the son/daughter of the household head. It is also interesting to note that the sons, daughters, and grandchildren of the household head were also more frequently categorized as not engaging in any of the food preparation categories.

2.5.6 Sampled Household Member Food Consumption Patterns

Table 6. Frequency distribution for the location of the main meal yesterday by household members

Location	*n*	*%*	*Cumulative %*
Home (this household)	9347	94.8	94.8
Another household	171	1.7	96.6
Work place	246	2.5	99.1
Restaurant	12	.1	99.2
Take away (takeout)	6	.1	99.2
Street food	13	.1	99.4
School	13	.1	99.5
Did not eat a meal	48	.5	100.0
Total	*9856*	*100.0*	

The most frequently selected location for the main meal consumed by household members in the sampled population was the home. Aside from this location, the next most frequently selected locations for the main meal consumed yesterday were either the workplace or another household.

2.5.7 Sampled Household Member Highest Level of Education

Table 7. Frequency distributions of the highest level of education attained by household members

Level of Education	*n*	*%*	*Cumulative %*
No formal schooling	1813	19.1	19.1
Some primary school (some basic)	2447	25.8	44.9
Primary completed (junior or senior)	1009	10.6	55.5
Some high school	2359	24.9	80.4
High school completed	1063	11.2	91.6
Post secondary qualifications not university	275	2.9	94.5
Some university	292	3.1	97.6
University completed	206	2.2	99.8
Post-graduate	22	.2	100.0
Total	*9486*	*100.0*	

Table 8. Frequency distributions of the highest level of education attained by household members over the age of 6 (school going age)

Level of Education	*n*	*%*	*Cumulative %*
No formal schooling	760	9.4	9.4
Some primary school (some basic)	2198	27.3	36.7
Primary completed (junior or senior)	982	12.2	48.9
Some high school	2303	28.6	77.5
High school completed	1040	12.9	90.4
Post secondary qualifications not university	271	3.4	93.7
Some university	282	3.5	97.2
University completed	200	2.5	99.7
Post-graduate	22	0.3	100
Total	8058	100	

Table 9. Frequency distributions of the highest level of education attained by household members over the age of 18 (working age adults)

Level of Education	*n*	*%*	*Cumulative %*
No formal schooling	611	10.9	10.9
Some primary school (some basic)	1140	20.4	31.3
Primary completed (junior or senior)	599	10.7	42
Some high school	1493	26.7	68.6
High school completed	998	17.8	86.5
Post secondary qualifications not university	262	4.7	91.2
Some university	275	4.9	96.1
University completed	198	3.5	99.6
Post-graduate	22	0.4	100
Total	5598	100	

2.6 Section D: Household Data

2.6.1 Sampled Household Dwelling and Structure

Table 10. Frequency distribution of the dwelling types of surveyed households

Dwelling Type	*n*	*%*	*Cumulative %*
House	1699	84.0	84.0
Town house	40	2.0	86.0
Flat	170	8.4	94.4
Traditional dwelling/homestead	33	1.6	96.0
Hostel/compound/dormitory	4	.2	96.2
Hotel/boarding house	1	.0	96.3
Backyard shack attached to house	9	.4	96.7
Room in house	22	1.1	97.8
Room in flat	3	.1	98.0
Shack in informal settlement/squatter camp	38	1.9	99.9
Other	3	.1	100.0
Total	*2022*	*100.0*	

Table 11. Frequency distribution the household structure of surveyed households

Household Structure	*n*	*%*	*Cumulative %*
Female centered (No husband/male partner in the household, may include relatives, children, friends)	637	31.0	31.0
Male centered (No wife/female partner in household, may include relatives, children, friends)	291	14.2	45.2
Nuclear (Husband/male partner and wife/female partner with or without children)	589	28.7	73.8
Extended (Husband/male partner and wife/female partner and children and relatives)	463	22.5	96.4
Other	75	3.6	100.0
Total	*2055*	*100.0*	

2.6.2 Sampled Household Income and Expenditure

2.6.2.1 Sampled Household income sources

Table 12. Frequency distribution of the sampled household income sources in the last month

Household Income Sources	*n*	*% of Sample*
Formal wage work	1105	53.6
Informal wage work	733	35.6
Casual wage work (formal and informal)	88	4.3
Net income from formal business	66	3.2
Net income from informal business (production and sale of fresh produce by this household)	65	3.2
Net income from informal business (sale of fresh produce not produced by this household)	81	3.9
Net income from informal business (sale of goods)	248	12.0
Net income from informal business (renting property)	30	1.5
Net income from other informal business	16	.8
Interest earned on personal investments	8	.4
Non-government formal grants or aid	21	1.0
Gifts (one time monetary gifts)?	16	.8
Cash remittances (regular financial support from friends or family)	91	4.4
Government social grants	53	2.6
Formal loans	1	.0
Informal loans	1	.0
Other income sources	65	3.2

Table 13. Sampled household income in the last month descriptive statistics (excluding loans)

Mean	*Median*	*Std. Deviation*	*Minimum*	*Maximum*	*n*
11567.77	5500	19149.28	0	230000	954

Income Quintile	*n*	*%*	*Cumulative %*
<= 2500.00	201	21.1	21.1
2501.00 - 4500.00	196	20.5	41.6
4501.00 - 7000.00	178	18.7	60.3
7001.00 - 13600.00	189	19.8	80.1
13601.00+	190	19.9	100
Total	*954*	*100*	

Table 14. Sampled household income in the last month descriptive statistics (including loans)

Mean	*Median*	*Std. Deviation*	*Minimum*	*Maximum*	*n*
11573.01	5500	19146.82	0	230000	954

Income Quintile	*n*	*%*	*Cumulative %*
<= 2500.00	200	21	21
2501.00 - 4500.00	196	20.5	41.5
4501.00 - 7000.00	179	18.8	60.3
7001.00 - 13600.00	189	19.8	80.1
13601.00+	190	19.9	100
Total	*954*	*100*	

Table 15. Average income amount by income source in the last month among sampled households

Income Source	*n*	*Mean*
Formal wage work	468	12934.46
Informal wage work	291	9668.08
Casual wage work (formal and informal)	31	14965.48
Net income from formal business	20	8480.00
Net income from informal business (production and sale of fresh produce by this household)	25	4018.40
Net income from informal business (sale of fresh produce not produced by this household)	36	3591.67
Net income from informal business (sale of goods)	77	6127.27
Net income from informal business (renting property)	23	4982.61
Net income from other informal business	8	3662.50
Interest earned on personal investments	3	7166.67
Non-government formal grants or aid	14	3565.71
Gifts (one time monetary gifts)?	11	2345.45
Cash remittances (regular financial support from friends or family)	55	4743.64
Government social grants	35	3253.57
Formal loans	0	0.00
Informal loans	1	5000.00
Other income sources	44	4952.95

2.6.2.2 Sampled Household Expenditures

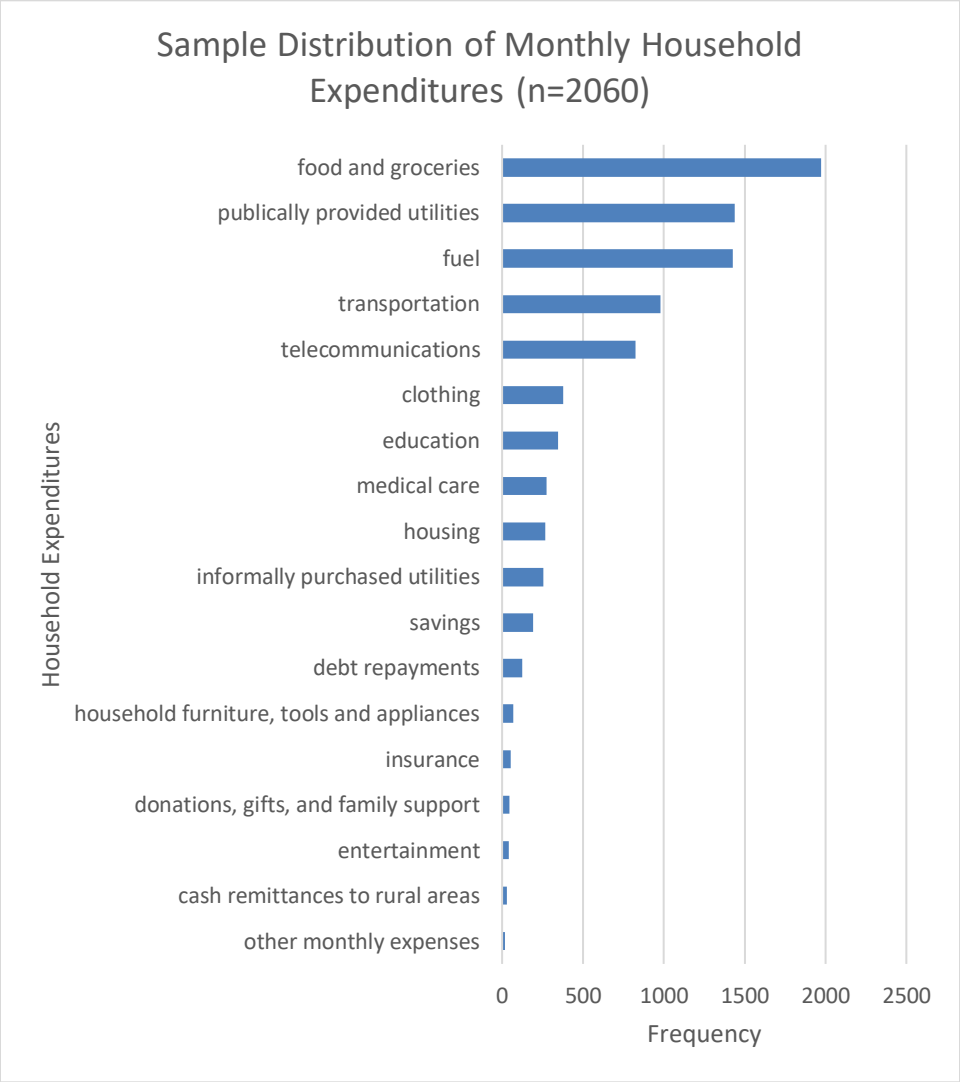

Figure 7. Frequency distribution histogram for sampled household expenditures in the last month

Table 16. Frequency distribution of sampled household expenditures in the last month

Household Expenditure	*n*	*%*
Food and Groceries	1974	95.8
Publically provided Utilities (Water, Electricity, Sanitation plus all taxes)	1438	69.8
Fuel (firewood, charcoal, paraffin, kerosene, propane)	1427	69.3
Transportation (purchase of cars, motorbikes, bicycles; maintenance, fuel; public transit; not insurance)	980	47.6
Telecommunications (cell-phone, telephone, internet)	824	40.0
Clothing (not including uniforms)	376	18.3
Education (tuition, books, uniforms. Does not include insurance)	346	16.8
Medical care (doctor's visits, medications, supports. Does not include insurance)	274	13.3
Housing (rent, mortgage payments, maintenance, renovation)	268	13.0
Informally purchased Utilities (Water, Electricity, Sanitation)	255	12.4
Savings	192	9.3
Debt repayments	126	6.1
Household Furniture, Tools and Appliances (monthly purchases or monthly Instalment payments)	69	3.3
Insurance (Medical, Vehicle, Household, Life)	52	2.5
Donations, Gifts, Family Support (Only to other households)	45	2.2
Entertainment (Does not include goods or appliances)	43	2.1
Cash remittances to rural areas	30	1.5
Other monthly expenses	18	.9

Table 17. Mean household expenditure amount in the last month by expenditure type among sampled households

Household Expenses	*n*	*Mean*
Food and groceries	1292	3761.26
Housing (rent, mortgage payments, maintenance, renovation)	236	4114.69
Clothing (not including uniforms)	245	2245.22
Transportation (purchase of cars, motorbikes, bicycles, maintenance, fuel, public transit, not insurance)	593	2333.54
Telecommunications (cell-phone, telephone, internet)	430	1131.64
Household furniture, tools and appliances (monthly purchases or monthly instalment payments)	51	7686.47
Medical care (doctor's visits, medications, supports. Does not include insurance)	194	1165.06
Education (tuition, books, uniforms)	271	3016.11
Entertainment (does not include goods or appliances)	33	4736.36
Insurance (medical, vehicle, household, life)	29	2964.62
Debt repayments	101	2508.70
Donations, gifts, family support (only to other households)	29	2208.62
Publically provided utilities (water, electricity, sanitation plus all taxes)	1286	950.42
Informally purchased utilities (water, electricity, sanitation)	233	2233.88
Fuel (charcoal, paraffin, kerosene, propane)	1293	919.44
Cash remittances to rural areas	20	2337.50
Savings	93	4033.33
Oher monthly expenses	15	3196.67

3. Section A: Food Insecurity

3.1 Household Food Insecurity Access Scale

Table 18. In the past four weeks, did you worry that your household would not have enough food?

Frequency	*n*	*%*	*Cumulative %*
No (answer to the question is no)	953	46.2	46.2
Rarely (once or twice)	459	22.2	68.4
Sometimes (3 to 10 times)	406	19.7	88.1
Often (more than 10 times)	246	11.9	100.0
Total	*2064*	*100.0*	

Table 19. In the past four weeks, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?

Frequency	*n*	*%*	*Cumulative %*
No (answer to the question is no)	887	43.0	43.0
Rarely (once or twice)	547	26.5	69.6
Sometimes (3 to 10 times)	461	22.4	91.9
Often (more than 10 times)	166	8.1	100.0
Total	*2061*	*100.0*	

Table 20. In the past four weeks, did you or any household member have to eat a limited variety of foods due to a lack of resources?

Frequency	*n*	*%*	*Cumulative %*
No (answer to the question is no)	955	46.2	46.2
Rarely (once or twice)	508	24.6	70.7
Sometimes (3 to 10 times)	453	21.9	92.6
Often (more than 10 times)	152	7.4	100.0
Total	*2068*	*100.0*	

Table 21. In the past four weeks, did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?

Frequency	*n*	*%*	*Cumulative %*
No (answer to the question is no)	940	45.5	45.5
Rarely (once or twice)	536	26.0	71.5
Sometimes (3 to 10 times)	421	20.4	91.9
Often (more than 10 times)	167	8.1	100.0
Total	*2064*	*100.0*	

Table 22. In the past four weeks, did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?

Frequency	*n*	*%*	*Cumulative %*
No (answer to the question is no)	1104	53.5	53.5
Rarely (once or twice)	470	22.8	76.2
Sometimes (3 to 10 times)	334	16.2	92.4
Often (more than 10 times)	157	7.6	100.0
Total	*2065*	*100.0*	

Table 23. In the past four weeks, did you or any household member have to eat fewer meals in a day because there was not enough food?

Frequency	*n*	*%*	*Cumulative %*
No (answer to the question is no)	1204	58.3	58.3
Rarely (once or twice)	384	18.6	76.9
Sometimes (3 to 10 times)	335	16.2	93.1
Often (more than 10 times)	142	6.9	100.0
Total	*2065*	*100.0*	

Table 24. In the past four weeks, was there ever no food to eat of any kind in your household because of lack of resources to get food?

Frequency	*n*	*%*	*Cumulative %*
No (answer to the question is no)	1407	68.1	68.1
Rarely (once or twice)	333	16.1	84.3
Sometimes (3 to 10 times)	217	10.5	94.8
Often (more than 10 times)	108	5.2	100.0
Total	*2065*	*100.0*	

Table 25. In the past four weeks, did you or any household member go to sleep at night hungry because there was not enough food?

Frequency	*n*	*%*	*Cumulative %*
No (answer to the question is no)	1572	76.2	76.2
Rarely (once or twice)	249	12.1	88.3
Sometimes (3 to 10 times)	163	7.9	96.2
Often (more than 10 times)	79	3.8	100.0
Total	*2063*	*100.0*	

Table 26. In the past four weeks, did you or any household member go a whole day and night without eating anything because there was not enough food?

Frequency	*n*	*%*	*Cumulative %*
No (answer to the question is no)	1640	79.4	79.4
Rarely (once or twice)	212	10.3	89.7
Sometimes (3 to 10 times)	133	6.4	96.1
Often (more than 10 times)	80	3.9	100.0
Total	*2065*	*100.0*	

Table 27. Sample HFIASS frequency distribution among sampled households

Binned HFIASS Scores	*n*	*%*	*Cumulative %*
<= 3.00	881	43.4	43.4
3.01 - 6.00	318	15.7	59.1
6.01 - 9.00	268	13.2	72.3
9.01 - 12.00	199	9.8	82.1
12.01 - 15.00	121	6	88.1
15.01 - 18.00	100	4.9	93
18.01 - 21.00	69	3.4	96.4
21.01 - 24.00	30	1.5	97.9
24.01-27.00	42	2.1	100
Total	*2028*	*100*	

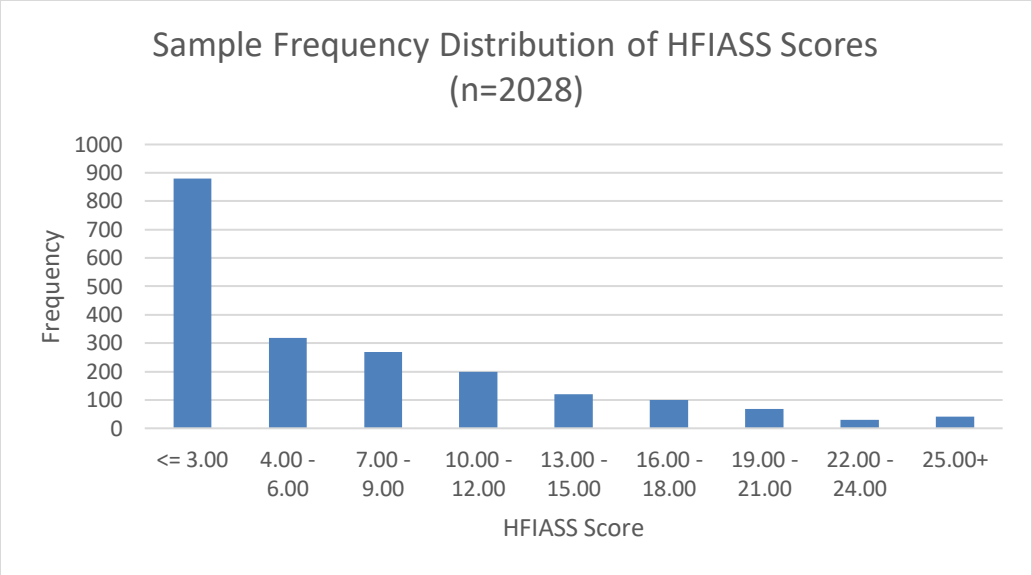

Figure 8. Frequency distribution of HFIASS scores among sampled households

Table 28. Sample frequency distribution of HFIAP scores among sampled households

HFIAP	*n*	*%*	*Cumulative %*
Food secure	589	28.6	28.6
Mildly food insecure access	227	11.0	39.7
Moderately food insecure access	453	22.0	61.7
Severely food insecure access	787	38.3	100.0
Total	*2056*	*100.0*	

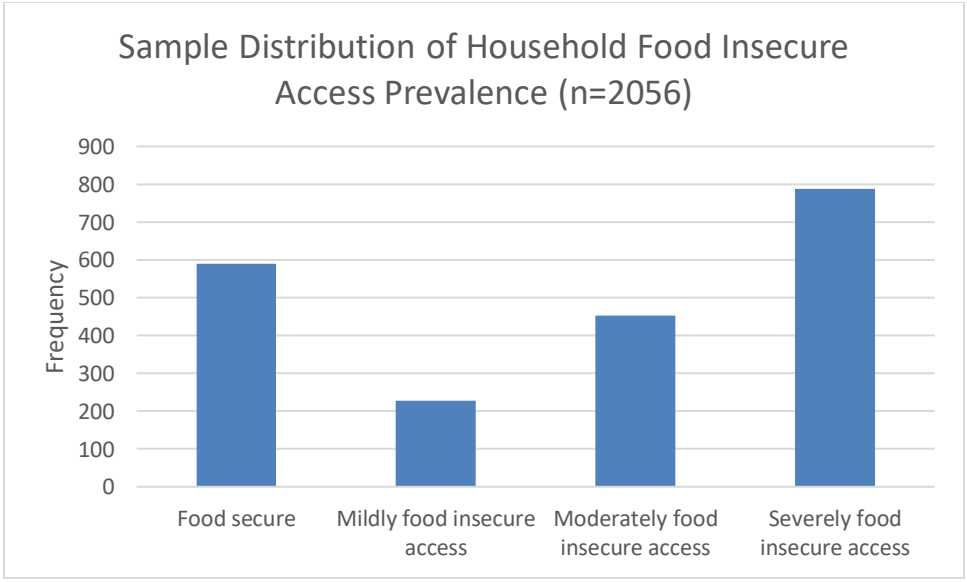

Figure 9. Sample frequency distribution of HFIAP scores among sampled households

3.2 Household Dietary Diversity Score

Table 29. Sample HDDS descriptive statistics

Mean	*Median*	*Std. Deviation*	*Minimum*	*Maximum*	*n*
4.1410	4	2.01070	0	11	2071

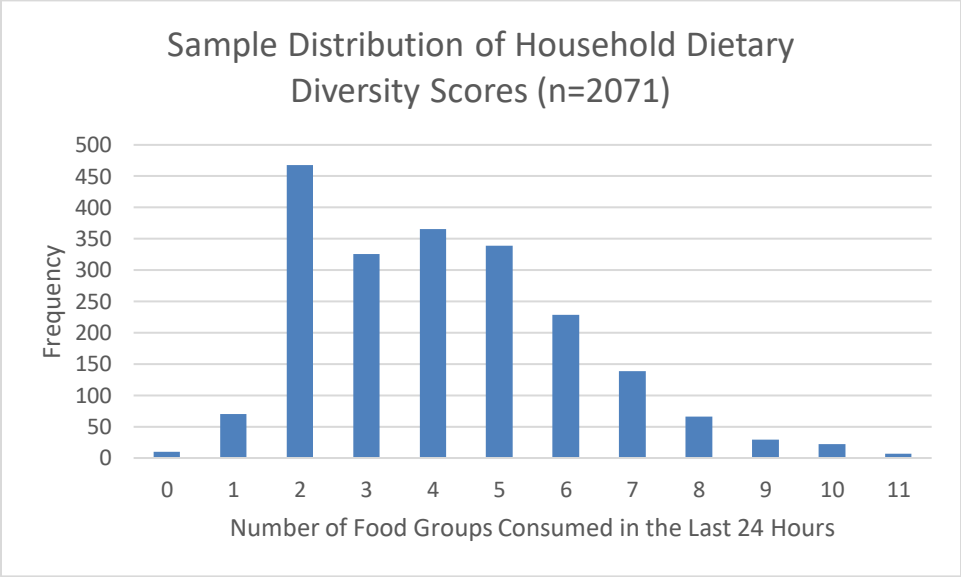

Figure 10. Sample frequency distribution histogram of HDDS

Table 30. Sample frequency distribution of Household Dietary Diversity Scores

HDDS Score	*n*	*%*	*Cumulative %*
0	10	.5	.5
1	70	3.4	3.9
2	468	22.6	26.5
3	326	15.7	42.2
4	366	17.7	59.9
5	339	16.4	76.2
6	229	11.1	87.3
7	139	6.7	94.0
8	66	3.2	97.2
9	29	1.4	98.6
10	22	1.1	99.7
11	7	.3	100.0
Total	*2071*	*100.0*	

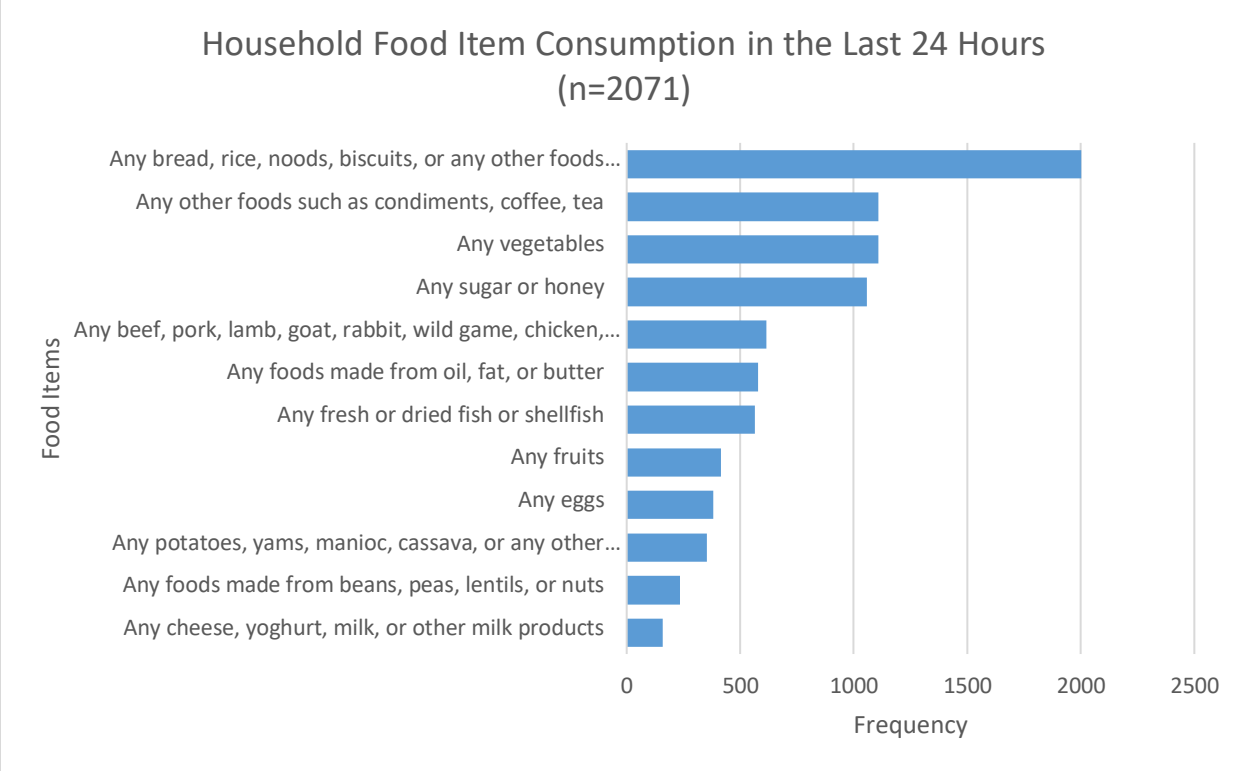

Figure 11. Household dietary food groups consumed in the previous 24 hours among the sampled households

Table 31. Household dietary food groups consumed in the previous 24 hours among the sampled households

Food Groups	*n*	*%*
Any bread, rice, noods, biscuits, or any other foods made from grains	2001	96.6
Any vegetables	1108	53.5
Any other foods such as condiments, coffee, tea	1108	53.5
Any sugar or honey	1059	51.1
Any beef, pork, lamb, goat, rabbit, wild game, chicken, duck, other birds, liver, kidney, or other organ meat	615	29.7
Any foods made from oil, fat, or butter	578	27.9
Any fresh or dried fish or shellfish	564	27.2
Any fruits	416	20.1
Any eggs	382	18.4
Any potatoes, yams, manioc, cassava, or any other foods made from roots or tubers	352	17.0
Any foods made from beans, peas, lentils, or nuts	234	11.3
Any cheese, yoghurt, milk, or other milk products	159	7.7

3.3 Months of Adequate Household Food Provisioning

Table 32. Sample MAHFP descriptive statistics

Mean	*Median*	*Std. Deviation*	*Minimum*	*Maximum*	*n*
10.3849	12	2.93912	0	12	2063

Table 33. Sample frequency distribution for responses to months with adequate food provisioning

MAHFP Score	*n*	*%*	*Cumulative %*
0	65	3.2	3.2
1	26	1.3	4.4
2	11	.5	4.9
3	22	1.1	6.0
4	12	.6	6.6
5	26	1.3	7.9
6	34	1.6	9.5
7	42	2.0	11.5
8	93	4.5	16.0
9	122	5.9	22.0
10	188	9.1	31.1
11	152	7.4	38.4
12	1270	61.6	100.0
Total	*2063*	*100.0*	

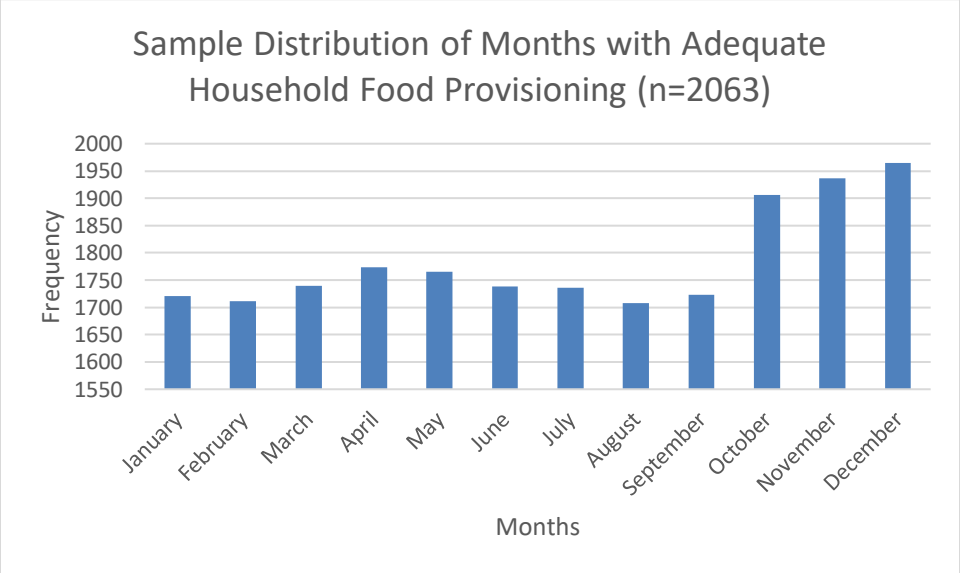

Figure 12. Sample distribution of months with adequate household food provisioning

Table 34. Sample frequency distribution of months with adequate household food provisioning (n=2063)

Months	*n*	*%*
January	1721	83.42
February	1711	82.94
March	1740	84.34
April	1774	85.99
May	1765	85.56
June	1738	84.25
July	1736	84.15
August	1708	82.79
September	1723	83.52
October	1906	92.39
November	1937	93.89
December	1965	95.25

3.4 Experience of Food Price Changes

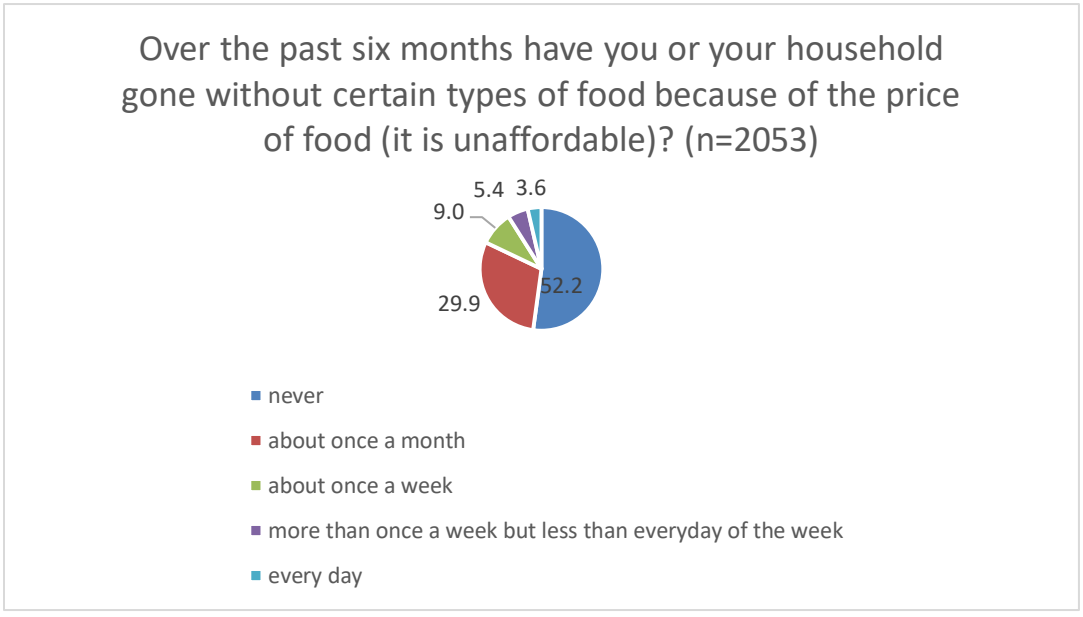

Figure 13. Sample frequency distribution of food price change impacts on food access

Table 35. Over the past six months have you or your household gone without certain types of food because of the price of food (it is unaffordable)?

Frequency	*n*	*%*	*Cumulative %*
Never	1071	52.2	52.2
About once a month	614	29.9	82.1
About once a week	184	9.0	91.0
More than once a week but less than everyday of the week	110	5.4	96.4
Every day	74	3.6	100.0
Total	*2053*	*100.0*	

Table 36. Sample frequency distribution of food categories deemed unaffordable

Food Types Identified as being Unaffordable	*n*	*% of Households that went without Food due to Food Price*
Any beef, pork, lamb, goat, rabbit, wild game, chicken, duck, other birds, liver, kidney, or other organ meat	637	64.9
Any bread, rice, noodles, biscuits, or any other foods made from grains	438	44.6
Any cheese, yoghurt, milk, or other milk products	336	34.2
Any fresh or dried fish or shellfish	296	30.1
Any foods made from oil, fat, or butter	220	22.4
Any potatoes, yams, manioc, cassava, or any other foods made from roots or tubers	213	21.7
Any eggs	201	20.5
Any foods made from beans, peas, lentils, or nuts	159	16.2
Any sugar or honey	143	14.6
Any fruits	130	13.2
Any other foods such as condiments, coffee, tea	83	8.5
Any vegetables	73	7.4

Table 37. Sample frequency distribution of household food price change impact by HFIAP (percentages calculated by rows)

	Frequency of Going without Food due to Food Price					
HFIAP Category	*Never*	*About once a month*	*About once a week*	*> once a week, < every day*	*Every day*	*Total*
Food secure	488	82	10	0	3	583
	83.7%	14.1%	1.7%	0.0%	.5%	100.0%
Mildly food insecure access	147	57	13	5	0	222
	66.2%	25.7%	5.9%	2.3%	0.0%	100.0%
Moderately food insecure access	209	170	47	21	3	450
	46.4%	37.8%	10.4%	4.7%	.7%	100.0%
Severely food insecure access	216	302	114	83	68	783
	27.6%	38.6%	14.6%	10.6%	8.7%	100.0%
Total	1060	611	184	109	74	2038
	52.0%	30.0%	9.0%	5.3%	3.6%	100.0%

Table 38. Sample frequency distribution of household food price change impact by HFIAP (percentages calculated by columns)

	Frequency of Going without Food due to Food Price					
HFIAP Category	*Never*	*About once a month*	*About once a week*	*> once a week, < every day*	*Every day*	*Total*
Food secure	488	82	10	0	3	583
	46.0%	13.4%	5.4%	0.0%	4.1%	28.6%
Mildly food insecure access	147	57	13	5	0	222
	13.9%	9.3%	7.1%	4.6%	0.0%	10.9%
Moderately food insecure access	209	170	47	21	3	450
	19.7%	27.8%	25.5%	19.3%	4.1%	22.1%
Severely food insecure access	216	302	114	83	68	783
	20.4%	49.4%	62.0%	76.1%	91.9%	38.4%
Total	1060	611	184	109	74	2038
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

3.5 Food Hazards

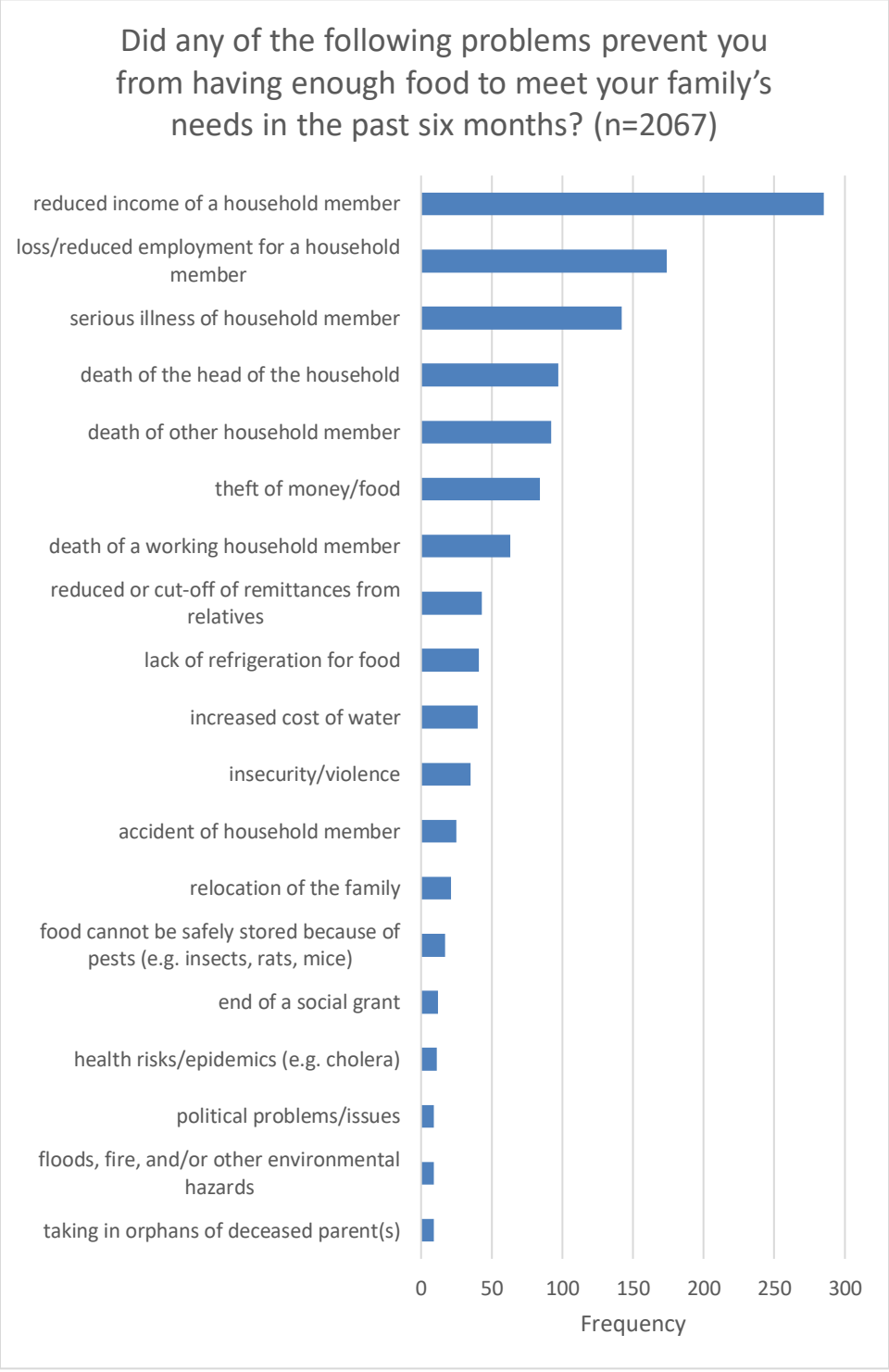

Figure 14. Frequency distribution histogram of food hazards

Table 39. Did any of the following problems prevent you from having enough food to meet your family's needs in the past six months? (n=2067)

Food Access Hazards	*n*	*%*
Reduced income of a household member	285	13.8
Loss/reduced employment for a household member	174	8.4
Serious illness of household member	142	6.9
Death of the head of the household	97	4.7
Death of other household member	92	4.5
Theft of money/food	84	4.1
Death of a working household member	63	3.0
Reduced or cut-off of remittances from relatives	43	2.1
Lack of refrigeration for food	41	2.0
Increased cost of water	40	1.9
Insecurity/violence	35	1.7
Accident of household member	25	1.2
Relocation of the family	21	1.0
Food cannot be safely stored because of pests (e.g. insects, rats, mice)	17	.8
End of a social grant	12	.6
Health risks/epidemics (e.g. cholera)	11	.5
Taking in orphans of deceased parent(s)	9	.4
Floods, fire, and/or other environmental hazards	9	.4
Political problems/issues	9	.4

3.6 Cross-tabulation of HDDS, HFIAS, and MAHFP Scores by Household Income Terciles

Table 40. Sample HDDS, HFIAS, and MAHFP scores by household income quintiles (excluding loans)

	Household Income (without Loans) Quintiles in the Last Month											
	<= 2500.00		*2501.00 - 4500.00*		*4501.00 - 7000.00*		*7001.00 - 13600.00*		*13601.00+*		*Total*	
	Mean	*n*	*Mean*	*n*	*Mean*	*n*	*Mean*	*n*	*Mean*	*n*	*Mean*	*n*
HDDS	3.18	201	3.67	196	4.05	178	4.31	189	4.98	190	4.03	954
HFIASS	11.98	195	8.32	190	6.32	174	4.75	188	2.55	188	6.83	935
MAHFP	8.35	201	9.68	196	10.50	177	10.97	187	11.38	189	10.14	950

3.7 Cross-tabulation of HDDS, HFIAS, and MAHFP Scores by Household Structure

Table 41. Sample HDDS, HFIAS, and MAHFP scores by household structure

Household Structure		*HDDS*	*HFIASS*	*MAHFP*
Female centered	*Mean*	4.2	7.3	10.2
	n	637	628	633
Male centered	*Mean*	3.5	6.1	10.7
	n	291	286	291
Nuclear	*Mean*	4.4	6.0	10.4
	n	589	576	587
Extended	*Mean*	4.3	6.3	10.4
	n	463	448	461
Other	*Mean*	3.9	6.5	10.0
	n	75	74	75
Total	*Mean*	4.1	6.5	10.4
	n	2055	2012	2047

4. Section B: Food Sources

4.1 Sampled Household Food Sources

Table 42. Sample distribution of household food sources by frequency of access

Food Sources		*Total*	*At least five days a week*	*At least once a week*	*At least once a month*	*At least once in six months*	*At least once a year*
Supermarket	*n*	*695*	61	195	399	28	12
	%	*100.0*	8.8	28.1	57.4	4.0	1.7
Small shops	*n*	*1556*	476	597	457	19	7
	%	*100*	30.6	38.4	29.4	1.2	.4
Fast food or take away	*n*	*60*	7	31	17	3	2
	%	*100*	30.6	38.4	29.4	1.2	.4
Restaurants	*n*	*77*	5	38	28	6	0
	%	*100*	6.5	49.4	36.4	7.8	0.0
Market	*n*	*1894*	1184	456	241	11	2
	%	*100*	62.5	24.1	12.7	.6	.1
Spaza shop	*n*	*29*	1	8	16	4	0
	%	*100*	3.4	27.6	55.2	13.8	0.0
Street sellers	*n*	*581*	333	189	54	3	2
	%	*100*	57.3	32.5	9.3	.5	.3
Livestock	*n*	*6*	0	1	2	1	2
	%	*100*	0.0	16.7	33.3	16.7	33.3
Rural agriculture	*n*	*35*	0	5	11	13	6
	%	*100*	0.0	14.3	31.4	37.1	17.1
Urban agriculture	*n*	*16*	3	6	5	1	1
	%	*100*	18.8	37.5	31.3	6.3	6.3
Rural relatives	*n*	*47*	1	0	23	19	4
	%	*100*	2.1	0.0	48.9	40.4	8.5
Urban relatives	*n*	*32*	1	4	20	6	1
	%	*100*	3.1	12.5	62.5	18.8	3.1
Shared meal with neighbours	*n*	*23*	1	15	6	0	1
	%	*100*	4.3	65.2	26.1	0.0	4.3
Provided by neighbours	*n*	*22*	0	16	5	1	0
	%	*100*	0.0	72.7	22.7	4.5	0.0
Community food kitchen	*n*	*1*	0	0	1	0	0
	%	*100*	0.0	0.0	100.0	0.0	0.0
Borrow food	*n*	*15*	3	7	5	0	0
	%	*100*	20.0	46.7	33.3	0.0	0.0
Provided at work	*n*	*15*	7	2	4	0	2
	%	*100*	46.7	13.3	26.7	0.0	13.3
Provided at school	*n*	*1*	0	0	1	0	0
	%	*100*	0.0	0.0	100.0	0.0	0.0
Begging	*n*	*2*	0	2	0	0	0
	%	*100*	0.0	100.0	0.0	0.0	0.0
Other	*n*	*19*	2	6	10	0	1
	%	*100*	10.5	31.6	52.6	0.0	5.3

4.2 Food Purchases Matrix

Table 43. Sampled household food purchases in the last month by frequency of purchase

Food Items		*Total*	*At least 5 days a week*	*At least once a week*	*At least twice a month*	*At least once a month*
White bread	*n*	*1743*	1559	153	18	13
	%	*100*	89.4	8.8	1.0	.7
Brown bread	*n*	*145*	65	57	14	9
	%	*100*	44.8	44.8	44.8	44.8
Rice	*n*	*1822*	64	68	179	1511
	%	*100*	3.5	3.7	9.8	82.9
Pasta	*n*	*912*	19	230	171	492
	%	*100*	2.1	25.2	18.8	53.9
Fresh/cooked vegetables	*n*	*1298*	578	607	62	51
	%	*100*	44.5	46.8	4.8	3.9
Fresh fruit	*n*	*563*	161	307	55	40
	%	*100*	28.6	54.5	9.8	7.1
Tinned/canned vegetables	*n*	*64*	2	14	15	33
	%	*100*	3.1	21.9	23.4	51.6
Tinned/canned fruit	*n*	*16*	2	3	3	8
	%	*100*	12.5	18.8	18.8	50.0
Fresh meat	*n*	*383*	15	113	93	162
	%	*100*	3.9	29.5	24.3	42.3
Frozen meat	*n*	*762*	13	167	195	387
	%	*100*	1.7	21.9	25.6	50.8
Cooked meat	*n*	*28*	0	16	8	4
	%	*100*	0.0	57.1	28.6	14.3
Offal	*n*	*119*	4	36	35	44
	%	*100*	3.4	30.3	29.4	37.0
Tinned/canned meat	*n*	*10*	1	1	3	5
	%	*100*	10.0	10.0	30.0	50.0
Frozen chicken	*n*	*898*	12	258	207	421
	%	*100*	1.3	28.7	23.1	46.9
Fresh chicken	*n*	*429*	9	159	93	168
	%	*100*	2.1	37.1	21.7	39.2
Cooked chicken	*n*	*48*	2	22	18	6
	%	*100*	4.2	45.8	37.5	12.5
Fresh fish	*n*	*369*	23	148	65	133
	%	*100*	6.2	40.1	17.6	36.0
Frozen fish	*n*	*1173*	47	380	188	558
	%	*100*	4.0	32.4	16.0	47.6
Cooked fish	*n*	*15*	2	7	3	3
	%	*100*	13.3	46.7	20.0	20.0
Pies/samosa/vetkoek	*n*	*16*	2	11	2	1
	%	*100*	12.5	68.8	12.5	6.3
Eggs	*n*	*853*	45	279	158	371
	%	*100*	5.3	32.7	18.5	43.5
Fresh milk	*n*	*347*	13	82	84	168
	%	*100*	3.7	23.6	24.2	48.4

Sour milk	*n*	*33*	1	2	5	25
	%	*100*	3.0	6.1	15.2	75.8
Tea/coffee	*n*	*1069*	78	134	147	710
	%	*100*	7.3	12.5	13.8	66.4
Sugar	*n*	*1348*	78	188	236	846
	%	*100*	5.8	13.9	17.5	62.8
Cooking oil	*n*	*1349*	56	140	217	936
	%	*100*	4.2	10.4	16.1	69.4
Snacks	*n*	*133*	21	26	5	81
	%	*100*	15.8	19.5	3.8	60.9
Sweets/chocolate	*n*	*129*	31	52	17	29
	%	*100*	24.0	40.3	13.2	22.5
Chips/french fries	*n*	*103*	14	23	15	51
	%	*100*	13.6	22.3	14.6	49.5

Table 44. Sampled household food purchases by food source

		Supermarket	*Small shop*	*Butchery bakery*	*Take away*	*Restaurant*	*Formal market*	*Informal market*	*Spaza shop*	*Street seller*
White bread (n=1746 purchasers)	*n*	140	146	1049	12	4	207	333	2	287
	% of total sample	6.8	7.0	50.7	.6	.2	10.0	16.1	.1	13.9
	% of item purchasers	8.0	8.4	60.1	.7	.2	11.9	19.1	.1	16.4
Brown bread (n=145 purchasers)	*n*	50	33	67	1	4	35	21	0	13
	% of total sample	2.4	1.6	3.2	.0	.2	1.7	1.0	0	.6
	% of item purchasers	34.5	22.8	46.2	.7	2.8	24.1	14.5	0	9.0
Rice (n=1827 purchasers)	*n*	283	1206	7	3	3	383	317	13	51
	% of total sample	13.7	58.2	.3	.1	.1	18.5	15.3	.6	2.5
	% of item purchasers	15.5	66.0	.4	.2	.2	21.0	17.4	.7	2.8
Pasta (n=917 purchasers)	*n*	220	625	1	3	3	222	153	4	22
	% of total sample	10.6	30.2	.0	.1	.1	10.7	7.4	.2	1.1
	% of item purchasers	24.0	68.2	.1	.3	.3	24.2	16.7	.4	2.4
Fresh cooked vegetables (n=1310 purchasers)	*n*	57	98	2	5	2	618	694	1	212
	% of total sample	2.8	4.7	.1	.2	.1	29.8	33.5	.0	10.2
	% of item purchasers	4.4	7.5	.2	.4	.2	47.2	53.0	.1	16.2
Fresh fruit (n=564 purchasers)	*n*	149	83	2	4	4	270	234	1	139
	% of total sample	7.2	4.0	.1	.2	.2	13.0	11.3	.0	6.7
	% of item purchasers	26.4	14.7	.4	.7	.7	47.9	41.5	.2	24.6

Tinned canned vegetables (n=64 purchasers)	*n*	46	41	0	0	0	12	6	0	0
	% of total sample	2.2	2.0	0	0	0	.6	.3	0	0
	% of item purchasers	71.9	64.1	0	0	0	18.8	9.4	0	0
Tinned canned fruit (n=16 purchasers)	*n*	10	10	0	0	0	4	2	0	0
	% of total sample	.5	.5	0	0	0	.2	.1	0	0
	% of item purchasers	62.5	62.5	0	0	0	25.0	12.5	0	0
Fresh meat (n=385 purchasers)	*n*	51	98	140	10	0	109	91	1	22
	% of total sample	2.5	4.7	6.8	.5	0	5.3	4.4	.0	1.1
	% of item purchasers	13.2	25.5	36.4	2.6	0	28.3	23.6	.3	5.7
Frozen meat (n=771 purchasers)	*n*	184	347	225	8	1	201	109	2	26
	% of total sample	8.9	16.8	10.9	.4	.0	9.7	5.3	.1	1.3
	% of item purchasers	23.9	45.0	29.2	1.0	.1	26.1	14.1	.3	3.4
Cooked meat (n=29 purchasers)	*n*	3	5	8	2	11	6	4	5	2
	% of total sample	.1	.2	.4	.1	.5	.3	.2	.2	.1
	% of item purchasers	10.3	17.2	27.6	6.9	37.9	20.7	13.8	17.2	6.9
Offal (n=121 purchasers)	*n*	31	60	12	0	2	27	35	1	10
	% of total sample	1.5	2.9	.6	0	.1	1.3	1.7	.0	.5
	% of item purchasers	25.6	49.6	9.9	0.0	1.7	22.3	28.9	.8	8.3
Tinned canned meat	*n*	4	5	0	0	0	3	3	.0	.0
	% of total sample	.2	.2	0	0	0	.1	.1	.0	.0

(n=10 purchasers)	*% of item purchasers*	40.0	50.0	0	0	0	30.0	30.0	.0	.0
Frozen chicken (n=902 purchasers)	*n*	223	553	73	10	0	218	146	4	20
	% of total sample	10.8	26.7	3.5	.5	0	10.5	7.0	.2	1.0
	% of item purchasers	24.7	61.3	8.1	1.1	0	24.2	16.2	.4	2.2
Fresh chicken (n=430 purchasers)	*n*	38	139	11	6	1	174	165	.0	49
	% of total sample	1.8	6.7	.5	.3	.0	8.4	8.0	.0	2.4
	% of item purchasers	8.8	32.3	2.6	1.4	.2	40.5	38.4	.0	11.4
Cooked chicken (n=49 purchasers)	*n*	10	5	2	6	23	14	7	5	1
	% of total sample	.5	.2	.1	.3	1.1	.7	.3	.2	.0
	% of item purchasers	20.4	10.2	4.1	12.2	46.9	28.6	14.3	10.2	2.0
Fresh fish (n=372 purchasers)	*n*	30	151	14	5	2	137	132	3	41
	% of total sample	1.4	7.3	.7	.2	.1	6.6	6.4	.1	2.0
	% of item purchasers	8.1	40.6	3.8	1.3	.5	36.8	35.5	.8	11.0
Frozen fish (n=1180 purchasers)	*n*	131	803	69	2	2	317	167	5	22
	% of total sample	6.3	38.8	3.3	.1	.1	15.3	8.1	.2	1.1
	% of item purchasers	11.1	68.1	5.8	.2	.2	26.9	14.2	.4	1.9
Cooked fish (n=15 purchasers)	*n*	2	2	1	3	6	4	3	1	0.0
	% of total sample	.1	.1	.0	.1	.3	.2	.1	.0	0.0
	% of item purchasers	13.3	13.3	6.7	20.0	40.0	26.7	20.0	6.7	0.0
	n	7	5	0.0	2	9	4	0.0	4	0.0

Pies samosa vetkoek (n=16 purchasers)	*% of total sample*	.3	.2	0.0	.1	.4	.2	0.0	.2	0.0
	% of item purchasers	43.8	31.3	0.0	12.5	56.3	25.0	0.0	25.0	0.0
Eggs (n=859 purchasers)	*n*	209	561	6	6	0	226	169	4	62
	% of total sample	10.1	27.1	.3	.3	0	10.9	8.2	.2	3.0
	% of item purchasers	24.3	65.3	.7	.7	0	26.3	19.7	.5	7.2
Fresh milk (n=348 purchasers)	*n*	163	213	3	2	3	65	35	.0	8
	% of total sample	7.9	10.3	.1	.1	.1	3.1	1.7	.0	.4
	% of item purchasers	46.8	61.2	.9	.6	.9	18.7	10.1	.0	2.3
Sour milk (n=33 purchasers)	*n*	15	21	1	1	0	17	8	1	0.0
	% of total sample	.7	1.0	.0	.0	.0	.8	.4	.0	0.0
	% of item purchasers	45.5	63.6	3.0	3.0	0.0	51.5	24.2	3.0	0.0
Tea/coffee (n=1072 purchasers)	*n*	235	743	5	4	3	291	187	7	54
	% of total sample	11.3	35.9	.2	.2	.1	14.1	9.0	.3	2.6
	% of item purchasers	21.9	69.3	.5	.4	.3	27.1	17.4	.7	5.0
Sugar (n=1349 purchasers)	*n*	263	940	3	4	1	349	283	7	74
	% of total sample	12.7	45.4	.1	.2	.0	16.9	13.7	.3	3.6
	% of item purchasers	19.5	69.7	.2	.3	.1	25.9	21.0	.5	5.5
Cooking oil (n=1350 purchasers)	*n*	296	919	4	3	2	342	268	7	70
	% of total sample	14.3	44.4	.2	.1	.1	16.5	12.9	.3	3.4
	% of item purchasers	21.9	68.1	.3	.2	.1	25.3	19.9	.5	5.2

Snacks (n=133 purchasers)	*n*	35	102	.0	1	6	57	11	7	15
	% of total sample	1.7	4.9	.0	.0	.3	2.8	.5	.3	.7
	% of item purchasers	26.3	76.7	.0	.8	4.5	42.9	8.3	5.3	11.3
Sweets chocolate (n=131 purchasers)	*n*	75	70	.0	.0	2	30	26	1	13
	% of total sample	3.6	3.4	.0	.0	.1	1.4	1.3	.0	.6
	% of item purchasers	57.3	53.4	.0	0	1.5	22.9	19.8	.8	9.9
Chips french fries (n=104 purchasers)	*n*	35	43	2	2	3	17	25	.0	9
	% of total sample	1.7	2.1	.1	.1	.1	.8	1.2	.0	.4
	% of item purchasers	33.7	41.3	1.9	1.9	2.9	16.3	24.0	.0	8.7

Table 45. Sampled household food purchases by food source location

Food Items		*Within my neighbourhood (in walking distance)*	*On road to or from work*	*Central business district*	*Other shopping area*	*Outside the city*	*Other*
White bread (n=1744 purchasers)	*n*	1678	63	23	137	5	3
	% of total sample	81.0	3.0	1.1	6.6	.2	.1
	% of item purchasers	96.2	3.6	1.3	7.9	.3	.2
Brown bread (n=145 purchasers)	*n*	107	27	14	37	6	4
	% of total sample	5.2	1.3	.7	1.8	.3	.2
	% of item purchasers	73.8	18.6	9.7	25.5	4.1	2.8
Rice (n=1826 purchasers)	*n*	1654	59	80	239	24	4
	% of total sample	79.9	2.8	3.9	11.5	1.2	.2
	% of item purchasers	90.6	3.2	4.4	13.1	1.3	.2
Pasta (n=917 purchasers)	*n*	818	63	47	165	19	7
	% of total sample	39.5	3.0	2.3	8.0	.9	.3
	% of item purchasers	89.2	6.9	5.1	18.0	2.1	.8
Fresh cooked	*n*	1221	30	28	160	18	17

vegetables (n=1310 purchasers)	*% of total sample*	59.0	1.4	1.4	7.7	.9	.8
	% of item purchasers	93.2	2.3	2.1	12.2	1.4	1.3
Fresh fruit (n=564 purchasers)	*n*	476	76	37	124	17	13
	% of total sample	23.0	3.7	1.8	6.0	.8	.6
	% of item purchasers	84.4	13.5	6.6	22.0	3.0	2.3
Tinned or canned vegetables (n=64 purchasers)	*n*	51	11	5	29	1	2
	% of total sample	2.5	.5	.2	1.4	.0	.1
	% of item purchasers	79.7	17.2	7.8	45.3	1.6	3.1
Tinned or canned fruit (n=16 purchasers)	*n*	12	5	3	5	3	0
	% of total sample	.6	.2	.1	.2	.1	.0
	% of item purchasers	75.0	31.3	18.8	31.3	18.8	0.0
Fresh meat (n=385 purchasers)	*n*	312	25	22	73	34	7
	% of total sample	15.1	1.2	1.1	3.5	1.6	.3
	% of item purchasers	81.0	6.5	5.7	19.0	8.8	1.8
Frozen meat (n=772 purchasers)	*n*	637	69	59	169	43	8
	% of total sample	30.8	3.3	2.8	8.2	2.1	.4

	% of item purchasers	82.5	8.9	7.6	21.9	5.6	1.0
Cooked meat (n=29 purchasers)	*n*	26	6	4	5	3	1
	% of total sample	1.3	.3	.2	.2	.1	.0
	% of item purchasers	89.7	20.7	13.8	17.2	10.3	3.4
Offal (n=121 purchasers)	*n*	106	12	2	23	5	6
	% of total sample	5.1	.6	.1	1.1	.2	.3
	% of item purchasers	87.6	9.9	1.7	19.0	4.1	5.0
Tinned or canned meat (n=10 purchasers)	*n*	7	1	3	1	0	0
	% of total sample	.3	.0	.1	.0	.0	.0
	% of item purchasers	70.0	10.0	30.0	10.0	0.0	0.0
Frozen chicken (n=902 purchasers)	*n*	780	59	53	157	32	9
	% of total sample	37.7	2.8	2.6	7.6	1.5	.4
	% of item purchasers	86.5	6.5	5.9	17.4	3.5	1.0
Fresh chicken (n=430 purchasers)	*n*	389	23	24	60	13	5
	% of total sample	18.8	1.1	1.2	2.9	.6	.2
	% of item purchasers	90.5	5.3	5.6	14.0	3.0	1.2

Cooked chicken (n=49 purchasers)	*n*	33	14	11	12	6	.0
	% of total sample	1.6	.7	.5	.6	.3	.0
	% of item purchasers	67.3	28.6	22.4	24.5	12.2	.0
Fresh fish (n=372 purchasers)	*n*	314	28	20	66	22	9
	% of total sample	15.2	1.4	1.0	3.2	1.1	.4
	% of item purchasers	84.4	7.5	5.4	17.7	5.9	2.4
Frozen fish (n=1180 purchasers)	*n*	1084	46	51	146	16	5
	% of total sample	52.3	2.2	2.5	7.0	.8	.2
	% of item purchasers	91.9	3.9	4.3	12.4	1.4	.4
Cooked fish (n=15 purchasers)	*n*	11	4	2	6	1	.0
	% of total sample	.5	.2	.1	.3	.0	.0
	% of item purchasers	73.3	26.7	13.3	40.0	6.7	.0
Pies samosa vetkoek (n=16 purchasers)	*n*	13	5	1	10	2	1
	% of total sample	.6	.2	.0	.5	.1	.0
	% of item purchasers	81.3	31.3	6.3	62.5	12.5	6.3
	n	747	70	50	146	35	11

Eggs (n=859 purchasers)	*% of total sample*	36.1	3.4	2.4	7.0	1.7	.5
	% of item purchasers	87.0	8.1	5.8	17.0	4.1	1.3
Fresh milk (n=348 purchasers)	*n*	274	54	36	81	10	6
	% of total sample	13.2	2.6	1.7	3.9	.5	.3
	% of item purchasers	78.7	15.5	10.3	23.3	2.9	1.7
Sour milk (n=33 purchasers)	*n*	27	7	4	14	4	2
	% of total sample	1.3	.3	.2	.7	.2	.1
	% of item purchasers	81.8	21.2	12.1	42.4	12.1	6.1
Tea or coffee (n=1072 purchasers)	*n*	957	82	41	195	19	12
	% of total sample	46.2	4.0	2.0	9.4	.9	.6
	% of item purchasers	89.3	7.6	3.8	18.2	1.8	1.1
Sugar (n=1349 purchasers)	*n*	1233	83	54	232	18	16
	% of total sample	59.5	4.0	2.6	11.2	.9	.8
	% of item purchasers	91.4	6.2	4.0	17.2	1.3	1.2
Cooking oil (n=1350 purchasers)	*n*	1212	89	73	231	20	11
	% of total sample	58.5	4.3	3.5	11.2	1.0	.5

	% of item purchasers	89.8	6.6	5.4	17.1	1.5	.8
Snacks (n=133 purchasers)	*n*	121	24	12	28	2	2
	% of total sample	5.8	1.2	.6	1.4	.1	.1
	% of item purchasers	91.0	18.0	9.0	21.1	1.5	1.5
Sweets chocolate (n=131 purchasers)	*n*	94	43	10	50	5	5
	% of total sample	4.5	2.1	.5	2.4	.2	.2
	% of item purchasers	71.8	32.8	7.6	38.2	3.8	3.8
Chips french fries (n=104 purchasers)	*n*	78	16	11	28	1	3
	% of total sample	3.8	.8	.5	1.4	.0	.1
	% of item purchasers	75.0	15.4	10.6	26.9	1.0	2.9

4.3 Supermarket attitudes

Table 46. Frequency distribution table of statements regarding supermarkets by sampled households who have gone to a supermarket in the last month

Attitude Statements		*Agree*	*Neither agree nor disagree*	*Disagree*	*Total*
Food is cheaper at supermarkets	*n*	294	216	188	*698*
	%	42.1	30.9	26.9	*100.0*
Food is better quality at supermarkets	*n*	481	140	77	*698*
	%	68.9	20.1	11.0	*100.0*
Supermarkets have a greater variety of foods	*n*	563	86	52	*701*
	%	80.3	12.3	7.4	*100.0*
We can buy in bulk at supermarkets	*n*	421	136	128	*685*
	%	61.5	19.9	18.7	*100.0*
Supermarkets are where we get social grant pay-outs so we shop there	*n*	147	190	328	*665*
	%	22.1	28.6	49.3	*100.0*

Table 47. Frequency distribution table of statements regarding supermarkets by sampled households who have not gone to a supermarket in the last month

Attitude Statements		*Agree*	*Neither agree nor disagree*	*Disagree*	*Total*
Supermarkets are too far away	*n*	643	134	564	*1341*
	%	47.9	10.0	42.1	*100.0*
Supermarkets are too expensive	*n*	513	334	443	*1290*
	%	39.8	25.9	34.3	*100.0*
Supermarkets do not provide credit	*n*	327	476	364	*1167*
	%	28.0	40.8	31.2	*100.0*
Supermarkets are only for the wealthy	*n*	336	211	757	*1304*
	%	25.8	16.2	58.1	*100.0*
Supermarkets do not sell the food that we need	*n*	200	246	843	*1289*
	%	15.5	19.1	65.4	*100.0*

4.4 Urban agriculture attitudes

Table 48. Frequency distribution table of statements about not engaging in urban agriculture among those sampled households not engaged in urban agriculture

Attitude Statements		*Agree*	*Neither agree nor disagree*	*Disagree*	*Total*
Farming is for rural people only	*n*	340	172	1157	1669
	%	20.4	10.3	69.3	100.0
We have no land on which to grow food	*n*	598	195	869	1662
	%	36.0	11.7	52.3	100.0
We have no interest in growing food	*n*	351	244	1068	1663
	%	21.1	14.7	64.2	100.0
We lack the skills to grow food	*n*	300	222	1136	1658
	%	18.1	13.4	68.5	100.0
We do not have access to inputs (seeds, water, fertilizer)	*n*	359	331	958	1648
	%	21.8	20.1	58.1	100.0
We do not have the time or labour	*n*	418	338	887	1643
	%	25.4	20.6	54.0	100.0
It is easier to buy our food than grow it	*n*	966	205	497	1668
	%	57.9	12.3	29.8	100.0
People would steal whatever we grow	*n*	430	367	768	1565
	%	27.5	23.5	49.1	100.0

4.5 Urban agriculture location

Table 49. Frequency distribution table of urban agriculture locations among sampled households

UA Plot Locations	*n*	*% of Sample*	*% of UA Farmers*
On own housing plot	140	6.8	38.6
Hanging garden	6	.3	1.7
Within residential area, but outside own plot	50	2.4	13.8
On riverbed	19	.9	5.2
On roadside	7	.3	1.9
On industrial site	7	.3	1.9
Urban forest	8	.4	2.2
Other urban land	151	7.3	41.6

4.6 Urban agriculture crops

Table 50. Frequency distribution table of urban agriculture crops among sampled households

Crops	*n*	*% of Sample*	*% of UA Farmers*
Maize/Mealies/Corn	79	3.8	21.7
Vegetables (including herbs)	262	12.7	72.0
Fruit	5	.2	1.4
Other	36	1.7	9.9

4.7 Urban agriculture livestock

Table 51. Frequency distribution table of types of livestock kept in the city by sampled households

Livestock	*n*	*% of Sample*	*% of Livestock Owners*
Cows	7	.3	1.9
Goats	16	.8	4.3
Sheep	1	.0	0.3
Chickens	250	12.1	67.0
Pigs	13	.6	3.5
Other	98	4.7	26.3

5. Lived Poverty Index Q18

5.1 LPI Sub-scales

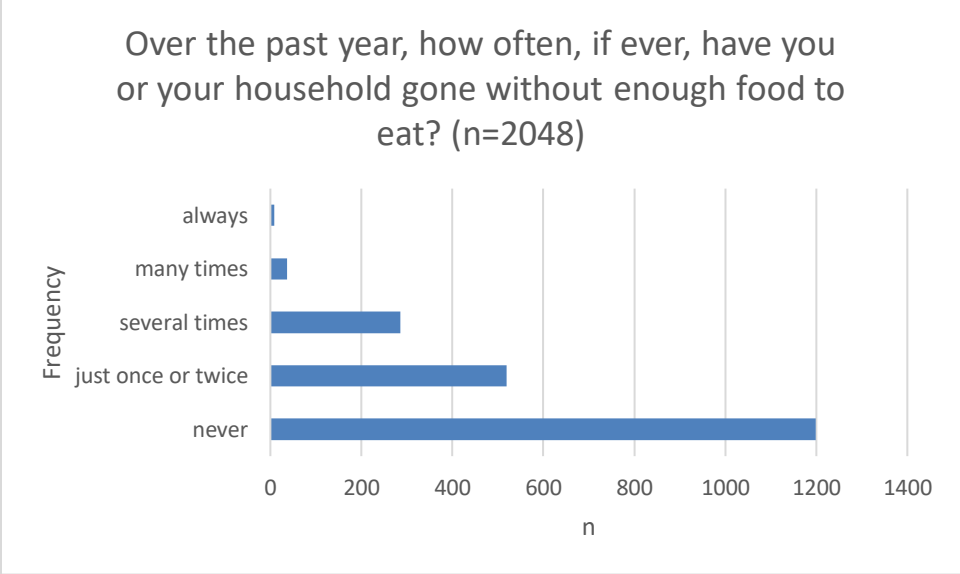

Figure 15. Consistent household access to food LPI sub-scale

Table 52. Sample frequency distribution of household experiences of inconsistent food access over the past year

Frequency	*n*	*%*	*Cumulative %*
Never	1198	58.5	58.5
Just once or twice	519	25.3	83.8
Several times	285	13.9	97.8
Many times	37	1.8	99.6
Always	9	.4	100.0
Total	*2048*	*100.0*	

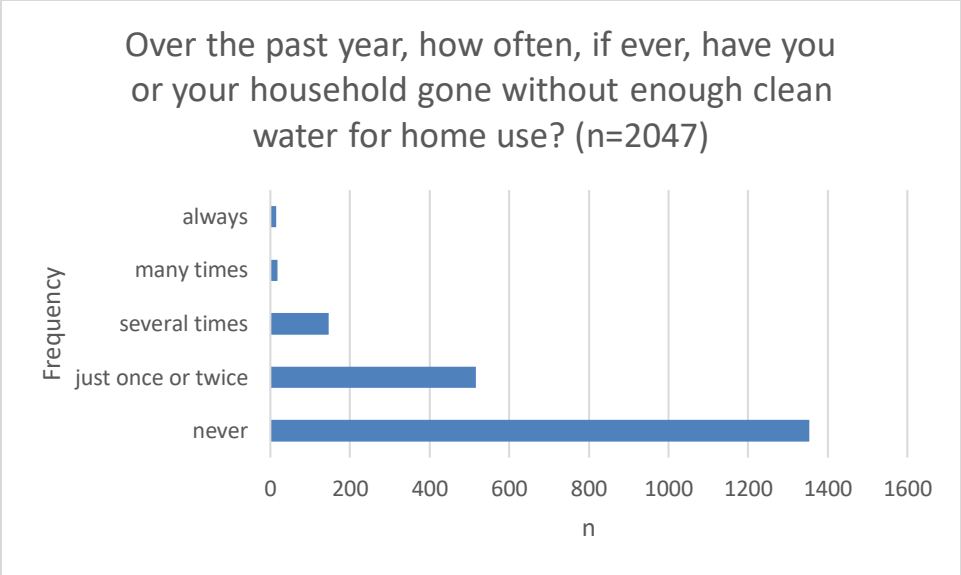

Figure 16. Consistent household access to clean water LPI sub-scale

Table 53. Sample frequency distribution of household experiences of inconsistent clean water access over the past year

Frequency	*n*	*%*	*Cumulative %*
Never	1353	66.1	66.1
Just once or twice	516	25.2	91.3
Several times	146	7.1	98.4
Many times	18	.9	99.3
Always	14	.7	100.0
Total	*2047*	*100.0*	

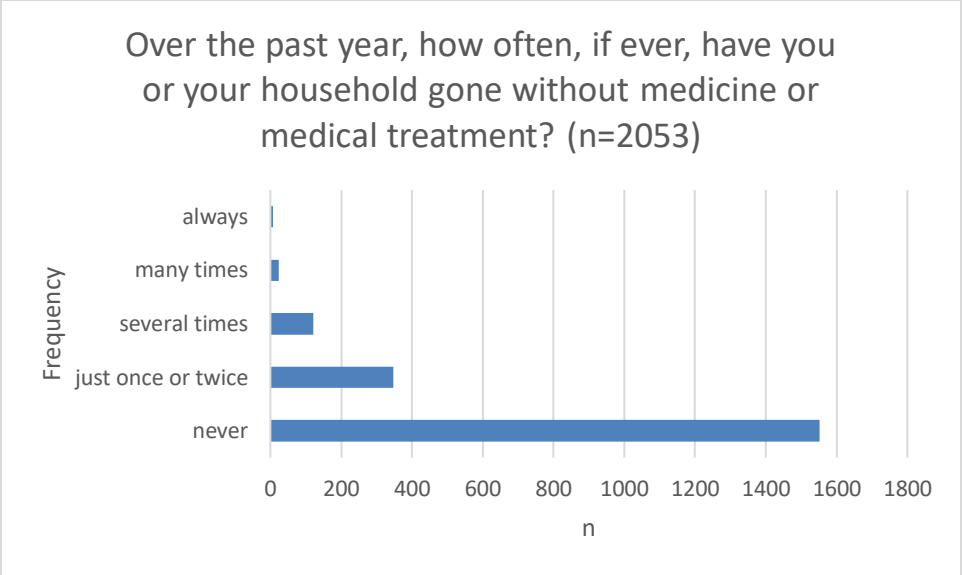

Figure 17. Consistent household access to medicine or medical treatment LPI sub-scale

Table 54. Sample frequency distribution of household experiences of inconsistent medicine or medical treatment access over the past year

Frequency	*n*	*%*	*Cumulative %*
Never	1552	75.6	75.6
Just once or twice	348	17.0	92.5
Several times	122	5.9	98.5
Many times	23	1.1	99.6
Always	8	.4	100.0
Total	*2053*	*100.0*	

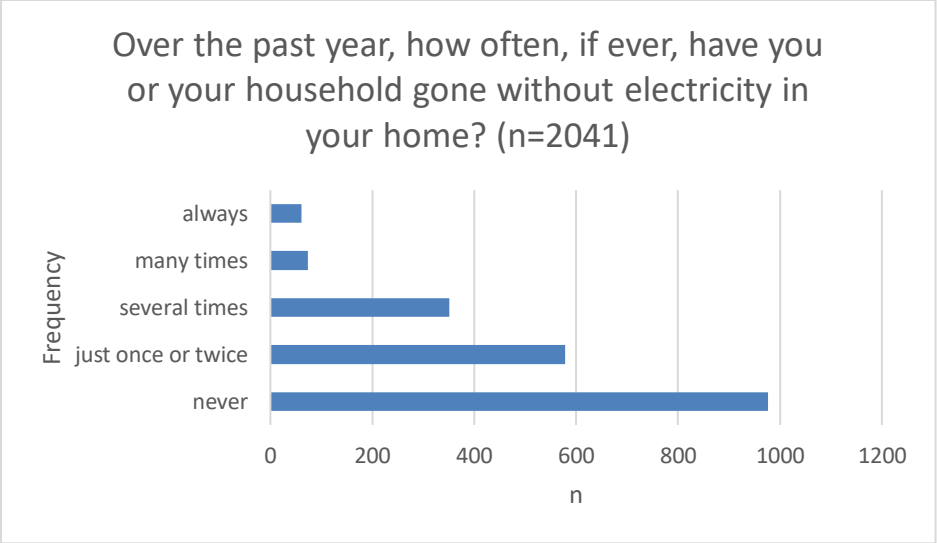

Figure 18. Consistent household access to electricity LPI sub-scale

Table 55. Sample frequency distribution of household experiences of inconsistent electricity access over the past year

Frequency	*n*	*%*	*Cumulative %*
Never	977	47.9	47.9
Just once or twice	578	28.3	76.2
Several times	351	17.2	93.4
Many times	74	3.6	97.0
Always	61	3.0	100.0
Total	*2041*	*100.0*	

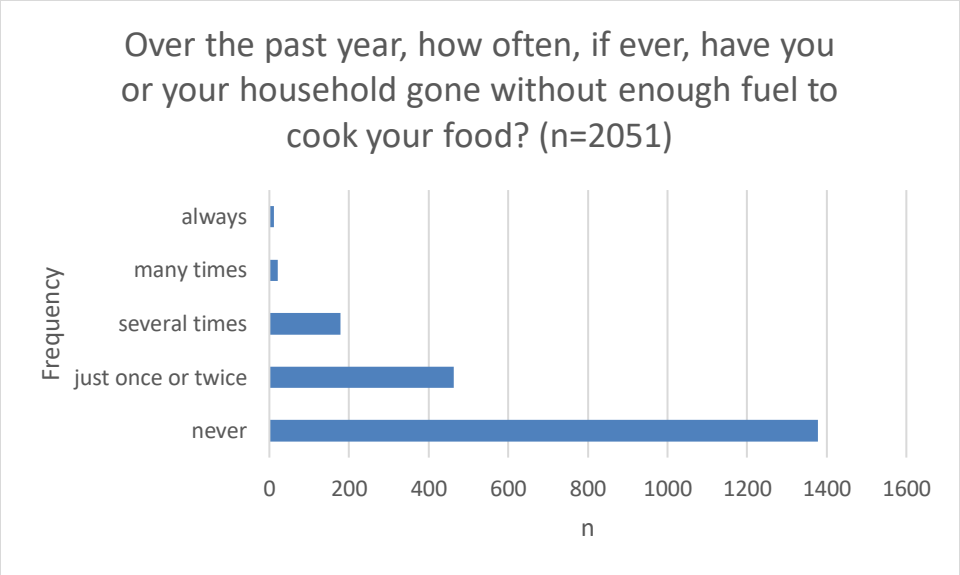

Figure 19. Consistent household access to cooking fuel LPI sub-scale

Table 56. Sample frequency distribution of household experiences of inconsistent cooking fuel access over the past year

Frequency	*n*	*%*	*Cumulative %*
Never	1378	67.2	67.2
Just once or twice	463	22.6	89.8
Several times	178	8.7	98.4
Many times	21	1.0	99.5
Always	11	.5	100.0
Total	*2051*	*100.0*	

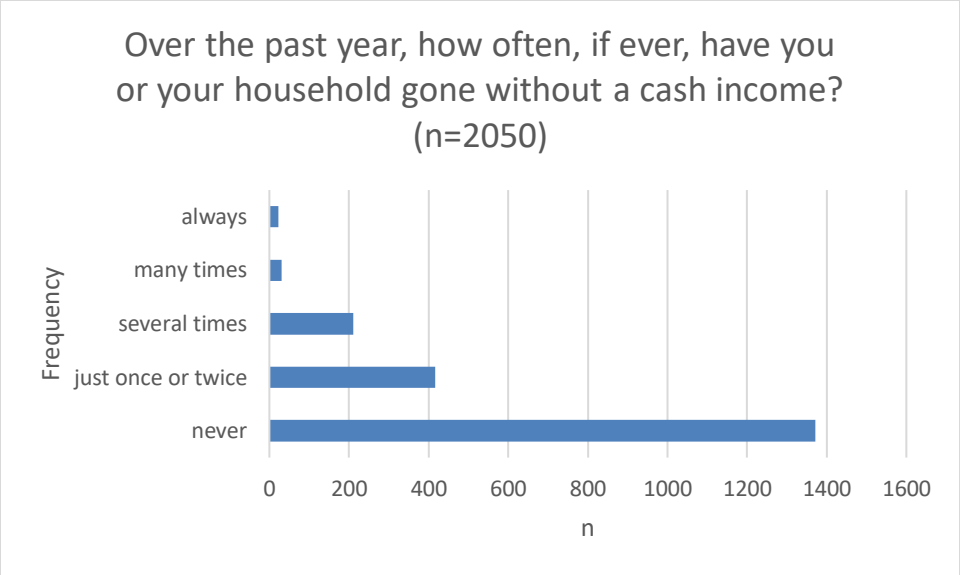

Figure 20. Consistent household access to cash income LPI sub-scale

Table 57. Sample frequency distribution of household experiences of inconsistent cash income access over the past year

Frequency	*n*	*%*	*Cumulative %*
Never	1371	66.9	66.9
Just once or twice	416	20.3	87.2
Several times	210	10.2	97.4
Many times	31	1.5	98.9
Always	22	1.1	100.0
Total	*2050*	*100.0*	

5.3 Lived Poverty Index

Table 58. Sample Lived Poverty Index score descriptive statistics

Mean	*Median*	*Std. Deviation*	*Minimum*	*Maximum*	*n*
.5314	.3333	.58866	0	4.00	2008

5.4 Cross Tabulations of Lived Poverty Sub-Scales by Household Food Insecure Access Prevalence

Table 59. Cross-tabulation of sampled HFIAP scores by the household frequency of going without food

LPI-Lack of Access to Food Frequency		*HFIAP*			
		Food secure	*Mildly food insecure access*	*Moderately food insecure access*	*Severely food insecure access*
Never	*n*	537	167	244	239
	%	92.4	74.2	54.1	30.8
Just once or twice	*n*	36	40	144	298
	%	6.2	17.8	31.9	38.4
Several times	*n*	7	18	59	199
	%	1.2	8.0	13.1	25.6
Many times	*n*	1	0	3	33
	%	.2	0.0	.7	4.2
Always	*n*	0	0	1	8
	%	0.0	0.0	.2	1.0
Total	*n*	581	225	451	777
	%	100.0	100.0	100.0	100.0

Table 60. Cross-tabulation of sampled HFIAP scores by the household frequency of going without clean water

LPI-Lack of Access to Clean Water Frequency		*HFIAP*			
		Food secure	*Mildly food insecure access*	*Moderately food insecure access*	*Severely food insecure access*
Never	*n*	507	159	261	416
	%	87.3	70.4	58.1	53.6
Just once or twice	*n*	64	54	147	247
	%	11.0	23.9	32.7	31.8
Several times	*n*	8	10	35	92
	%	1.4	4.4	7.8	11.9
Many times	*n*	1	1	3	13
	%	.2	.4	.7	1.7
Always	*n*	1	2	3	8
	%	.2	.9	.7	1.0
Total	*n*	581	226	449	776
	%	100.0	100.0	100.0	100.0

Table 61. Cross-tabulation of sampled HFIAP scores by the household frequency of going without medical care

LPI-Lack of Access to Medical Care Frequency		*HFIAP*			
		Food secure	*Mildly food insecure access*	*Moderately food insecure access*	*Severely food insecure access*
Never	*n*	552	207	346	435
	%	94.7	92.0	76.7	55.8
Just once or twice	*n*	26	12	82	226
	%	4.5	5.3	18.2	29.0
Several times	*n*	4	5	20	93
	%	.7	2.2	4.4	11.9
Many times	*n*	1	1	3	18
	%	.2	.4	.7	2.3
Always	*n*	0	0	0	8
	%	0.0	0.0	0.0	1.0
Total	*n*	583	225	451	780
	%	100.0	100.0	100.0	100.0

Table 62. Cross-tabulation of sampled HFIAP scores by the household frequency of going without electricity

LPI-Lack of Access to Electricity Frequency		*HFIAP*			
		Food secure	*Mildly food insecure access*	*Moderately food insecure access*	*Severely food insecure access*
Never	*n*	440	114	157	258
	%	75.9	50.7	35.0	33.3
Just once or twice	*n*	98	52	144	281
	%	16.9	23.1	32.1	36.3
Several times	*n*	30	47	112	159
	%	5.2	20.9	25.0	20.5
Many times	*n*	10	8	23	33
	%	1.7	3.6	5.1	4.3
Always	*n*	2	4	12	43
	%	.3	1.8	2.7	5.6
Total	*n*	580	225	448	774
	%	100.0	100.0	100.0	100.0

Table 63. Cross-tabulation of sampled HFIAP scores by the household frequency of going without cooking fuel

LPI-Lack of Access to Cooking Fuel Frequency		*HFIAP*			
		Food secure	*Mildly food insecure access*	*Moderately food insecure access*	*Severely food insecure access*
Never	*n*	544	179	300	341
	%	93.6	79.2	66.4	43.9
Just once or twice	*n*	34	32	116	281
	%	5.9	14.2	25.7	36.2
Several times	*n*	3	14	33	127
	%	.5	6.2	7.3	16.3
Many times	*n*	0	0	3	18
	%	0.0	0.0	.7	2.3
Always	*n*	0	1	0	10
	%	0.0	.4	0.0	1.3
Total	*n*	581	226	452	777
	%	100.0	100.0	100.0	100.0

Table 64. Cross-tabulation of sampled HFIAP scores by the household frequency of going without a cash income

LPI-Lack of Access to a Cash Income Frequency		*HFIAP*			
		Food secure	*Mildly food insecure access*	*Moderately food insecure access*	*Severely food insecure access*
Never	*n*	532	192	307	327
	%	91.3	85.0	68.7	42.0
Just once or	*n*	40	27	99	248
twice	*%*	6.9	11.9	22.1	31.8
Several times	*n*	9	7	38	156
	%	1.5	3.1	8.5	20.0
Many times	*n*	0	0	1	30
	%	0.0	0.0	.2	3.9
Always	*n*	2	0	2	18
	%	.3	0.0	.4	2.3
Total	*n*	583	226	447	779
	%	100.0	100.0	100.0	100.0

Table 65. Cross-tabulation of sampled HFIAP scores by the total LPI categories

LPI Categories		*HFIAP*			
		Food secure	*Mildly food insecure access*	*Moderately food insecure access*	*Severely food insecure access*
<= 1.00	*n*	568	213	390	512
	%	99.0	95.5	88.2	67.7
1.01 - 2.00	*n*	6	9	50	208
	%	1.0	4.0	11.3	27.5
2.01 - 3.00	*n*	0	1	2	29
	%	0.0	.4	.5	3.8
3.01+	*n*	0	0	0	7
	%	0.0	0.0	0.0	.9
Total	*n*	574	223	442	756
	%	100.0	100.0	100.0	100.0

6. Section E: Social Grants

6.1 Type of grants received by sampled households

Table 66. Sample frequency distribution of household grants received (n=2056)

Grant Type	*n*	*%*
Child grants	8	.4
Old age pension	59	2.9
Disability grant	3	.1
War veterans grant	10	.5
Foster care grant	35	1.7
Food vouchers	1	.0
Food for work	1	.0
Food aid	17	.8
No aid received	1925	93.6

6.2 Amount received from social grants

Table 67. Descriptive statistics of total amounts received in social grants by sampled households

Mean	*Median*	*Std. Deviation*	*Minimum*	*Maximum*	*n*
3247.55	2000.00	5474.669	0	45000	94

6.3 Source of social grants

Table 68. Sample frequency distribution of social grant sources

Location	*n*	*% of Sample*	*% of Grant Recipients*
Cash pay-point	19	.9	15.0
Supermarket	4	.2	3.1
Electronic deposit into bank or postbank account	67	3.2	52.8
Other	30	1.4	23.6

6.4 Use of social grants

Table 69. Sample distribution of household social grant use

Grant Uses	*n*	*% of Sample*	*% of Grant Recipients*
Purchase food/groceries for household	107	5.2	84.3
Pay education expenses	19	.9	15.0
Buy clothing	21	1.0	16.5
Buy household items	5	.2	3.9
Pay medical expenses	25	1.2	19.7
Pay utilities	28	1.4	22.0
Buy livestock	0	0	0
Buy seeds/fertilizer to grow produce	7	.3	5.5
Remittances - send money to other relatives	1	.0	.8
Savings	9	.4	7.1
Pay debts	10	.5	7.9
Gifts	3	.1	2.4

6.5 Importance of social grants

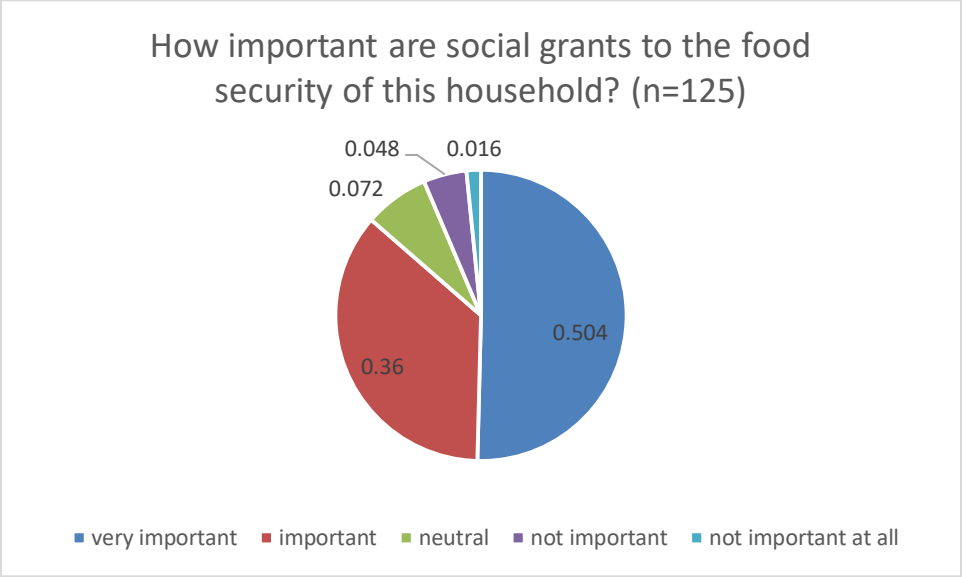

Figure 20. Sample frequency distribution of social grant importance among households receiving social grants

Table 70. Sample frequency distribution of social grant importance to households receiving grants

Grant Importance	*n*	*%*	*Cumulative %*
Very important	63	50.4	50.4
Important	45	36.0	86.4
Neutral	9	7.2	93.6
Not important	6	4.8	98.4
Not important at all	2	1.6	100.0
Total	*125*	*100.0*	

7. Policy Implications

7.1 Summary of findings

In summary, some very interesting trends were observed in the findings of this report. In particular, the sampled households in Maputo tended to be…

7.2 Conclusions related to the identified food themes for the city

Within Maputo, the practice of informal food trade appears to be very common among the sampled household population…

7.3 Future research recommendations

While this report provides some very comprehensive analyses regarding household food security and social vulnerability, there are lingering questions which have been inspired by this report's findings and have yet to be answered. In particular, it will be interesting to determine….