Evans School of Public Affairs
UNIVERSITY OF WASHINGTON

LSMS – Integrated Surveys on Agriculture
United Republic of Tanzania:
Food Consumption and Expenditures

EPAR Request No. 165

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SECTION G: Food Consumption and Expenditures

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Section Highlights

- The mean total value of household consumption was higher for agricultural households (US$27.28) compared to non-agricultural households (US$26.59), but the mean per capita value of household consumption was higher for non-agricultural households (US$7.32) compared to agricultural households (US$5.24).
- Very few households purchased a food item that they also produced over the past one week. This does not imply households only purchase or produce all food items, just that within one particular food item category, they are likely to consume the majority of their food from either purchases or self-production over a one week period, but not both.
- Households that produced a particular food item tended to consume a higher mean quantity over the last seven days than households that purchased the food item. Two exceptions were rice and fresh milk. Households that purchased rice consumed more (17kg) than households that produced rice (5.9kg), and households that purchased fresh milk consumed more (3L) than households that produced fresh milk (1.7L).
- The Central zone had the lowest mean total weekly value of consumption at US$20.77 compared to the highest mean of US$34.20 in the Southern zone.
- The mean per capita value of weekly consumption for the Southern zone was only US$5.34, compared to the highest mean per capita value of US$6.63 in the Eastern zone. The Central zone still had the lowest per capita value of consumption at US$4.40.
- Across the majority of administrative zones and food groups, the weekly value of consumption is higher for households that produced the food group compared to households that purchased the food group.[1]

[1] Note: shadow prices were used to calculate the value of all food groups that were produced.

Consumption: Priority Foods

The LSMS data allows us to calculate the proportion of households that reported consuming a particular food item within their household over the past seven days. The survey includes data on 59 food items, grouped into the following categories: cereals, starches, sugar and sweets, pulses, nuts, vegetables, fruits, meat and meat products (including fish), milk and milk products, oils and fats, spices, and beverages.

We ranked all food items according to the proportion of agricultural households that reported consuming some quantity of the food. Those items falling in the top quartile were considered *priority foods* and were thus included in the analysis below. Items of strategic importance to the Bill & Melinda Gates Foundation and foods considered generally high in macronutrients, vitamins, minerals, or amino acids were also categorized as *priority foods*.[2] Items meeting these criteria include:

- **Cereals**: maize flour, maize grain, and husked rice
- **Starches**: fresh cassava, cassava flour, sweet potatoes, and cooking bananas and plantains
- **Sugar and Sweets**: sugar
- **Pulses**: peas, beans, lentils and "other" pulses
- **Nuts**: groundnuts
- **Vegetables and fruits**: onions, tomatoes, carrots, green pepper, spinach, cabbage, and other leafy greens
- **Meats, meat products, and fish**: goat, beef, pork, chicken, eggs, and fresh and dried fish
- **Milk and milk products**: fresh milk, cheese, yogurt, and cream
- **Oils, fats, and spices**: salt and cooking oil
- **Beverages**: dry tea

For a detailed list of all food item rankings, based on proportions of agricultural and non-agricultural households that reported consumption, see *Appendix A*.

[2] Based on the World Food Dietary Assessment System and Lukmanji, Z., Hertzmark, E., Mlingi, N., Assey, V., Ndossi, G., and Fawzi, W. (2008). Tanzanian Food Composition Tables. https://apps.sph.harvard.edu/publisher/upload/nutritionsource/files/tanzania-food-composition-tables.pdf

Total Value of Consumption

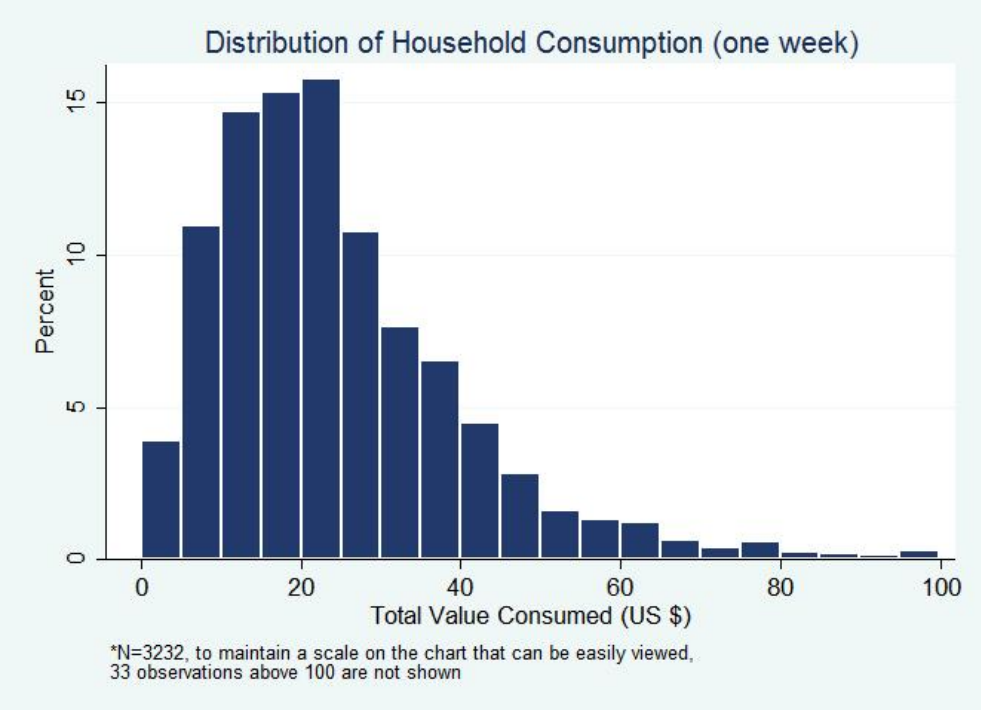
The total value of consumption was calculated based on the value of all foods consumed by the household within the seven days prior to administration of the survey.[3] *Table 1* shows the mean value consumed over the past seven days for agricultural households was US$27.28, compared to US$26.59 for non-agricultural households. However, the mean per capita value consumed over the past seven days was US$5.24 for agricultural households[4] and US$7.32 for non-agricultural households.[5]

Table 1: **Total Household Consumption (per week in US dollars)**

		Mean	95% C.I.	Number of Observations
Agricultural households	Total household consumption	$27.28	[25.27, 29.29]	2474
	Consumption per capita	$5.24	[5.04, 5.44]	2469
Non-Agricultural households	Total household consumption	$26.59	[23.62, 29.56]	791
	Consumption per capita	$7.32	[6.77, 7.86]	790
All Tanzania households	Total household consumption	$27.17	[25.40, 28.95]	3265
	Consumption per capita	$5.56	[5.37, 5.75]	3259

Figure 1 shows the distribution of the total value of consumption for all households over the past seven days. The mean total value of consumption for all households was US$27.17 and the median total value of consumption for all households was US$21.69.

Figure 1



[3] Shadow prices were calculated by taking the mean price across all observations of a particular food item that was purchased, and attributed to food that was produced.
[4] Five improbably high outliers were removed from this calculation, prior to which the mean was US$5.62.
[5] One improbably high outlier was removed from this calculation, prior to which the mean was US$7.51.

Figure 2 shows the distribution of the per capita total value of consumption for all households over the past seven days. The mean per capita total value of consumption for all households was US$5.56 and the median per capita total value of consumption for all households was US$4.60.

Figure 2

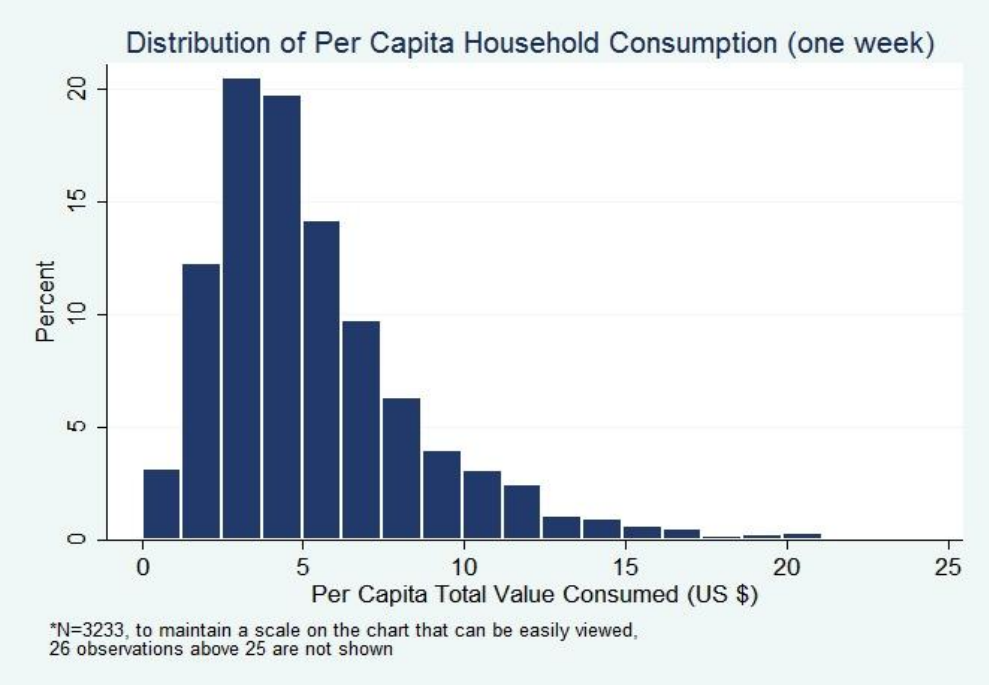
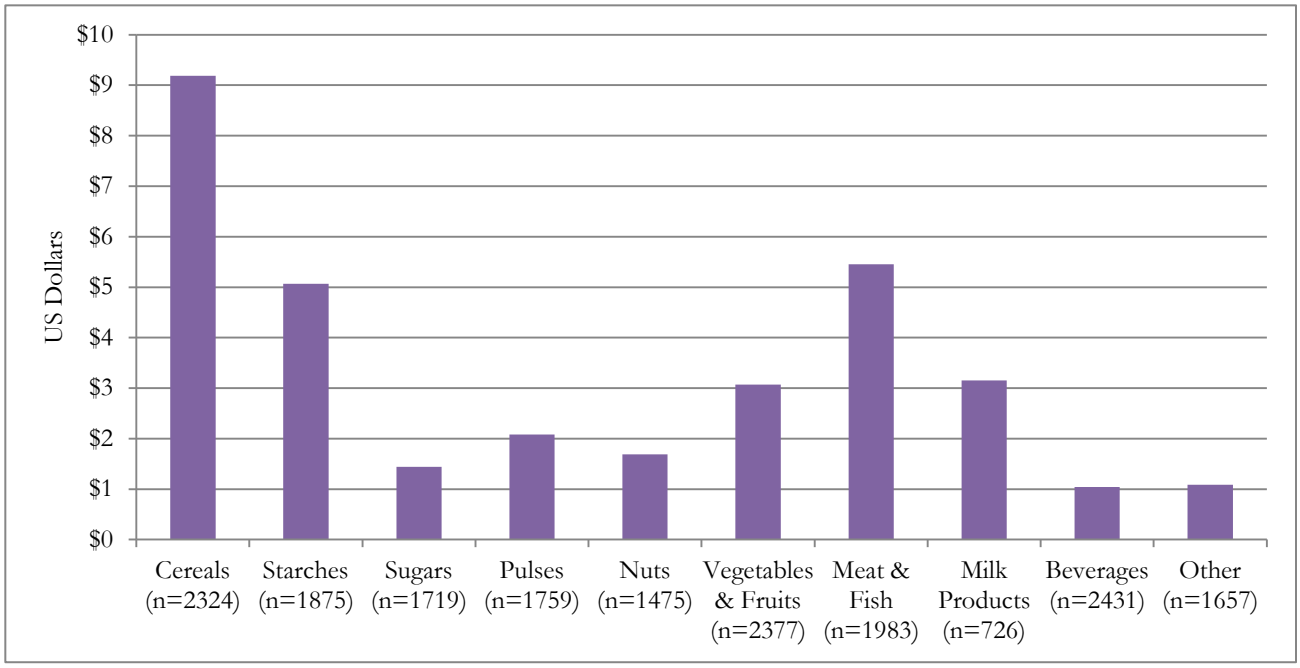


Figure 3 shows the value of consumption by food groups for all agricultural households (n=2474) that consume that particular food group. The mean consumption value for cereals is highest (US$9.19) while the mean consumption value for other (which includes salt, spices, and oil) is lowest (US$1.04). See *Appendix B* for data and confidence intervals.

***Figure 3*: Total Value of Agricultural Household Consumption (by food group)**



Food Consumption and Production

Appendix C shows the proportion of a food item that was purchased, of those households that purchased that food item and the proportion of a food item that was produced, of those households that produced that food item. We calculated the percent of total consumption that was purchased or produced for each food item in the survey. Percent purchased is defined as the total quantity purchased of a particular food (*How much came from purchases during the past 7 days?*), divided by the total quantity of that same food that was consumed by a purchasing household (*How much in total did your household consume in the past 7 days?*). Likewise, the percent produced is defined as the total quantity of a food item that was consumed from own-production (*How much came from own-production?*), divided by the total quantity consumed of that food item – among producing households.

Appendix C shows that almost all food items were either entirely purchased or entirely produced by a household. Very few households purchased a food item that they also produced. This does not imply that households only purchase or produce all food items, just that within one particular food item category, they are likely to either purchase it or produce it, but not both.

Figures 4–10 show the mean quantity of a particular food item consumed by agricultural households that purchased the food as compared to agricultural households that produced the food. *Figures 21-27* show the mean value of consumption of a particular food group consumed by agricultural households that purchased the food as compared to agricultural households that produced the food, by administrative zone.

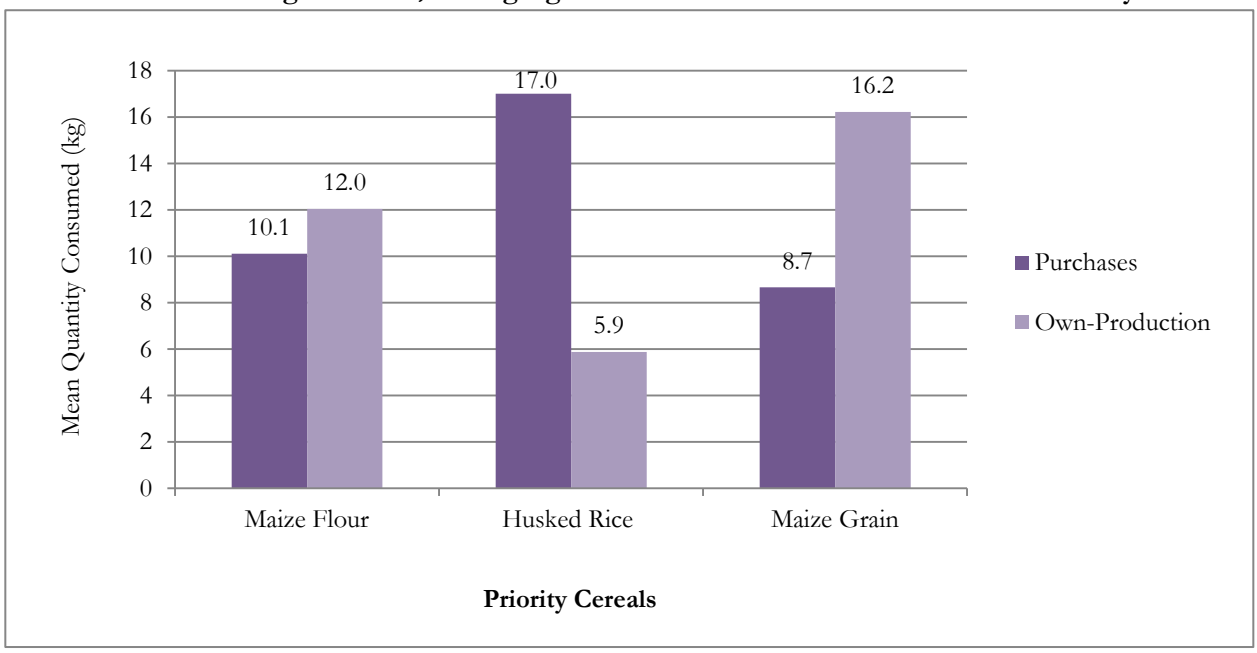
Consumption: Priority Food Level Analysis

Each household that reported consuming a food was asked *How much in total did your household consume in the past 7 days?* and, of that total, *How much came from purchases during the past 7 days?* and *How much came from own-production?* The figures below compare consumption from purchases and own-production across agricultural households for priority food items. Data is not presented for households that reported receiving some portion of their consumption from gifts or other sources, as this represented a small portion of overall consumption (approximately 1% of food level observations were received as gifts or from other sources).

Priority Cereals

Figure 4 compares the mean quantity of maize flour, husked rice, and maize grain consumed by households that purchased the food to the mean quantity consumed by households that produced the food, among agricultural households over the past seven days. During this period, an estimated 82% of all agricultural households (n=2474) reported consuming maize flour. Of these households, 47% stated they purchased almost all (99.7%) of the maize flour consumed, while 49% produced 99.8% of their consumption. Approximately 45% of agricultural households reported consuming husked rice in the past week; the majority (75%) purchased most of their consumption. Of the 24% of agricultural households that consumed maize grain, 32% produced the majority of their consumption, while 63% purchased the majority of their consumption. See *Appendix D* for further details and confidence intervals on quantities consumed and *Appendix E* for expanded analysis of the proportion of households that purchased or produced some portion of their consumption.

***Figure 4*: Mean Quantity of Priority Cereals Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households over the Past Seven Days**

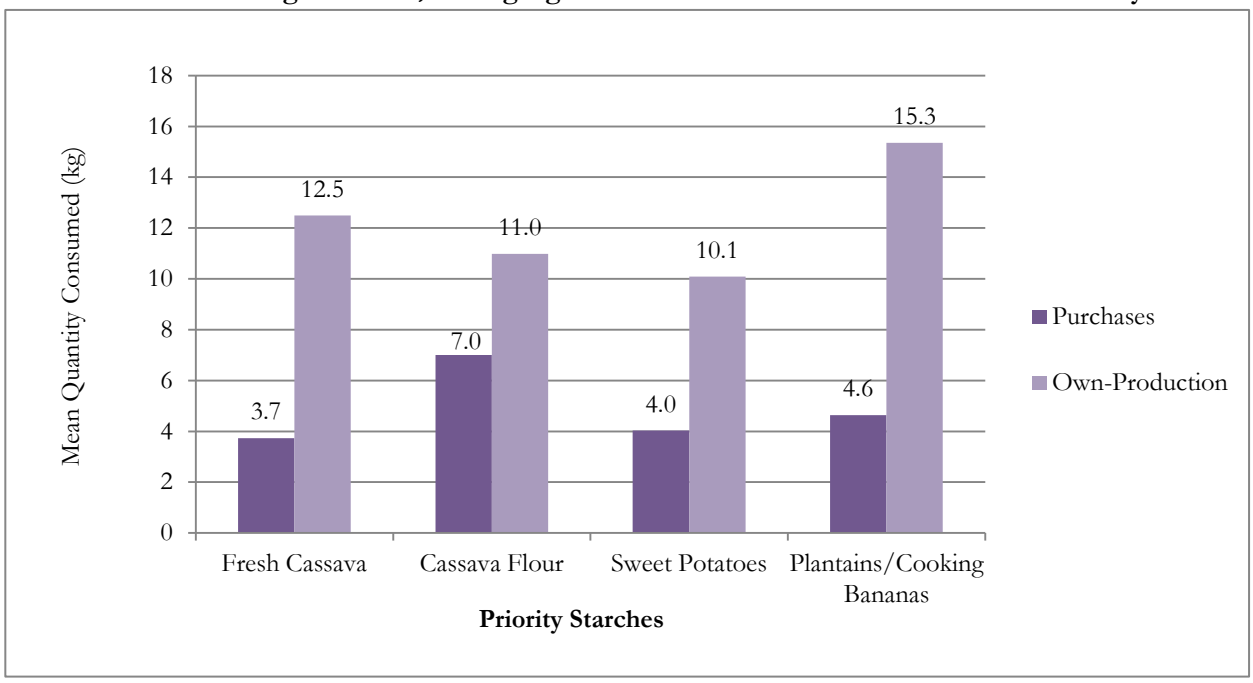


Questions: skq1, skq3, skq5

Priority Starches

Figure 5 shows the mean quantity of fresh cassava, cassava flour, sweet potatoes, and plantains consumed by agricultural households over the prior week, comparing the mean quantity consumed by households that purchased these items to the mean quantity consumed by households that produced these items. On average, agricultural households that produced starches consumed a greater quantity in the previous week than agricultural households that purchased the starches.

Figure 5: **Mean Quantity of Priority Starches Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**



Questions: skq1, skq3, skq5

Priority Sugars and Sweets

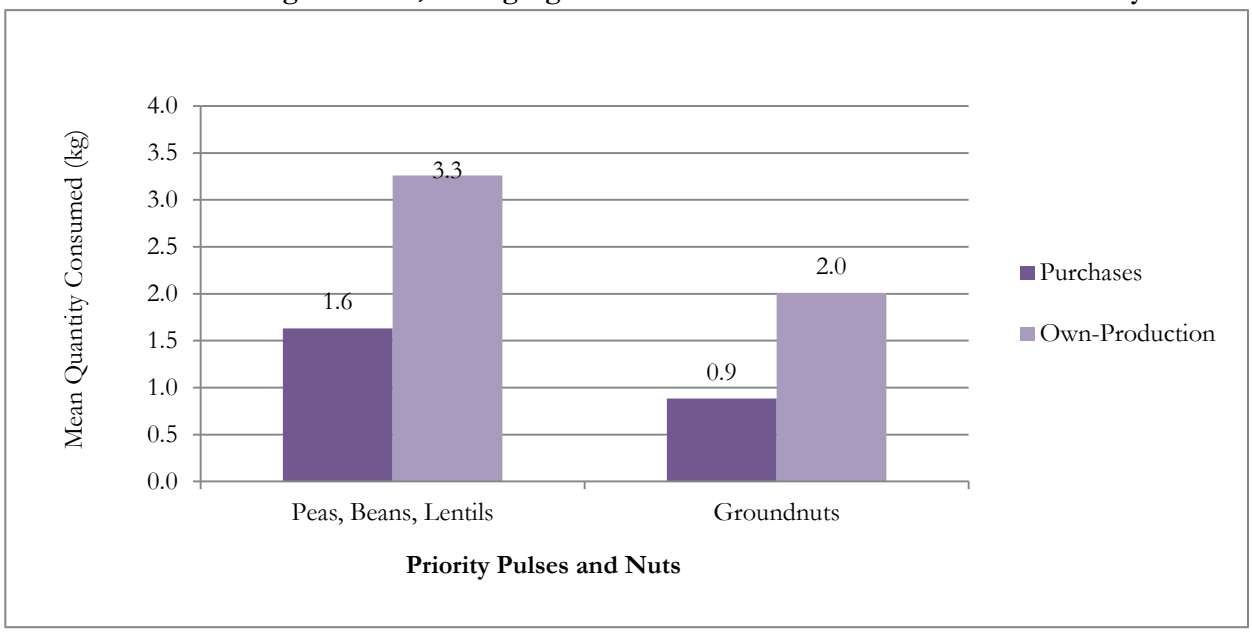
Nearly 64% of all agricultural households reported consuming sugar over the last seven days. Of these consuming households, 99% reported purchasing the sugar they consumed; there was only one observation of an agricultural household self-producing sugar. The mean quantity consumed from purchases was 1.2 kilograms.

Priority Pulses and Nuts

Pulses are defined as one variable in the household survey and include peas, beans, and lentils. An estimated 72% of all agricultural households consumed pulses in the last seven days. Of these, 56% consumed pulses from purchases and 41% consumed pulses from their own production. The mean quantity of pulses consumed by households that produced was nearly twice the mean consumed from purchases, as shown in *Figure 6*.

Groundnuts were consumed by an estimated 37% of all agricultural households over the last week. The mean quantity of groundnuts consumed from own-production was approximately double the quantity consumed from purchases.

Figure 6: **Mean Quantity of Pulses and Nuts Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**

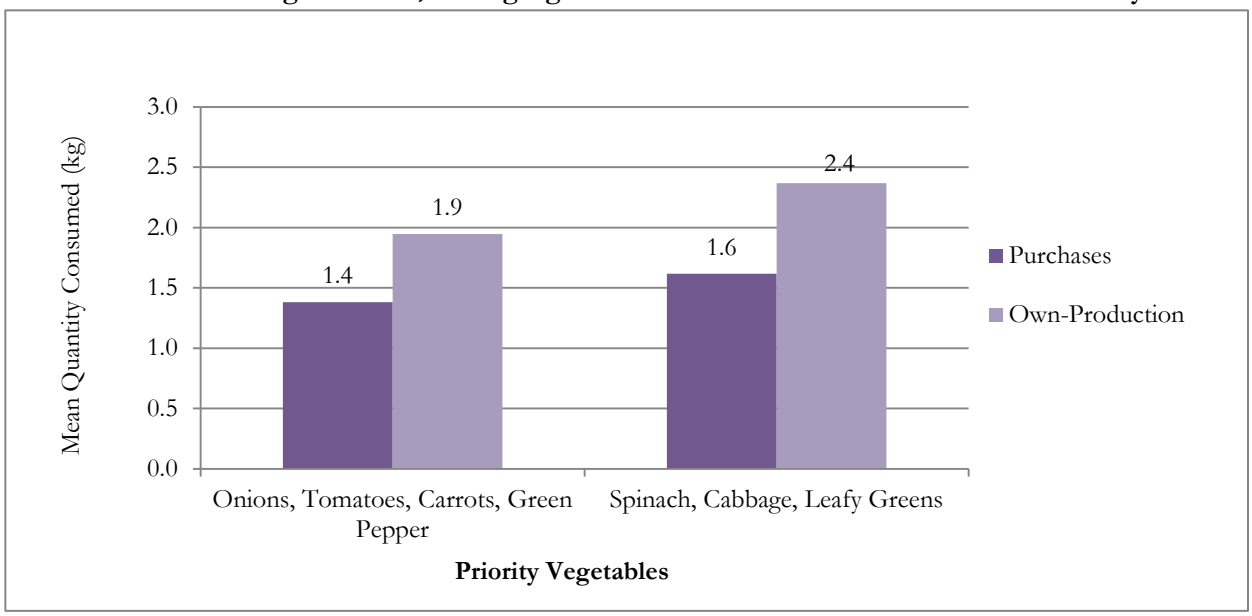


Questions: skq1, skq3, skq5

Priority Vegetables

Figure 7 compares the mean quantity of priority vegetables consumed over the last week that came from purchases to the mean that came from own-production. The survey categorizes fresh vegetables such as onions, tomatoes, carrots, and green peppers as one food item. Cabbage, spinach, and other leafy greens are similarly defined as one food item. An estimated 81% of agricultural households consumed fresh vegetables and approximately 72% consumed cabbage or leafy greens in the past week. A greater proportion of agricultural households (91%) purchased their fresh vegetables compared to leafy greens (47%).

Figure 7: **Mean Quantity of Priority Vegetables Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**

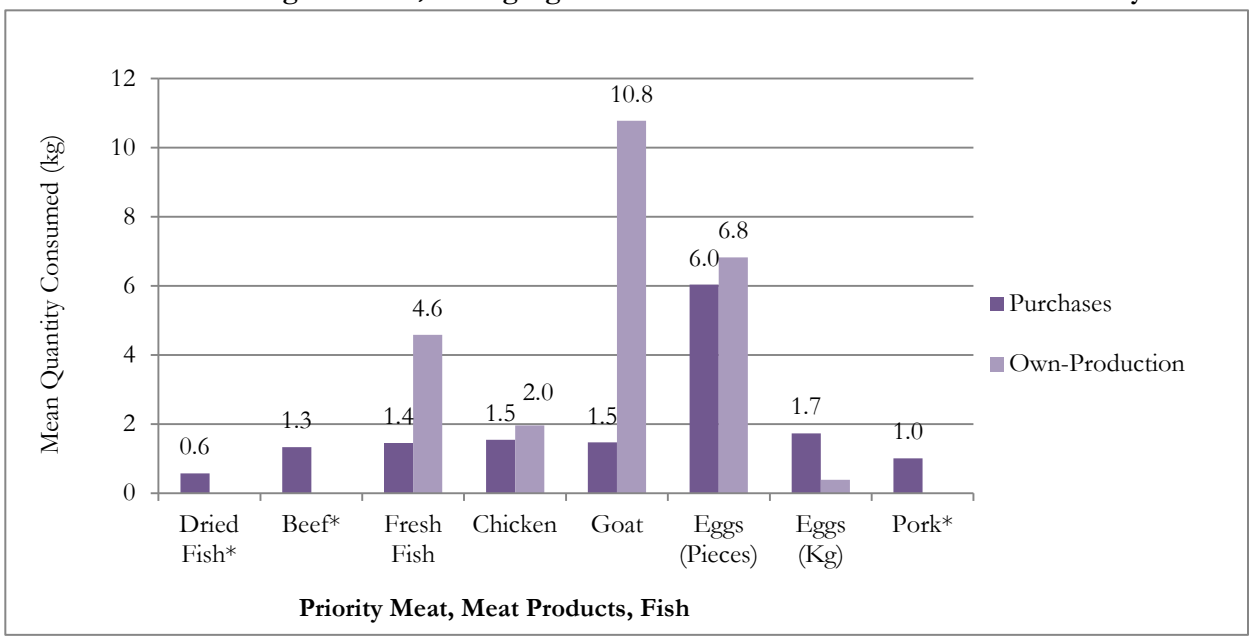


Questions: skq1, skq3, skq5

Priority Meats, Meat Products, and Fish

In the past week, a greater proportion of all agricultural households (n=2474) consumed dried, salted, or canned fish and seafood (40%) compared to other sources of animal protein such as beef (28%), fresh fish (26%), chicken (17%), eggs (14%), goat (12%), or pork (4%). *Figure 8* illustrates the mean quantity consumed of priority meats and fish consumed from purchases and own-production. Observations of households consuming dried fish (n=14), beef (n=14), or pork (n=4) from own-production were too small to present representative estimates. Egg consumption from purchases and production was recorded in both kilograms and pieces; both are presented below.

Figure 8: **Mean Quantity of Priority Meat & Fish Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**

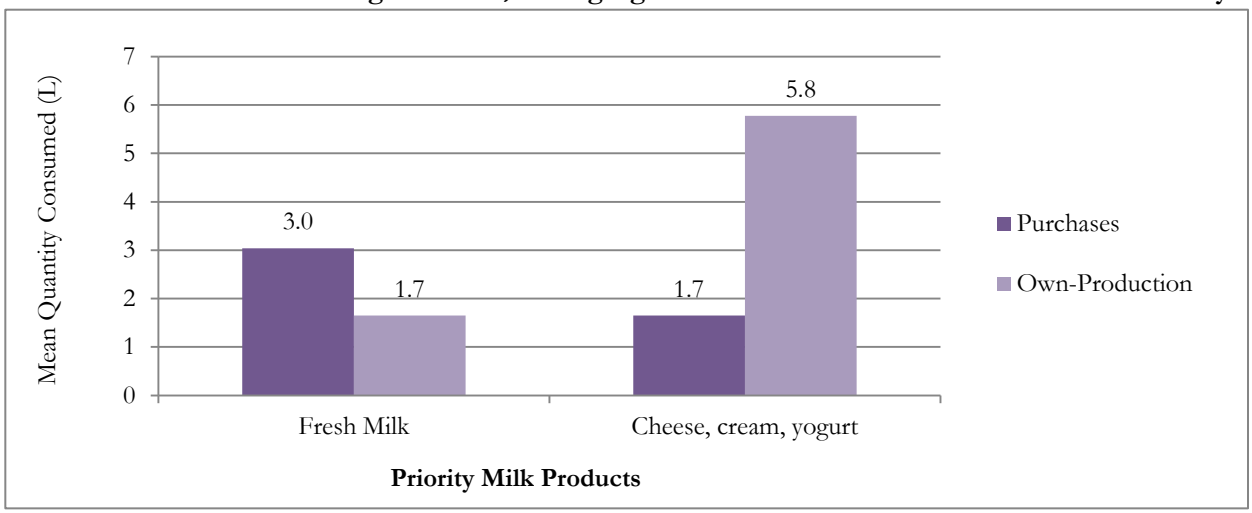


**Less than 30 observations of consumption from own-production* *Questions: skq1, skq3, skq5*

Priority Milk Products

The survey classifies "milk products", including cheese, cream, and yogurt, as one food item. Fresh milk is a separate item. A greater proportion of agricultural households consumed fresh milk (28%) compared to other milk products (10%). Approximately half the fresh milk (53%) and milk products (45%) came from purchased goods. *Figure 9* compares the mean quantity consumed of each from either purchases or production by those households that consumed the food item. While fewer households consumed milk products than fresh milk, those that did consume milk products tended to consume a higher mean quantity.

Figure 9: **Mean Quantity of Priority Milk Products Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**

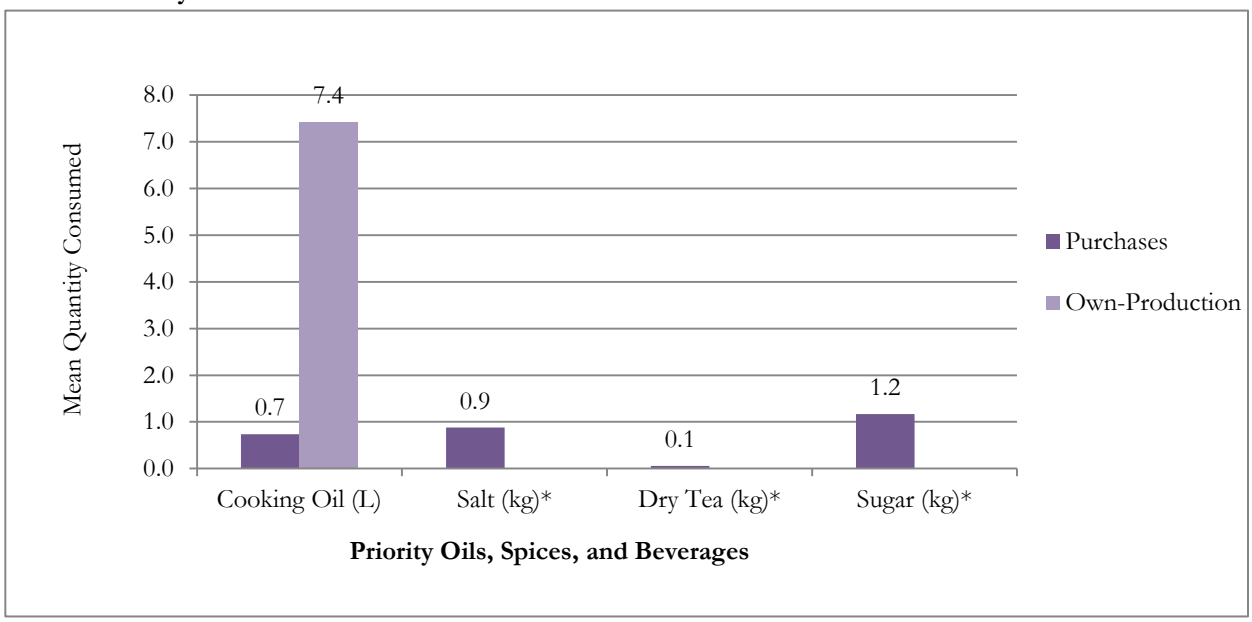


Questions: skq1, skq3, skq5

Priority Oils, Spices, and Beverages

A greater proportion of agricultural households (96%) consumed salt over the past week compared to all other food items. Cooking oil was also used by a large proportion (74%), as was sugar (64%). Dry tea was consumed by nearly half of all agricultural households (48%). Over 95% of all agricultural households reported purchasing a portion of the priority oils, spices, and beverages they consumed. Observations of households consuming salt (n=1), sugar (n=1), or dry tea (n=8) from own-production were too small to present representative means in *Figure 10* below.

Figure 10: **Mean Quantity of Priority Oils, Spices, and Beverages Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**



**Less than 30 observations of consumption from own-production* *Questions: skq1, skq3, skq5*

Zone Analysis: Total Value of Consumption

The figure below shows the mean value of total consumption over the past seven days for agricultural households by administrative zone. The Central zone had the lowest mean at US$20.77 compared to the highest mean of US$34.20 in the Southern zone.

***Figure 11*: Mean Value of Total Household Consumption among Agricultural Households Over the Past Seven Days**

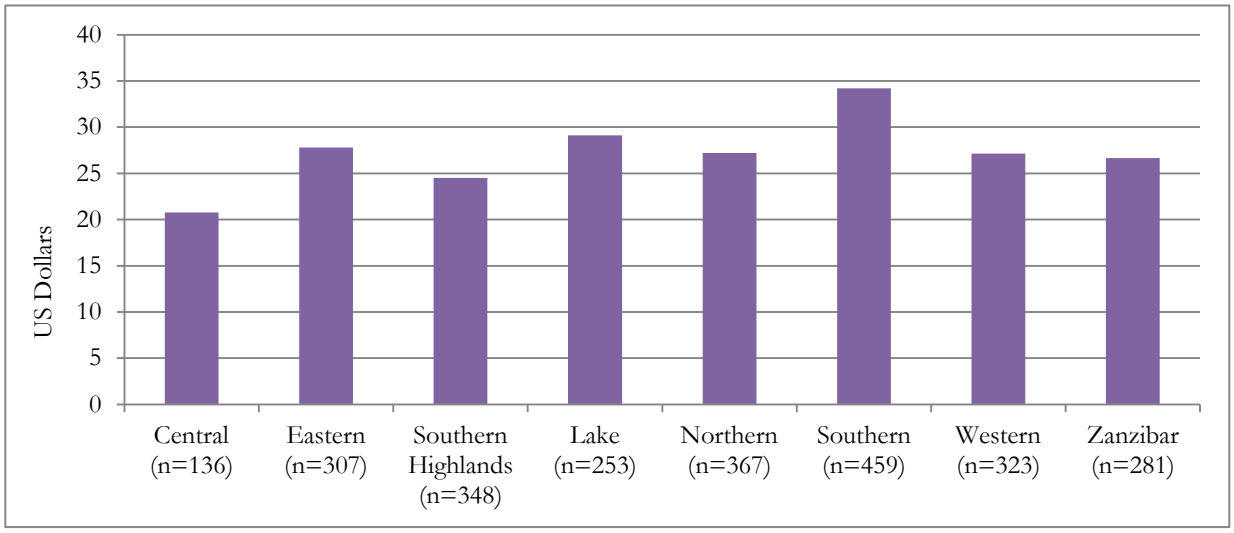
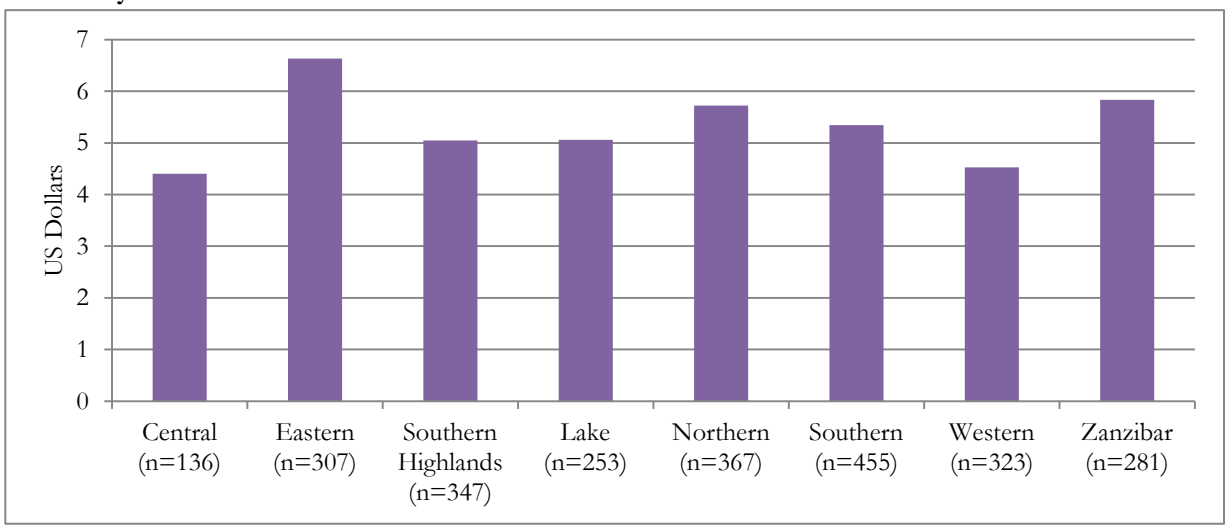


Figure 12 shows the mean per capita value of consumption over the past seven days for agricultural households by administrative zone. While the Southern zone had the highest total value of consumption, the per capita value of consumption was only US$5.34, compared to the highest mean per capita value of US$6.63 in the Eastern zone. The Central zone still had the lowest per capita value of consumption at US$4.40.

***Figure 12:* Mean Value of Per Capita Consumption among Agricultural Households Over the Past Seven Days**

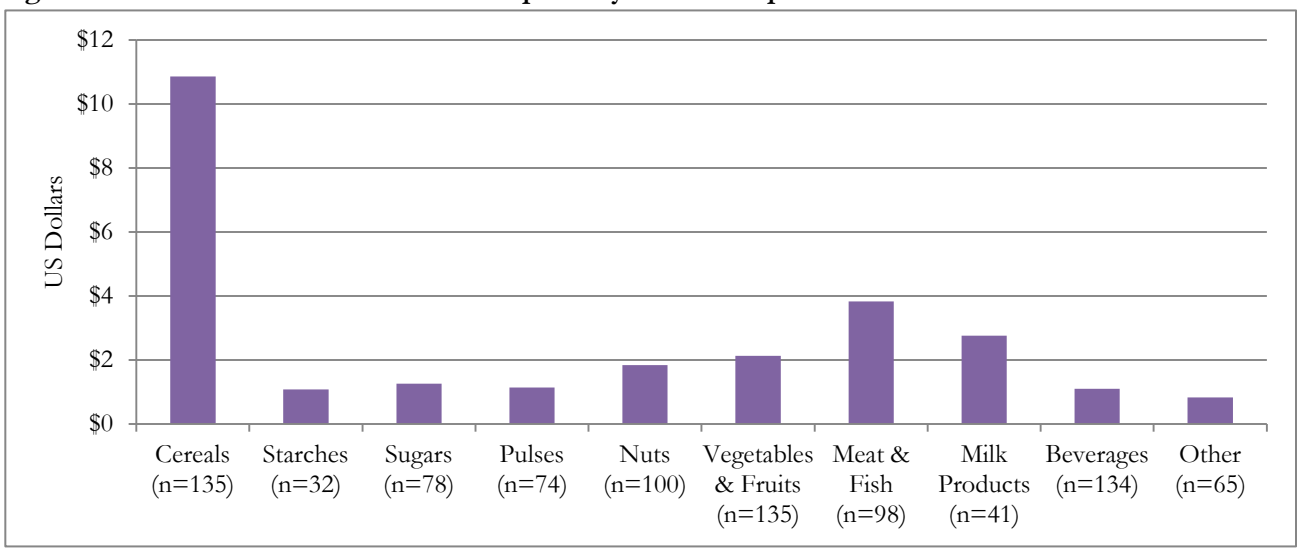


See *Appendix F* for confidence intervals.

Zone Analysis: Value of Consumption, by Food Group

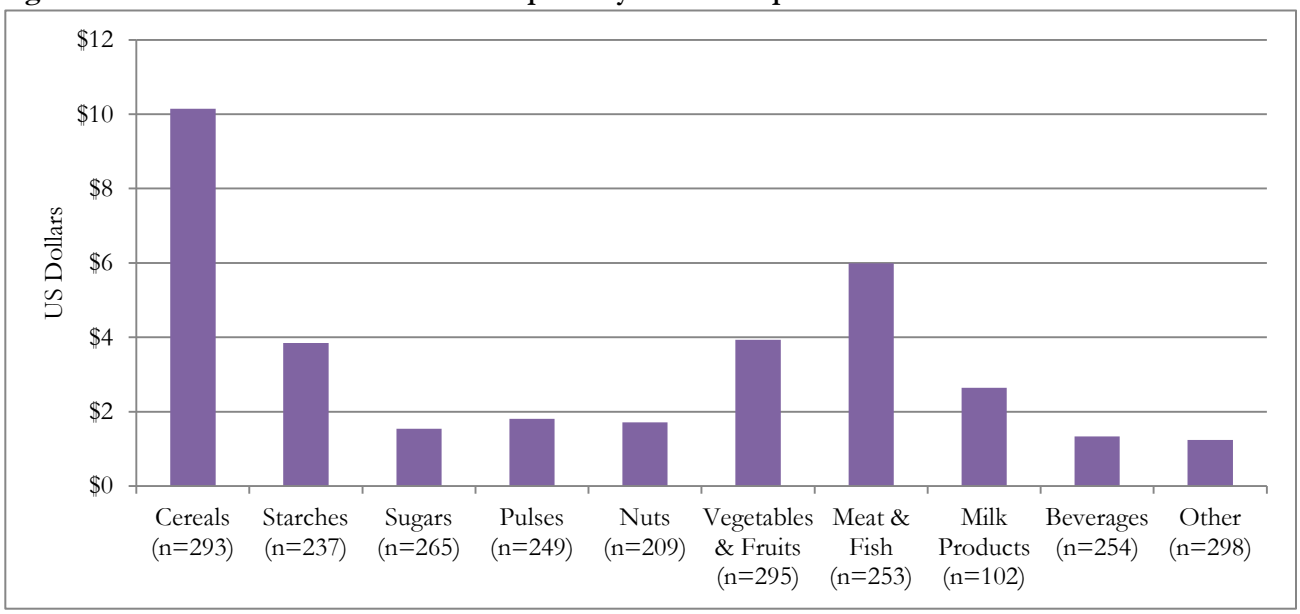
Figures 13-20 show the value of consumption within each of the eight zones by food group for households that consumed each particular food group (n values are below each food group bar). With the exception of the Lake zone, cereals had the highest value of consumption, ranging from US$11.63 in the Western zone to US$6.74 in the Southern zone. Meats (which includes meat, meat products, and fish) and starches tend to represent the next highest values of consumption.

Figure 13: **Central Zone: Value of Consumption by Food Group**



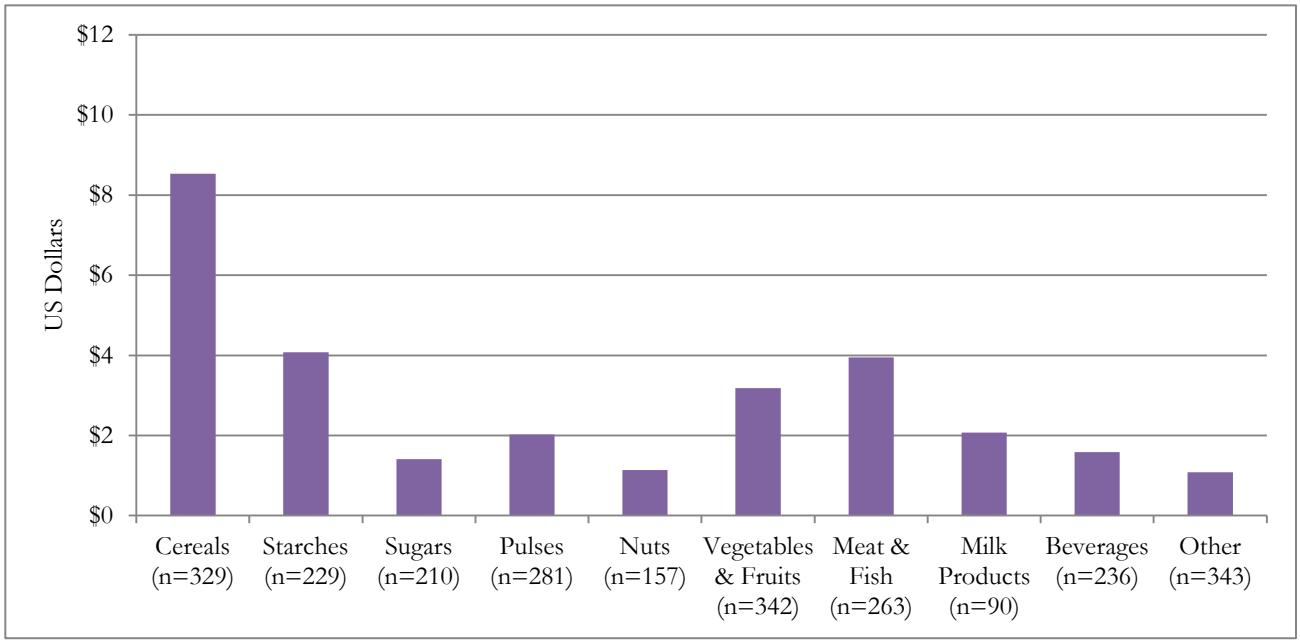
Note: N=136 agricultural households in the Central Zone

Figure 14**: Eastern Zone: Value of Consumption by Food Group**



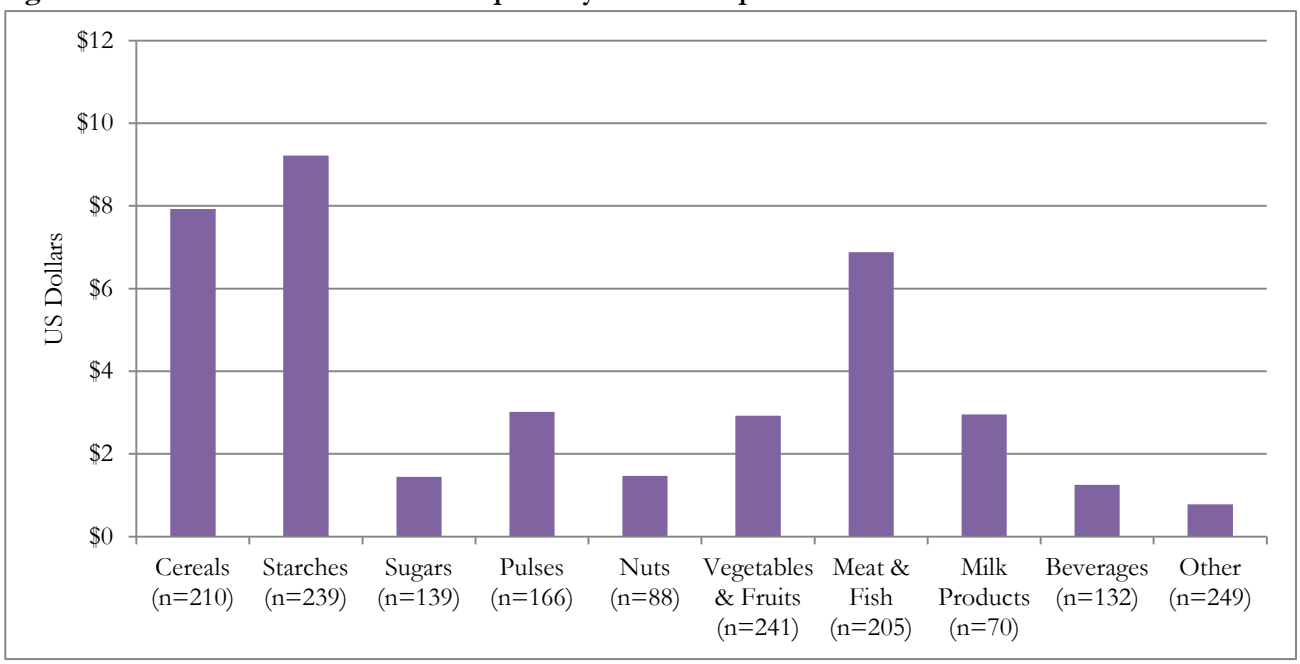
Note: N=307 agricultural households in the Eastern Zone

Figure 15: **Southern Highlands: Value of Consumption by Food Group**



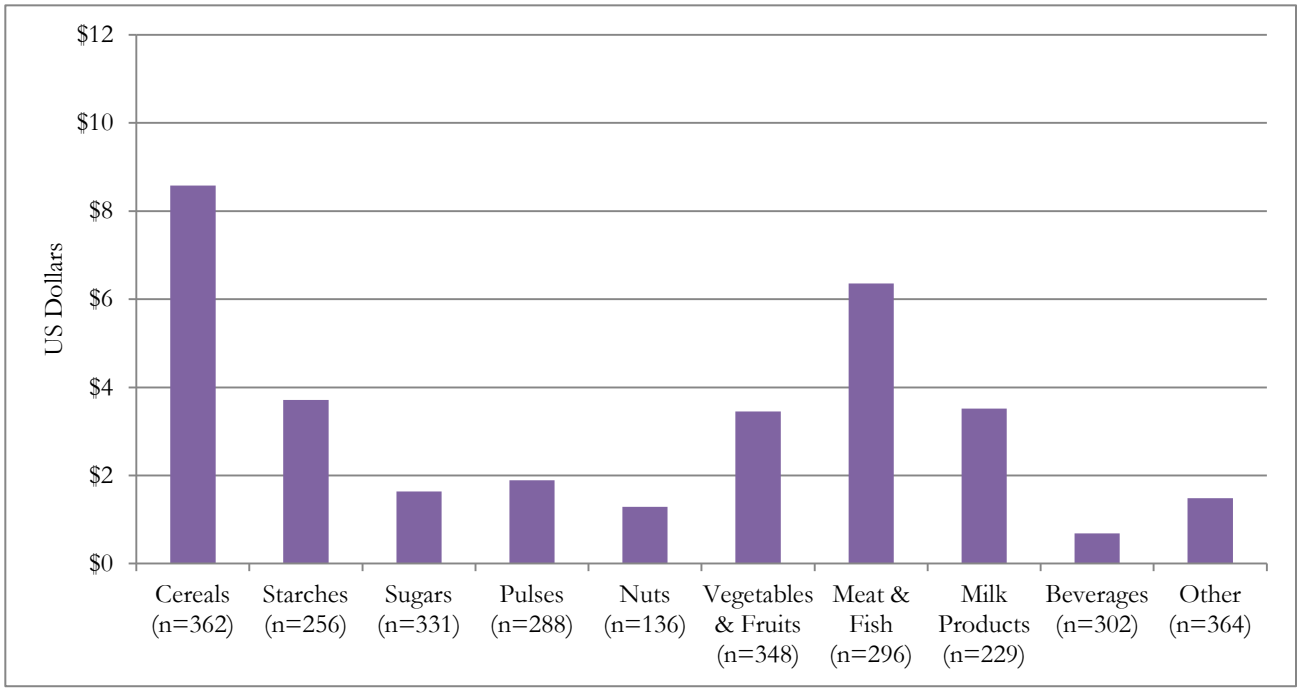
Note: N=348 agricultural households in the Southern Highlands

Figure 16: **Lake Zone: Value of Consumption by Food Group**



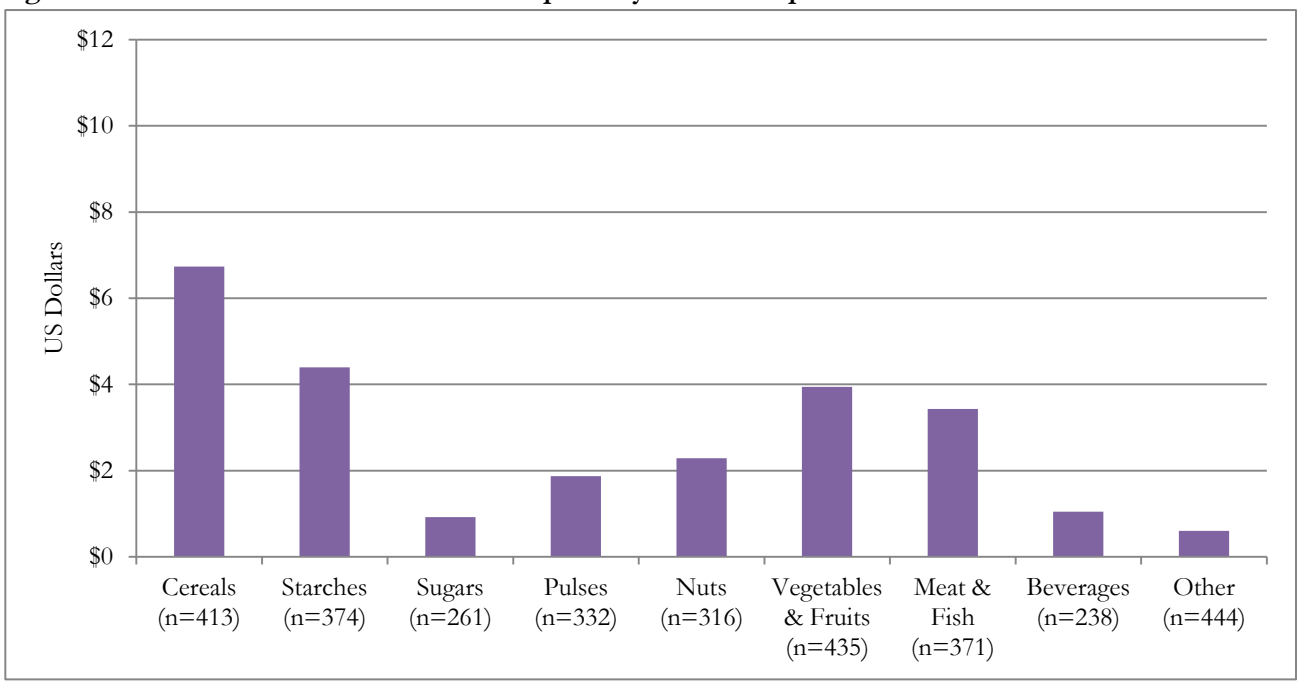
Note: N=253 agricultural households in the Lake Zone

Figure 17: **Northern Zone: Value of Consumption by Food Group**



Note: N=367 agricultural households in the Northern Zone

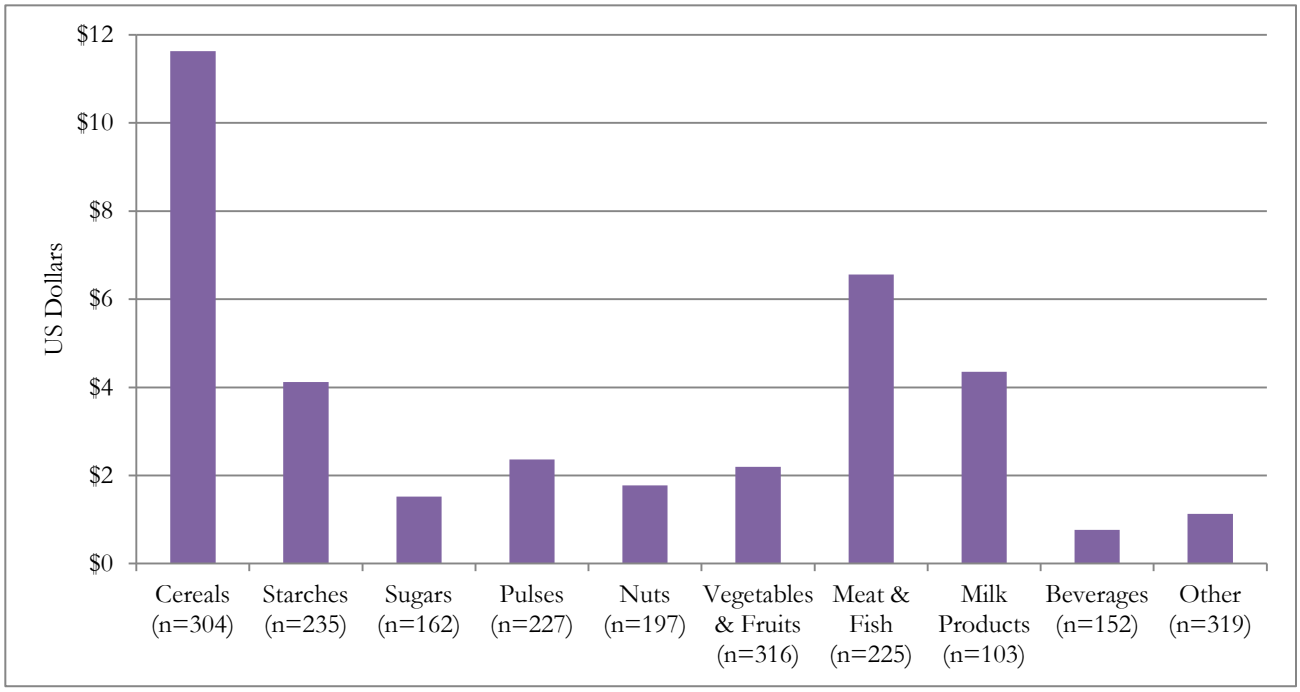
Figure 18: **Southern Zone: Value of Consumption by Food Group**



Note: N=459 agricultural households in the Southern Zone

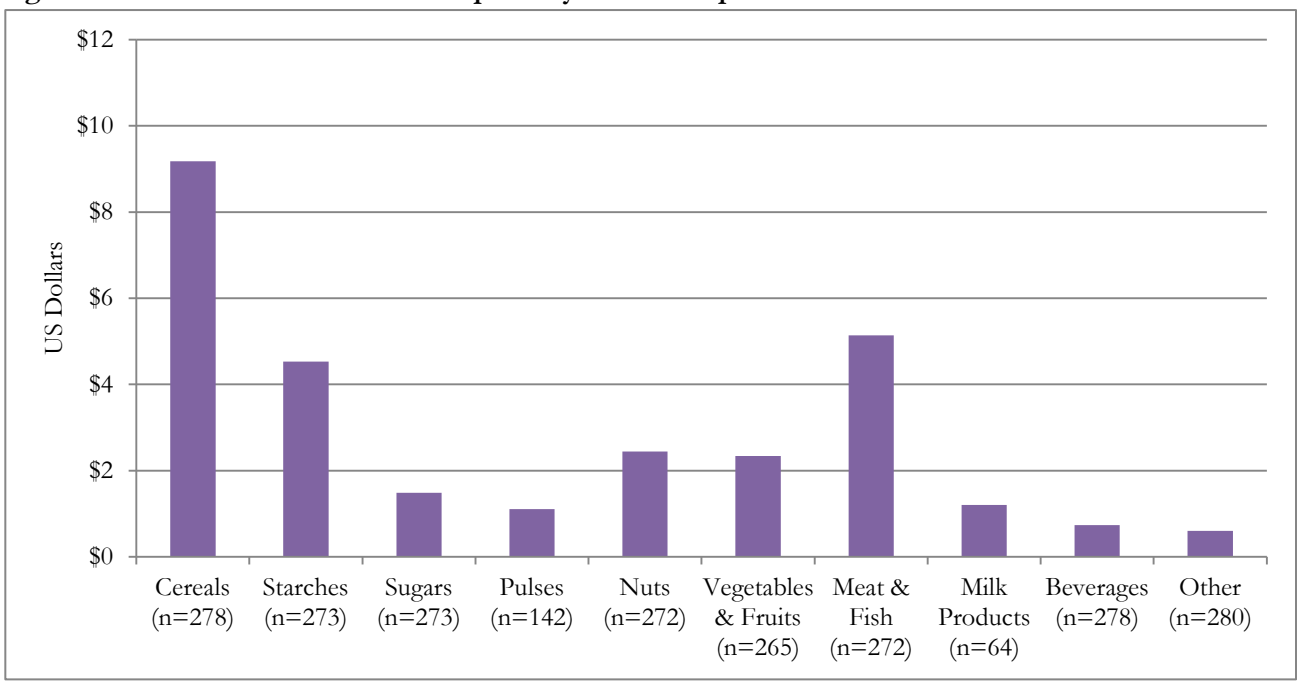
*Insufficient observations (less than 30) of households consuming milk products for the Southern Zone

***Figure 19*: Western Zone: Value of Consumption by Food Group**



Note: N=323 agricultural households in the Western Zone

***Figure 20*: Zanzibar: Value of Consumption by Food Group**



Note: N=281 agricultural households in Zanzibar

See *Appendix G* for further details and confidence intervals.

Zone Analysis: Value of Produced versus Purchased, by Food Group

This section provides the mean value of consumption for agricultural households that produced a particular food group versus agricultural households that purchased a particular food group by administrative zone. The mean value of each food group that was produced was calculated based on the shadow price, which was calculated by taking the mean price reported by respondents for all observations of that food group that were purchased. *Figure 21* shows that households that produced cereals tended to consume a higher mean value of cereals than households that purchased cereals, with the exception of Zanzibar and Northern zone.[6]

Figure 21: **Mean Value of Priority Cereals Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**

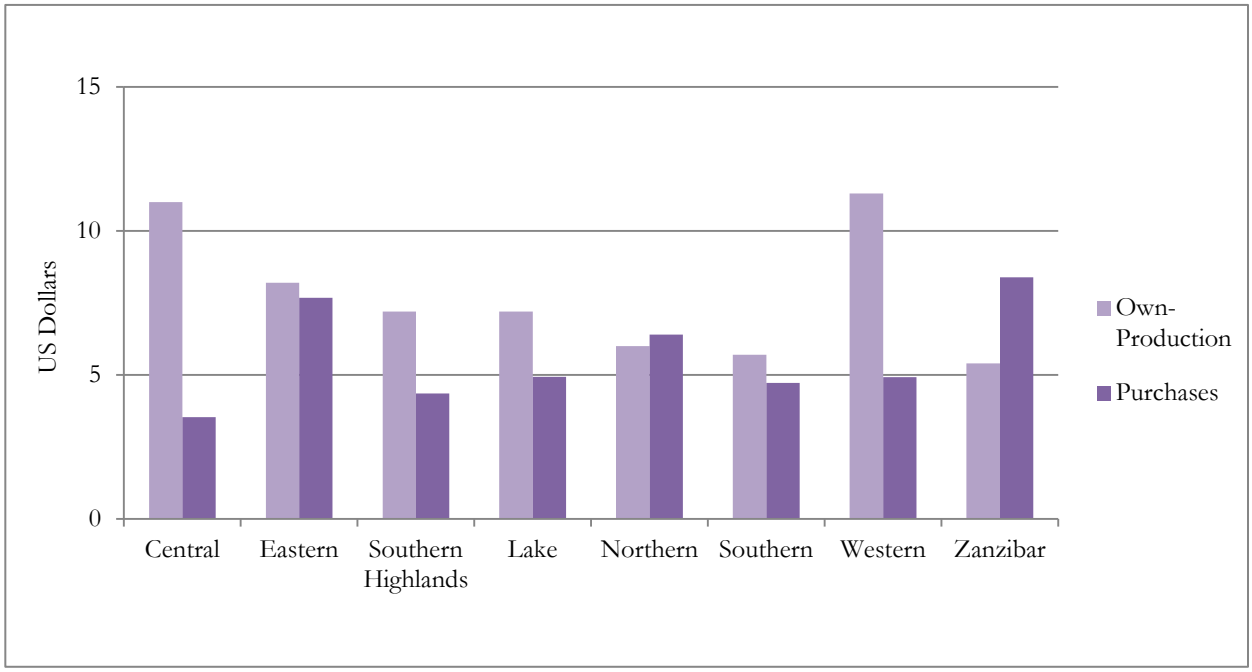
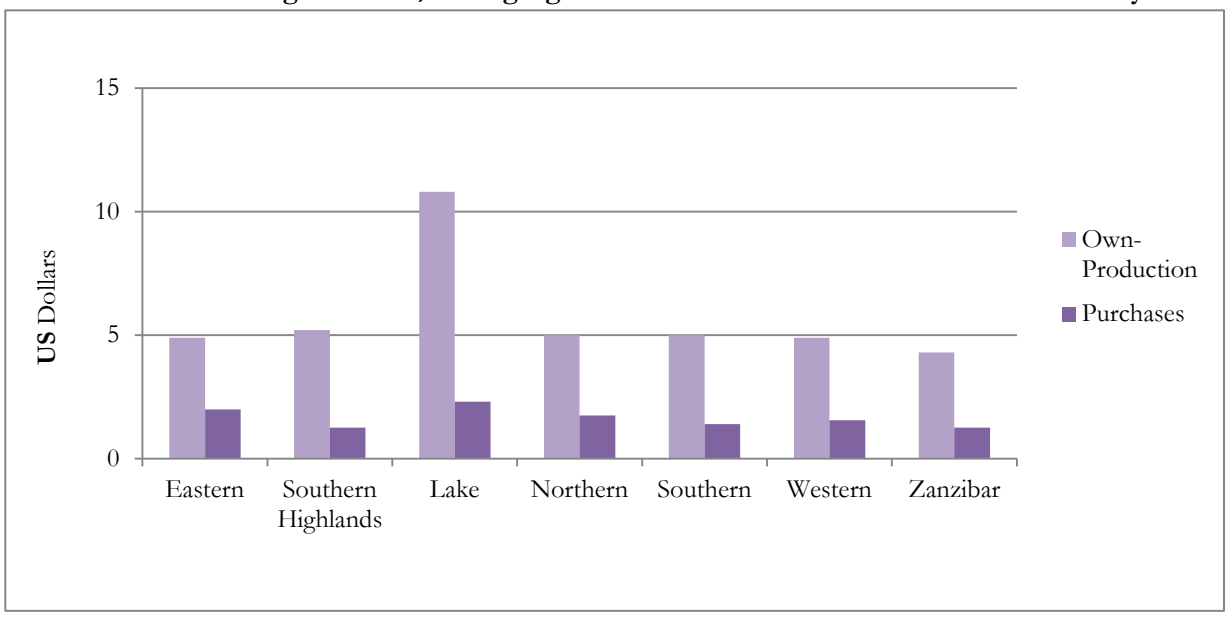


Figure 22 shows that across all zones, households that produced their starches consumed a higher mean value of starches than households that purchased their starches[7].

[6] Three improbably high outliers for value of produced were removed from the Southern zone (changing the mean from 18.3 to 5.7)

[7] Three improbably high outliers for value of produced were removed, one from Western zone (changing the mean from 67.4 to 4.9) and two from Southern zone (changing the mean from 13.0 to 5.0)

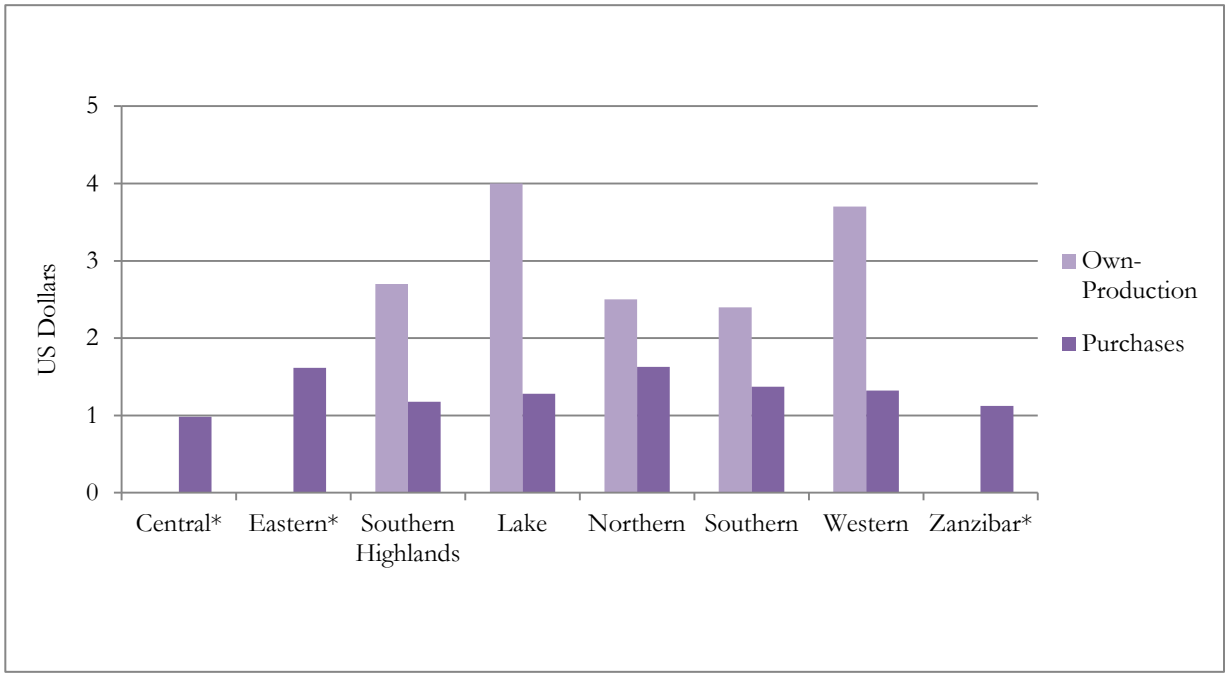
Figure 22: **Mean Value of Priority Starches Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**



*Central zone was removed due to insufficient observations (less than 30) for both own-production and purchases

Figure 23 shows the value of consumption for pulses across administrative zones. Again, those households that produced their pulses had a higher mean value of consumption of pulses than those households that purchased pulses.

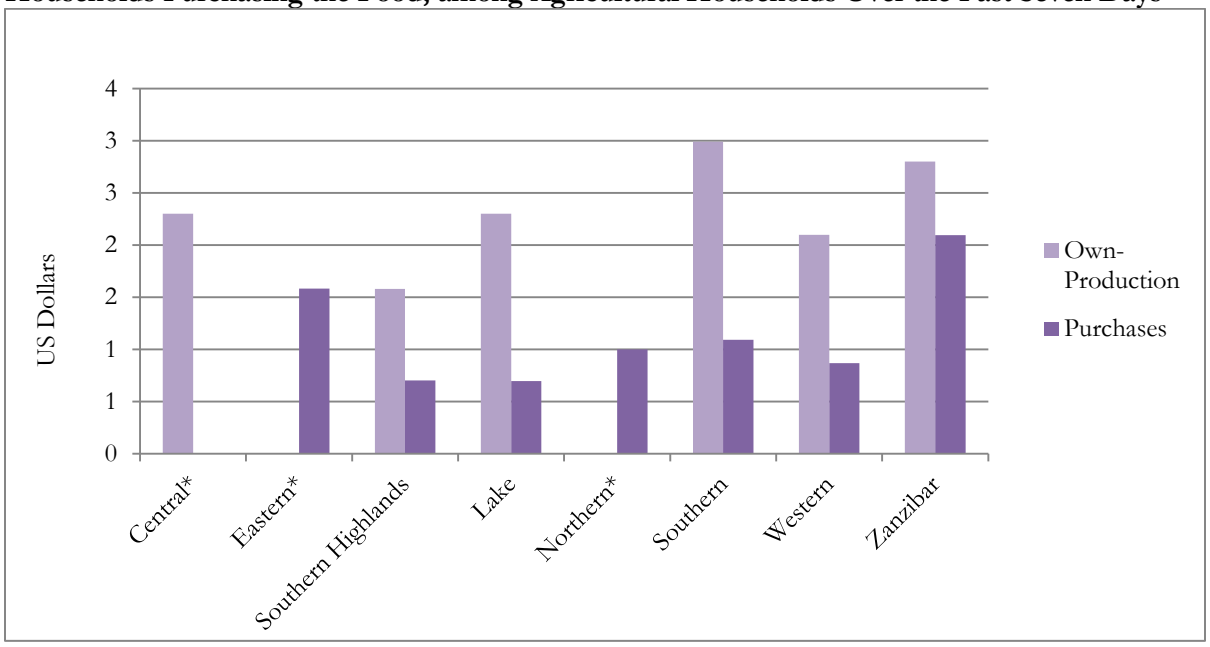
Figure 23: **Mean Value of Priority Pulses Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**



*Insufficient observations (less than 30) of own-production in Zanzibar, Central, and Eastern zone.

Figure 24 shows the mean value of consumption for priority nuts across all administrative zones. For all zones that had sufficient observations for households that produced and households that purchased, those households that produced had a higher mean value of consumption for nuts.[8]

***Figure 24*: Mean Value of Priority Nuts Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**



*Insufficient observations (less than 30) of purchases in the Central zone and of own-production in the Northern and Eastern zones.

The mean value of consumption for vegetables by administrative zone is shown in *Figure 25*. Across all zones those households that produced their vegetables had a higher value of consumption than did those households that purchased their vegetables.[9]

[8] Three improbably high outliers for value of produced were removed, one from Southern Highlands (changing the mean from 19.7 to 1.6) and two from Southern zone (changing the mean from 20.0 to 3.0)
[9] Two improbably high outliers for value of produced were removed, one from Lake zone (changing the mean from 4.4 to 3.2) and two from Western zone (changing the mean from 4.3 to 2.2)

Figure 25: **Mean Value of Priority Vegetables Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**

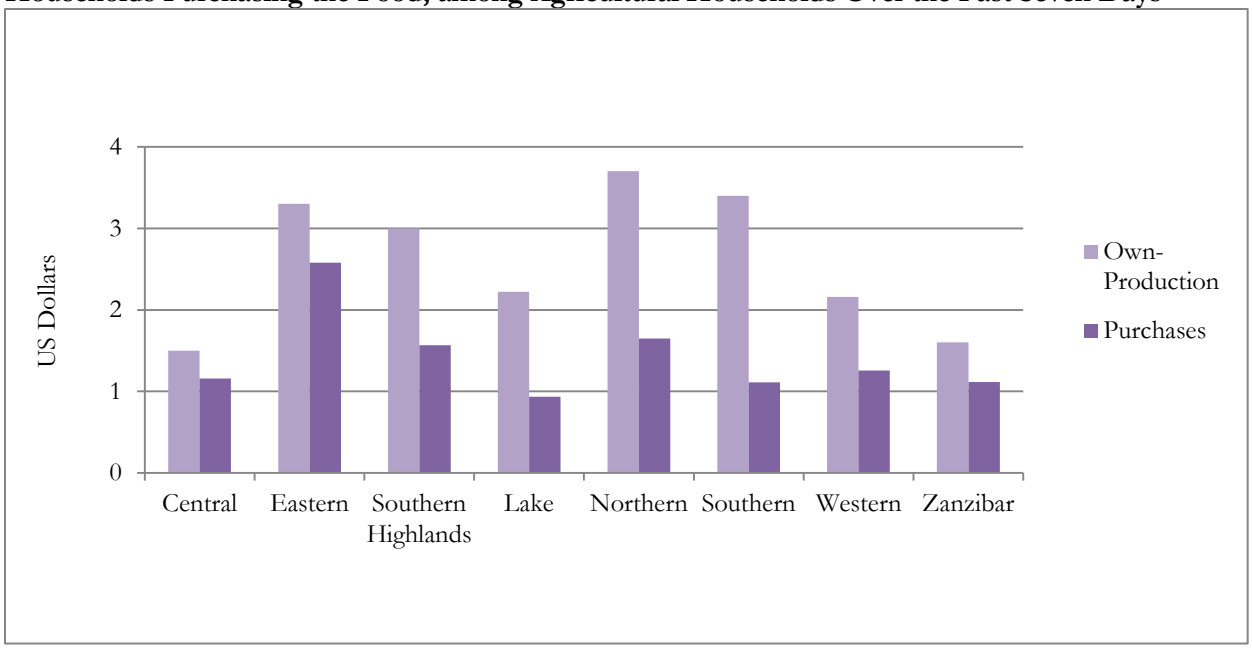
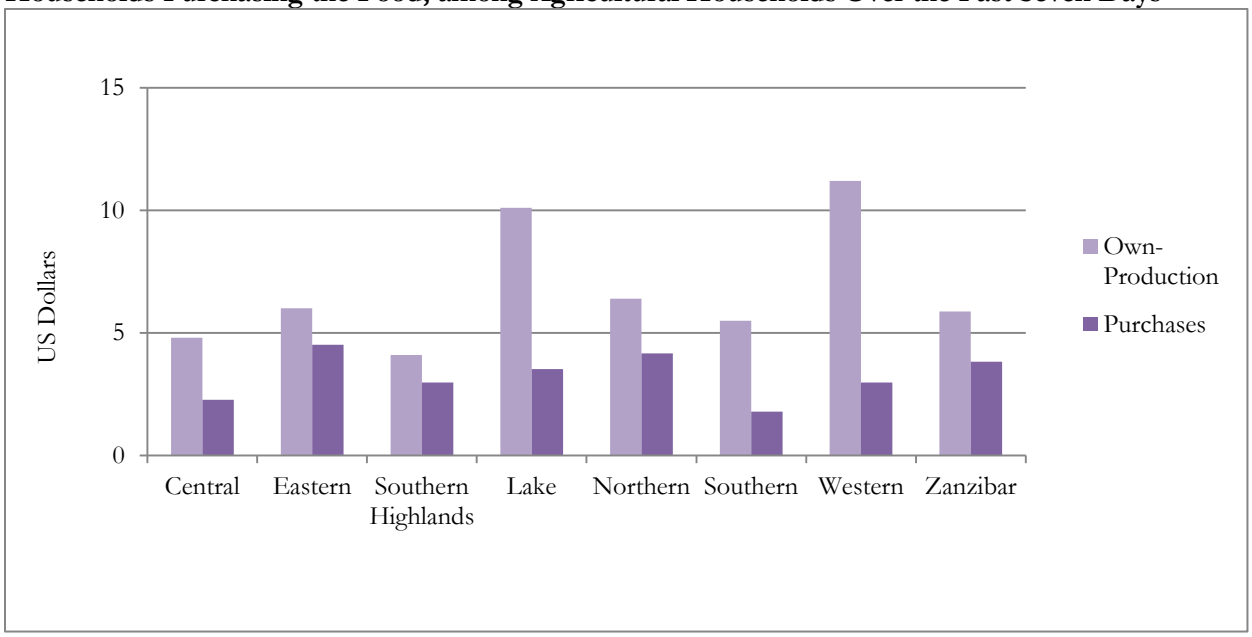


Figure 26 shows the mean value of priority meats for households that produce versus households that purchase. Production households once again tend to have a higher mean value of consumption for meat than do purchasing households.[10]

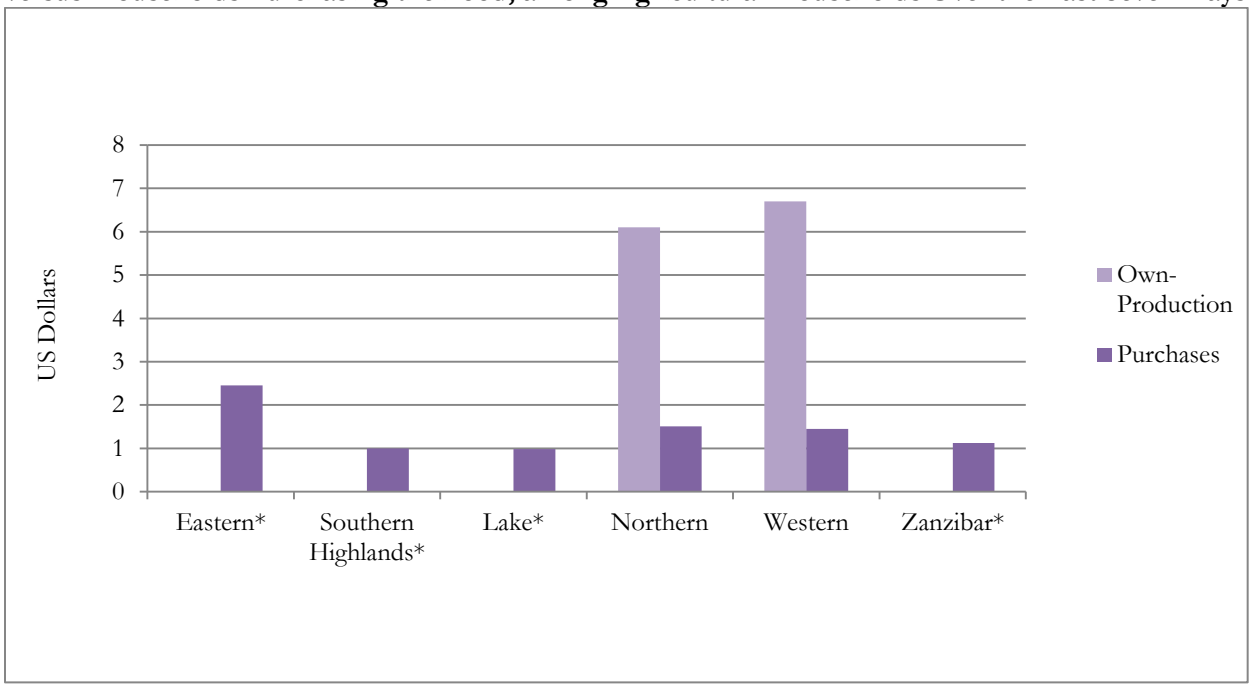
***Figure 26*: Mean Value of Priority Meat & Fish Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**



[10] One improbably high outlier for value of produced was removed from Zanzibar (changing the mean from 15.4 to 5.9).

Finally, *Figure 27* shows the mean value of milk and milk products consumed for those households that produced and those households that purchased milk and milk products. However, there were insufficient observations for own-production in all zones except Northern and Western, and insufficient observations for production and purchase for Central and Southern zones. Both Northern and Western zones, however, had higher values of consumption for households that produced milk and milk products than households that purchased.

Figure 27: **Mean Value of Priority Milk Products & Milk Consumed by Own-Production Households versus Households Purchasing the Food, among Agricultural Households Over the Past Seven Days**



*Insufficient observations (less than 30) for Central and Southern zones. Insufficient observations (less than 30) of consumption from own-production in Eastern, Southern Highlands, Lake, and Zanzibar.

See *Appendix H* for data and confidence intervals.

Appendix A Proportion of Households Reporting Food Consumption, Past Seven Days

Proportion of Agricultural Households Reporting Consumption Over Last 7 Days (n=2474)					
Food Item	Proportion	95% C.I.			
Salt*	96%	[	96%	,	97%]
Onions, tomatoes, carrots, and green pepper*	82%	[	79%	,	84%]
Maize (flour)*	82%	[	79%	,	84%]
Cooking oil*	74%	[	71%	,	76%]
Spinach, cabbage, and other green vegetables*	72%	[	70%	,	75%]
Peas, beans, lentils, and other pulses*	72%	[	69%	,	75%]
Sugar*	64%	[	61%	,	67%]
Tea dry*	48%	[	45%	,	51%]
Rice (husked)*	45%	[	42%	,	49%]
Dried/salted/canned fish and seafood*	40%	[	36%	,	43%]
Groundnuts in shell/shelled*	37%	[	34%	,	40%]
Cassava fresh*	33%	[	29%	,	36%]
Cooking bananas, plantains*	30%	[	26%	,	33%]
Sweet potatoes*	28%	[	25%	,	32%]
Fresh milk*	28%	[	26%	,	31%]
Beef including minced sausage*	28%	[	25%	,	31%]
Buns, cakes, and biscuits	27%	[	24%	,	29%]
Fresh fish and seafood*	26%	[	22%	,	29%]
Maize (grain)*	24%	[	21%	,	27%]
Cassava dry/flour*	23%	[	20%	,	27%]
Canned, dried and wild vegetables	21%	[	18%	,	23%]
Coconuts (mature/immature)	19%	[	17%	,	22%]
Sugarcane	19%	[	16%	,	21%]
Mangoes, avocadoes, and other fruits	18%	[	15%	,	21%]
Maize (green, cob)	18%	[	15%	,	21%]
Chicken and other poultry*	17%	[	15%	,	19%]
Citrus fruits (oranges, lemon, tangerines, etc.)	16%	[	14%	,	19%]
Ripe bananas	16%	[	14%	,	18%]
Irish potatoes	15%	[	12%	,	17%]
Eggs*	14%	[	13%	,	16%]
Local brews	14%	[	12%	,	16%]
Bottled/canned soft drinks (soda, juice, water)	13%	[	12%	,	15%]
Goat meat*	12%	[	10%	,	14%]
Millet and sorghum (flour)	11%	[	9%	,	13%]
Bread	11%	[	9%	,	12%]
Milk products (like cream, cheese, yoghurt etc)*	10%	[	8%	,	11%]
Yams/cocoyams	8%	[	6%	,	10%]
Pork including sausages and bacon*	7%	[	5%	,	9%]
Honey, syrups, jams, marmalade, jellies, canned fruits	5%	[	4%	,	6%]
Sweets	4%	[	3%	,	5%]
Butter, margarine, ghee, and other fat products	4%	[	3%	,	5%]
Other spices	3%	[	3%	,	4%]
Rice (paddy)	3%	[	2%	,	4%]
Millet and sorghum (grain)	3%	[	2%	,	4%]
Wheat, barley grain, and other cereals	3%	[	2%	,	4%]
Macaroni, spaghetti	3%	[	2%	,	4%]

Coffee and cocoa	2%	[	1%	,	3%	]
Bottled beer	2%	[	1%	,	3%	]
Cashew, almonds, and other nuts	2%	[	1%	,	2%	]
Seeds and products from nuts/seeds (*excl.* cooking oil)	1%	[	1%	,	2%	]
Other starches	1%	[	1%	,	1%	]
Other cereal products	1%	[	0%	,	1%	]
Wild birds and insects	1%	[	0%	,	1%	]
Prepared tea, coffee	1%	[	0%	,	1%	]
Other domestic/wild meat products	1%	[	0%	,	1%	]
Canned milk/milk powder	1%	[	0%	,	1%	]
Other raw materials for drinks	0%	[	0%	,	1%	]
Wine and spirits	0%	[	0%	,	0%	]
Package fish	0%	[	0%	,	0%	]

**Priority foods*

Proportion of Non-Agricultural Households Reporting Consumption Over Last 7 Days (n=791)					
Food Item	Proportion	95% C.I.			
Salt	90%	[	88%	, 93%	]
Onions, tomatoes, carrots, and green pepper	90%	[	87%	, 93%	]
Maize (flour)	88%	[	86%	, 91%	]
Sugar	88%	[	85%	, 91%	]
Cooking oil	87%	[	84%	, 90%	]
Tea dry	83%	[	79%	, 87%	]
Rice (husked)	80%	[	76%	, 84%	]
Peas, beans, lentils, and other pulses	77%	[	73%	, 80%	]
Spinach, cabbage, and other green vegetables	77%	[	73%	, 81%	]
Beef including minced sausage	60%	[	55%	, 66%	]
Fresh fish and seafood	52%	[	47%	, 58%	]
Coconuts (mature/immature)	52%	[	46%	, 58%	]
Buns, cakes and biscuits	50%	[	45%	, 55%	]
Bottled/canned soft drinks (soda, juice, water)	47%	[	42%	, 52%	]
Bread	45%	[	41%	, 50%	]
Irish potatoes	41%	[	36%	, 46%	]
Citrus fruits (oranges, lemon, tangerines, etc.)	39%	[	33%	, 45%	]
Ripe bananas	33%	[	29%	, 38%	]
Fresh milk	31%	[	26%	, 36%	]
Cooking bananas, plantains	30%	[	25%	, 35%	]
Dried/salted/canned fish and seafood	29%	[	24%	, 34%	]
Mangoes, avocadoes, and other fruits	28%	[	23%	, 33%	]
Eggs	28%	[	22%	, 33%	]
Sweet potatoes	27%	[	21%	, 32%	]
Cassava fresh	26%	[	22%	, 30%	]
Groundnuts in shell/shelled	22%	[	16%	, 27%	]
Chicken and other poultry	16%	[	13%	, 20%	]
Other spices	16%	[	13%	, 20%	]
Honey, syrups, jams, marmalade, jellies, canned fruits	16%	[	11%	, 20%	]
Macaroni, spaghetti	15%	[	11%	, 19%	]
Sweets	12%	[	10%	, 15%	]
Maize (grain)	11%	[	7%	, 15%	]
Millet and sorghum (flour)	11%	[	8%	, 14%	]
Sugarcane	9%	[	6%	, 12%	]
Maize (green, cob)	9%	[	4%	, 14%	]
Milk products (like cream, cheese, yoghurt etc)	9%	[	4%	, 13%	]
Cassava dry/flour	8%	[	4%	, 12%	]
Other cereal products	7%	[	5%	, 9%	]
Butter, margarine, ghee, and other fat products	7%	[	5%	, 9%	]
Yams/cocoyams	6%	[	3%	, 9%	]
Goat meat	6%	[	4%	, 8%	]
Canned, dried and wild vegetables	4%	[	2%	, 7%	]
Bottled beer	4%	[	2%	, 6%	]
Pork including sausages and bacon	4%	[	2%	, 6%	]
Wheat, barley grain, and other cereals	4%	[	2%	, 5%	]
Coffee and cocoa	3%	[	1%	, 5%	]
Canned milk/milk powder	2%	[	1%	, 3%	]
Other raw materials for drinks	2%	[	1%	, 2%	]

Other starches	1%	[	0%	,	2%	]
Millet and sorghum (grain)	1%	[	0%	,	2%	]
Cashew, almonds, and other nuts	1%	[	0%	,	1%	]
Rice (paddy)	1%	[	0%	,	1%	]
Seeds and products from nuts/seeds (*excl.* cooking oil)	1%	[	0%	,	1%	]
Local brews	1%	[	0%	,	2%	]
Other domestic/wild meat products	0%	[	0%	,	1%	]
Wine and spirits	0%	[	0%	,	1%	]
Prepared tea, coffee	0%	[	0%	,	1%	]
Wild birds and insects	0%	[	0%	,	1%	]
Package fish	0%	[	0%	,	1%	]

Appendix B Total Agricultural Household Consumption by Food Group

Mean Value of Consumption by Food Group			
Food Group	Mean	95% C.I.	Number of Observations
Cereals	$9.19	[$8.75, $9.63]	2324
Starches	$5.06	[$4.57, $5.55]	1875
Sugars	$1.44	[$1.34, $1.55]	1719
Pulses	$2.08	[$1.89, $2.27]	1759
Nuts	$1.69	[$1.56, $1.82]	1475
Vegetables & Fruits	$3.07	[$2.86, $3.28]	2377
Meat & Fish	$5.45	[$4.87, $6.04]	1983
Milk Products	$3.15	[$2.71, $3.6]	726
Beverages	$1.09	[$0.97, $1.21]	1657
Other	$1.04	[$0.98, $1.1]	2431

Appendix C Proportion of Priority Food Consumption that is Purchased or Produced

Proportion of Food Item Consumption that was Purchased Among Agricultural Households that Reported Purchasing a Portion of Food Item				
Food Item	Proportion	95% C.I.		Number of Observations
Chicken and other poultry	100.0%	-	-	66
Eggs	100.0%	-	-	96
Maize (grain)	100.0%	-	-	168
Milk products (like cream, cheese, yoghurt etc)	100.0%	-	-	79
Cooking oil	100.0%	-	-	1587
Pork including sausages and bacon	100.0%	-	-	139
Beef including minced sausage	100.0%	-	-	616
Tea dry	100.0%	-	-	1340
Salt	100.0%	-	-	2321
Sugar	100.0%	-	-	1655
Dried/salted/canned fish and seafood	99.9%	[99.7%	, 100.1%]	897
Rice (husked)	99.9%	[99.7%	, 100.0%]	1024
Cassava dry/flour	99.8%	[99.5%	, 100.2%]	148
Fresh milk	99.8%	[99.5%	, 100.2%]	376
Goat meat	99.7%	[99.2%	, 100.2%]	184
Groundnuts in shell/shelled	99.7%	[99.3%	, 100.1%]	330
Fresh cassava	99.7%	[99.5%	, 100.0%]	328
Maize (flour)	99.7%	[99.4%	, 100.1%]	1059
Fresh fish and seafood	99.6%	[99.1%	, 100.0%]	659
Cooking bananas, plantains	99.6%	[99.0%	, 100.2%]	248
Peas, beans, lentils, and other pulses	99.1%	[98.4%	, 99.9%]	1052
Sweet potatoes	99.1%	[98.1%	, 100.0%]	263
Onions, tomatoes, carrots, and green pepper	98.8%	[98.3%	, 99.3%]	1859
Spinach, cabbage, and other green vegetables	97.9%	[97.1%	, 98.8%]	838

Proportion of Food Item Consumption that was Produced Among Agricultural Households that Reported Producing a Portion of Food Item				
Food Item	Proportion	95% C.I.		Number of Observations
Chicken and other poultry	100.0%	-	-	327
Eggs	100.0%	-	-	163
Maize (grain)	100.0%	-	-	314
Milk products (like cream, cheese, yoghurt etc)	100.0%	-	-	88
Cooking oil	100.0%	-	-	50
Pork including sausages and bacon	100.0%	-	-	4
Beef including minced sausage	100.0%	-	-	14
Tea dry	100.0%	-	-	8
Salt	100.0%	-	-	1
Sugar	100.0%	-	-	1
Dried/salted/canned fish and seafood	100.0%	-	-	14

Cassava dry/flour	100.0%	[	99.9%	,	100.0%	]	393
Fresh cassava	99.9%	[	99.8%	,	100.0%	]	581
Sweet potatoes	99.9%	[	99.8%	,	100.0%	]	364
Groundnuts in shell/shelled	99.9%	[	99.6%	,	100.1%	]	388
Rice (husked)	99.8%	[	99.5%	,	100.1%	]	197
Maize (flour)	99.8%	[	99.5%	,	100.1%	]	832
Fresh milk	99.8%	[	99.3%	,	100.2%	]	221
Cooking bananas, plantains	99.4%	[	98.7%	,	100.1%	]	465
Peas, beans, lentils, and other pulses	99.4%	[	98.9%	,	99.8%	]	645
Fresh fish and seafood	99.1%	[	97.8%	,	100.3%	]	94
Goat meat	98.6%	[	96.2%	,	101.1%	]	32
Spinach, cabbage, and other green vegetables	98.1%	[	97.4%	,	98.9%	]	850
Onions, tomatoes, carrots, and green pepper	94.4%	[	91.1%	,	97.7%	]	131

Appendix D Mean Quantity of Priority Foods Consumed from Purchases and Production

Mean Quantity Consumed from Purchases Over Last Seven Days, Agricultural Households				
Food Item	Mean	Measurement	95% C.I	Number of Observations
Husked Rice	17.0	Kg	[-8.7,42.7]	1026
Maize Flour	10.1	Kg	[9.5,10.9]	1060
Maize Grain	8.7	Kg	[7.1,10.3]	168
Cassava Flour	7.0	Kg	[5.6,8.6]	148
Eggs	6.0	Pieces	[5.2,7]	96
Plantains	4.6	Kg	[3.8,5.5]	249
Sweet Potatoes	4.0	Kg	[3.3,4.9]	263
Fresh Cassava	3.7	Kg	[3.2,4.3]	328
Fresh Milk	3.0	L	[2.7,3.5]	376
Eggs	1.7	Kg	[0.6,3]	34
Milk Products	1.7	L	[1.4,2.1]	79
Pulses	1.6	Kg	[1.6,1.8]	1052
Fresh Greens	1.6	Kg	[1.3,2.1]	840
Chicken	1.5	Kg	[1.3,1.8]	66
Goat	1.5	Kg	[1.1,1.9]	184
Fresh Fish	1.4	Kg	[1.4,1.6]	659
Fresh Vegetables	1.4	Kg	[1.4,1.5]	1860
Beef	1.3	Kg	[1.3,1.5]	616
Sugar	1.2	Kg	[1.2,1.3]	1655
Pork	1.0	Kg	[0.9,1.2]	139
Groundnuts	0.9	Kg	[0.8,1.1]	330
Oil	0.7	L	[0.4,1.1]	1588
Dry Fish	0.6	Kg	[0.6,0.7]	897
Oil	0.5	Kg	[0.5,0.7]	53
Salt	0.4	Kg	[0.4,0.4]	2321
Dry Tea	0.1	Kg	[0.1,0.1]	1340

Mean Quantity Consumed from Own-Production Over Last Seven Days, Agricultural Households				
Food Item	Mean	Measurement	95% C.I	Number of Observations
Maize Grain	16.2	Kg	[-0.8,33.2]	316
Plantains/Cooking Bananas	15.3	Kg	[11.8,19]	481
Fresh Cassava	12.5	Kg	[-0.2,25.2]	582
Maize Flour	12.0	Kg	[11.3,12.9]	837
Cassava Flour	11.0	Kg	[9.1,12.9]	395
Goat	10.8	Kg	[5.3,16.3]	33
Sweet Potatoes	10.1	Kg	[7.9,12.3]	368
Beef	9.3	Kg	[1.2,17.5]	14
Fresh Milk	8.4	L	[6.9,10]	221
Oil	7.4	L	[-5.7,20.5]	51
Eggs	6.8	Pieces	[4.7,9]	164
Husked Rice	5.9	Kg	[5.1,6.8]	197

Milk Products	5.8	L	[4.5,7.2]	88
Fresh Fish	4.6	Kg	[3.7,5.5]	94
Pork	3.8	Kg	[1.1,6.6]	4
Pulses	3.3	Kg	[2.9,3.7]	645
Fresh Greens	2.4	Kg	[2.2,2.6]	850
Groundnuts	2.0	Kg	[1.8,2.3]	388
Sugar	2.0	Kg	-	1
Chicken	2.0	Kg	[1.9,2.1]	327
Fresh Vegetables	1.9	Kg	[1.6,2.3]	131
Dry Fish	1.7	Kg	[0.6,2.9]	14
Salt	0.5	Kg	-	1
Oil	0.5	Kg	-	1
Eggs	0.4	Kg	[0.3,0.5]	76
Dry Tea	0.1	Kg	[-0.1,0.3]	8

Appendix E Proportion of Agricultural Households Purchasing or Producing a Portion of Priority Food Consumption

Proportion of Agricultural Households that Purchased a Portion of Priority Foods Consumed Over the Last Seven Days (n=2474)			
Food Item	Proportion	95% C.I.	
Sugar	99%	[98% ,	99%]
Salt	98%	[98% ,	99%]
Tea dry	98%	[97% ,	99%]
Dried/salted/canned fish and seafood	96%	[95% ,	98%]
Cooking oil	96%	[94% ,	97%]
Pork including sausages and bacon	94%	[90% ,	98%]
Beef including minced sausage	94%	[92% ,	96%]
Onions, tomatoes, carrots, and green pepper	91%	[90% ,	93%]
Fresh fish and seafood	83%	[78% ,	87%]
Rice (husked)	75%	[71% ,	80%]
Goat meat	71%	[64% ,	78%]
Peas, beans, lentils, and other pulses	56%	[52% ,	60%]
Fresh milk	53%	[48% ,	58%]
Spinach, cabbage, and other green vegetables	47%	[43% ,	51%]
Maize (flour)	47%	[44% ,	51%]
Milk products (like cream, cheese, yoghurt etc)	41%	[33% ,	49%]
Groundnuts in shell/shelled	41%	[35% ,	46%]
Cassava fresh	37%	[32% ,	41%]
Sweet Potatoes	36%	[30% ,	42%]
Cooking bananas, plantains	33%	[28% ,	39%]
Maize (grain)	32%	[27% ,	38%]
Cassava dry/flour	30%	[24% ,	36%]
Eggs	29%	[24% ,	34%]
Chicken and other poultry	15%	[12% ,	19%]

Proportion of Agricultural Households that Produced a Portion of Priority Foods Consumed Over the Last Seven Days (n=2474)			
Food Item	Proportion	95% C.I.	
Chicken and other poultry	81%	[77% ,	85%]
Eggs	68%	[63% ,	74%]
Cassava dry/flour	65%	[59% ,	72%]
Maize (grain)	63%	[58% ,	68%]
Cooking bananas, plantains	61%	[55% ,	67%]
Sweet Potatoes	58%	[53% ,	64%]
Cassava fresh	57%	[52% ,	62%]
Groundnuts in shell/shelled	52%	[47% ,	58%]
Maize (flour)	49%	[46% ,	53%]
Spinach, cabbage, and other green vegetables	46%	[42% ,	50%]
Milk products (like cream, cheese, yoghurt etc)	45%	[37% ,	53%]
Peas, beans, lentils, and other pulses	41%	[37% ,	45%]
Fresh milk	36%	[32% ,	41%]

Rice (husked)	21%	[	16%	, 25%	]
Goat meat	14%	[	9%	, 19%	]
Fresh fish and seafood	11%	[	7%	, 14%	]
Onions, tomatoes, carrots, and green pepper	7%	[	5%	, 8%	]
Cooking oil	4%	[	2%	, 5%	]
Pork including sausages and bacon	3%	[	0%	, 5%	]
Beef including minced sausage	2%	[	1%	, 4%	]
Dried/salted/canned fish and seafood	2%	[	1%	, 2%	]
Tea dry	1%	[	0%	, 1%	]
Salt	0%	[	0%	, 0%	]
Sugar	0%	[	0%	, 0%	]

Appendix F Total Household Consumption

Value of Total Household Consumption (per week in US dollars)				
	Zone	Mean	95% C.I.	Number of Observations
Agricultural households	Central	$20.77	[19, 22]	136
	Eastern	$27.81	[24, 31]	307
	Southern Highlands	$24.52	[20, 29]	348
	Lake	$29.13	[25, 33]	253
	Northern	$27.22	[25, 29]	367
	Southern	$34.20	[20, 48]	459
	Western	$27.14	[24, 30]	323
	Zanzibar	$26.65	[25, 29]	281
Non-Agricultural households	Central	$27.84	[28, 28]	8
	Eastern	$28.92	[26, 32]	424
	Southern Highlands	$21.43	[15, 28]	20
	Lake	$23.70	[15, 32]	51
	Northern	$17.14	[12, 23]	33
	Southern	$22.90	[19, 27]	28
	Western	$19.99	[12, 28]	29
	Zanzibar	$45.80	[10, 81]	198

Total Per Capita Household Consumption (per week in US dollars)					
	Zone	Mean	95% C.I.	Number of Observations	Wald Test P-value
Agricultural households	Central	$4.40	[4, 4.8]	136	0.000
	Eastern	$6.63	[5.84, 7.42]	307	
	Southern Highlands	$5.04	[4.6, 5.49]	347	
	Lake	$5.06	[4.48, 5.64]	253	
	Northern	$5.72	[5.27, 6.17]	367	
	Southern	$5.34	[4.94, 5.75]	455	
	Western	$4.53	[3.95, 5.1]	323	
	Zanzibar	$5.83	[5.04, 6.63]	281	
Non-Agricultural households	Central	$7.65	[7.65, 7.65]	8	0.000
	Eastern	$7.90	[7.11, 8.7]	424	
	Southern Highlands	$6.50	[5.25, 7.74]	20	
	Lake	$7.98	[5.99, 9.97]	51	
	Northern	$5.22	[3.35, 7.09]	33	
	Southern	$8.25	[6.21, 10.29]	28	
	Western	$5.70	[4.85, 6.55]	29	
	Zanzibar	$5.87	[5.09, 6.65]	198	

Appendix G Zone: Value of Consumption by Food Group

Total Agricultural Household Consumption (per week in US dollars)				
Zone	Food Group	Mean	95% C.I.	Number of Observations
Central	Cereals	$10.85	[$9.49, $12.22]	135
	Starches	$1.08	[$0.62, $1.54]	32
	Sugars	$1.26	[$0.87, $1.64]	78
	Pulses	$1.14	[$0.95, $1.32]	74
	Nuts	$1.83	[$1.53, $2.14]	100
	Vegetables & Fruits	$2.13	[$1.95, $2.32]	135
	Meat & Fish	$3.83	[$2.79, $4.86]	98
	Milk Products	$2.75	[$1.21, $4.3]	41
	Beverages	$1.10	[$0.63, $1.57]	134
	Other	$0.83	[$0.67, $0.99]	65
Eastern	Cereals	$10.15	[$8.95, $11.35]	293
	Starches	$3.85	[$2.73, $4.96]	237
	Sugars	$1.54	[$1.26, $1.82]	265
	Pulses	$1.81	[$1.46, $2.16]	249
	Nuts	$1.72	[$1.21, $2.23]	209
	Vegetables & Fruits	$3.94	[$3.35, $4.52]	295
	Meat & Fish	$5.99	[$4.84, $7.15]	253
	Milk Products	$2.64	[$1.68, $3.6]	102
	Beverages	$1.34	[$0.94, $1.74]	254
	Other	$1.24	[$1.03, $1.46]	298
Southern Highlands	Cereals	$8.53	[$7.91, $9.16]	329
	Starches	$4.08	[$3.16, $4.99]	229
	Sugars	$1.41	[$0.94, $1.88]	210
	Pulses	$2.03	[$1.72, $2.34]	281
	Nuts	$1.13	[$0.93, $1.34]	157
	Vegetables & Fruits	$3.18	[$2.74, $3.62]	342
	Meat & Fish	$3.94	[$3.19, $4.69]	263
	Milk Products	$2.07	[$1.5, $2.64]	90
	Beverages	$1.59	[$1.25, $1.92]	236
	Other	$1.08	[$0.97, $1.19]	343
Lake	Cereals	$7.93	[$6.57, $9.29]	210
	Starches	$9.21	[$7.26, $11.17]	239
	Sugars	$1.45	[$1.22, $1.67]	139
	Pulses	$3.02	[$2.19, $3.85]	166
	Nuts	$1.47	[$0.9, $2.05]	88
	Vegetables & Fruits	$2.93	[$2.2, $3.66]	241
	Meat & Fish	$6.88	[$4.69, $9.07]	205
	Milk Products	$2.95	[$1.72, $4.18]	70
	Beverages	$1.25	[$0.91, $1.59]	132
	Other	$0.78	[$0.62, $0.94]	249
Northern	Cereals	$8.58	[$7.87, $9.29]	362
	Starches	$3.71	[$3.03, $4.39]	256
	Sugars	$1.64	[$1.5, $1.78]	331

	Pulses	$1.89	[$1.65, $2.14]	288
	Nuts	$1.29	[$0.94, $1.64]	136
	Vegetables & Fruits	$3.45	[$2.84, $4.07]	348
	Meat & Fish	$6.36	[$4.86, $7.85]	296
	Milk Products	$3.52	[$2.56, $4.47]	229
	Beverages	$0.68	[$0.49, $0.88]	302
	Other	$1.49	[$1.33, $1.65]	364
Southern	Cereals	$6.74	[$6.05, $7.42]	413
	Starches	$4.39	[$3.71, $5.08]	374
	Sugars	$0.92	[$0.83, $1.02]	261
	Pulses	$1.88	[$1.68, $2.08]	332
	Nuts	$2.29	[$1.89, $2.7]	316
	Vegetables & Fruits	$3.94	[$3.19, $4.69]	435
	Meat & Fish	$3.43	[$2.93, $3.93]	371
	Milk Products	$2.14	[$1.09, $3.18]	27
	Beverages	$1.05	[$0.69, $1.4]	238
	Other	$0.60	[$0.51, $0.69]	444
Western	Cereals	$11.63	[$9.85, $13.41]	304
	Starches	$4.12	[$3.26, $4.98]	235
	Sugars	$1.52	[$1.35, $1.69]	162
	Pulses	$2.36	[$1.72, $3]	227
	Nuts	$1.77	[$1.53, $2.01]	197
	Vegetables & Fruits	$2.20	[$1.92, $2.47]	316
	Meat & Fish	$6.56	[$4.49, $8.63]	225
	Milk Products	$4.35	[$3.32, $5.39]	103
	Beverages	$0.77	[$0.57, $0.96]	152
	Other	$1.13	[$0.97, $1.29]	319
Zanzibar	Cereals	$9.18	[$8.34, $10.01]	278
	Starches	$4.53	[$3.97, $5.1]	273
	Sugars	$1.49	[$1.33, $1.64]	273
	Pulses	$1.11	[$0.92, $1.3]	142
	Nuts	$2.44	[$2.18, $2.71]	272
	Vegetables & Fruits	$2.34	[$1.97, $2.71]	265
	Meat & Fish	$5.14	[$4.52, $5.77]	272
	Milk Products	$1.21	[$0.95, $1.46]	64
	Beverages	$0.74	[$0.57, $0.91]	278
	Other	$0.60	[$0.48, $0.72]	280

Appendix H Total Value of Priority Foods Consumed by Agricultural Households

Total Value of Priority Foods Consumed from Purchases among Agricultural Households by Zone (per week in US dollars)

Food Category	Zone	Mean	95% C.I.	Number of Observations
Priority Cereals	Zanzibar	$8.39	[7.5,9.3]	269
	East	$7.68	[6.4,9.1]	271
	Northern	$6.40	[5.6,7.3]	307
	Lake	$4.93	[3.7,6.3]	131
	Western	$4.92	[4,6]	191
	Southern	$4.72	[4.1,5.4]	268
	Southern Highlands	$4.35	[3.7,5.1]	207
	Central	$3.53	[2.9,4.2]	72
Priority Starches	Lake	$2.30	[1.8,2.9]	76
	East	$2.00	[1.5,2.6]	173
	Northern	$1.74	[1.5,2.1]	166
	Western	$1.55	[1.3,1.9]	111
	Southern	$1.40	[1.1,1.8]	125
	Zanzibar	$1.26	[1.1,1.6]	190
	Southern Highlands	$1.26	[1,1.6]	93
	Central	$0.72	[0.5,1.1]	22
Priority Sugars	Northern	$1.61	[1.5,1.8]	327
	Western	$1.51	[1.4,1.7]	159
	Lake	$1.45	[1.3,1.7]	136
	Zanzibar	$1.43	[1.3,1.6]	269
	East	$1.42	[1.3,1.7]	263
	Southern Highlands	$1.18	[1.1,1.3]	202
	Central	$1.08	[0.9,1.3]	78
	Southern	$0.90	[0.9,1]	250
Priority Pulses	Northern	$1.63	[1.4,1.9]	197
	East	$1.61	[1.3,2]	217
	Southern	$1.37	[1.2,1.6]	160
	Western	$1.32	[1.2,1.6]	118
	Lake	$1.28	[1,1.6]	51
	Southern Highlands	$1.18	[1,1.4]	123
	Zanzibar	$1.12	[1,1.4]	139
	Central	$0.98	[0.8,1.2]	49
Priority Nuts	Zanzibar	$2.10	[2,2.3]	223
	East	$1.58	[1.1,2.2]	189
	Southern	$1.09	[1,1.3]	160
	Northern	$1.00	[0.9,1.3]	120
	Western	$0.87	[0.7,1.1]	65
	Central	$0.86	[0.6,1.2]	25

	Southern Highlands	$0.70	[0.5,1]	72
	Lake	$0.70	[0.5,1]	44
Priority Vegetables	East	$2.58	[2.2,3]	268
	Northern	$1.65	[1.5,1.9]	330
	Southern Highlands	$1.56	[1.4,1.9]	273
	Western	$1.26	[1.1,1.5]	247
	Central	$1.16	[1,1.4]	103
	Zanzibar	$1.12	[1,1.3]	241
	Southern	$1.11	[1,1.3]	329
	Lake	$0.94	[0.8,1.1]	196
Priority Meats & Fish	East	$4.51	[3.7,5.4]	237
	Northern	$4.17	[3.4,5]	259
	Zanzibar	$3.82	[3.4,4.4]	219
	Lake	$3.52	[2.8,4.3]	176
	Southern Highlands	$2.97	[2.5,3.5]	245
	Western	$2.97	[2.6,3.4]	192
	Central	$2.27	[1.8,2.9]	82
	Southern	$1.79	[1.6,2.1]	302
Priority Milk Products	East	$2.45	[1.5,3.5]	95
	Southern	$1.85	[0.7,3.1]	23
	Northern	$1.51	[1.3,1.8]	119
	Western	$1.45	[0.9,2.1]	40
	Zanzibar	$1.13	[1,1.4]	49
	Southern Highlands	$1.00	[0.7,1.4]	51
	Lake	$0.99	[0.7,1.4]	39
	Central	$0.98	[0.4,1.7]	14
Priority Oils and Spices	Northern	$1.38	[1.3,1.6]	362
	East	$1.25	[1.1,1.5]	296
	Southern Highlands	$0.99	[0.9,1.2]	341
	Western	$0.93	[0.9,1.1]	316
	Lake	$0.74	[0.6,0.9]	247
	Central	$0.71	[0.7,0.9]	132
	Southern	$0.60	[0.6,0.8]	426
	Zanzibar	$0.59	[0.5,0.8]	274
Priority Beverages	Southern Highlands	$1.37	[1.1,1.7]	215
	East	$1.26	[1,1.7]	250
	Central	$1.10	[0.7,1.6]	65
	Lake	$0.91	[0.7,1.2]	117
	Southern	$0.87	[0.7,1.1]	227
	Western	$0.77	[0.6,1]	148
	Northern	$0.65	[0.5,0.9]	298
	Zanzibar	$0.62	[0.5,0.8]	277

Total Value of Priority Foods Consumed from Own-Production among Agricultural HHs by Zone (per week in US dollars)				
Food Category	Zone	Mean	95% C.I.	Number of Observations
Priority Cereals	Western	$11.34	[9.5,13.3]	216
	Central	$10.99	[9.7,12.4]	109
	Eastern	$8.18	[6.9,9.6]	76
	Southern Highlands	$7.24	[6.6,8]	256
	Lake	$7.24	[5.8,8.8]	135
	Northern	$6.05	[5.2,7]	168
	Southern	$5.75	[4.9,6.6]	241
	Zanzibar	$5.42	[3.7,7.2]	48
Priority Starches	Lake	$10.76	[8.9,12.7]	182
	Southern Highlands	$5.16	[4.2,6.2]	148
	Northern	$5.00	[4.2,5.9]	125
	Southern	$4.97	[4.2, 5.7]	266
	Eastern	$4.94	[3.4,6.6]	86
	Western	$4.86	[3.7, 6]	151
	Zanzibar	$4.30	[3.7,5]	218
	Central	$1.80	[1.1,2.6]	9
Priority Sugars	Southern Highlands	$21.81	[0,0]	2
	Central	$9.81	[0,0]	1
	Eastern	$9.08	[0,0]	3
	Southern	$2.79	[0,0]	3
	Zanzibar	$2.36	[0,0]	8
	Western	$2.32	[0,0]	2
	Northern	$2.25	[0,0]	2
	Lake	$0.98	[0,0]	1
Priority Pulses	Lake	$4.01	[3,5.1]	108
	Western	$3.65	[2.5,4.9]	99
	Eastern	$2.88	[2,3.8]	28
	Southern Highlands	$2.72	[2.3,3.2]	153
	Northern	$2.53	[2.1,3.1]	82
	Southern	$2.37	[2.1,2.7]	150
	Central	$1.34	[1,1.8]	24
	Zanzibar	$0.93	[0,0]	1
Priority Nuts	Northern	$3.14	[2,4.4]	15
	Southern	$2.99	[2.4,3.6]	159
	Zanzibar	$2.81	[2,3.7]	63
	Central	$2.34	[1.7,3]	64
	Lake	$2.34	[1.4,3.4]	43
	Western	$2.13	[1.9,2.5]	123

	Eastern	$1.98	[1.2,2.8]	23
	Southern Highlands	$1.58	[1.4,1.8]	73
Priority Vegetables	Northern	$3.71	[2.9,4.6]	156
	Southern	$3.39	[2.9,4]	270
	Eastern	$3.26	[2.4,4.2]	115
	Lake	$3.22	[2.1,4.3]	146
	Southern Highlands	$2.97	[2.4,3.6]	194
	Western	$2.16	[1.8,2.6]	145
	Zanzibar	$1.62	[1.2,2.1]	177
	Central	$1.52	[1.2,2]	42
Priority Meats & Fish	Western	$11.22	[5.9,16.6]	75
	Lake	$10.13	[4.5,15.9]	66
	Northern	$6.44	[3.1,9.9]	118
	Eastern	$5.98	[4.7,7.4]	68
	Zanzibar	$5.87	[4.4,7.3]	72
	Southern	$5.47	[4.2,6.8]	111
	Central	$4.83	[2.9,6.8]	30
	Southern Highlands	$4.06	[3.2,5]	64
Priority Milk Products	Western	$6.67	[5.3,8.2]	51
	Lake	$6.13	[3.4,8.9]	22
	Northern	$6.12	[4.2,8.2]	95
	Eastern	$5.62	[1.5,9.8]	7
	Central	$5.17	[0.4,10]	15
	Southern Highlands	$4.17	[2.9,5.5]	27
	Southern	$3.86	[1.5,6.4]	4
	Zanzibar	$1.14	[0.7,1.7]	14
Priority Oils and Spices	Western	$2.70	[1.5,4]	25
	Northern	$2.07	[1.3,2.9]	20
	Southern	$1.59	[1.2,2]	2
	Southern Highlands	$1.38	[0.9,1.9]	17
	Lake	$1.24	[1,1.5]	10
	Central	$1.07	[0.7,1.5]	12
	Eastern	$0.98	[0,0]	1
	Zanzibar	$0.35	[0.3,0.5]	16
Priority Beverages	Southern	$5.05	[-1.7,11.8]	9
	Zanzibar	$4.21	[1.7,6.8]	8
	Eastern	$4.10	[0.4,7.9]	5
	Southern Highlands	$3.92	[1,7]	13
	Northern	$3.35	[0.5,6.3]	3
	Lake	$3.20	[1.4,5.1]	15
	Western	$0.25	[0,0]	1
	Central			0

Appendix I Data Issues

Issue	Description	Number of observations affected	Direction of effect	Magnitude of effect
Possible data entry errors in amount consumed in the past seven days for food measured in kilograms or grams.	48 observations reported improbably high amounts of consumption. For example, a household of 7 reported consuming 10,500kg of rice. This may be a result of enumerator recording grams as kilograms. Observations over 50kg are excluded from the analysis (this cut-off falls well within the 99th percentile, which begins at 21kg). Size of household was taken into consideration.	48 observations	Reduces mean consumption (foods impacted include husked rice, paddy, dry tea, fresh cassava, cooking bananas/plantains)	Small. Reduces aggregate standard error from 0.346 to 0.022.
Possible data entry errors in amount consumed over past seven days for food measured in litres or millilitres.	5 observations reported improbably high amounts of consumption in liters over the past seven days. Observations over 100 L were excluded from analysis (this cut-off falls well within the 99th percentile, which begins at 21 L).	5 observations	Reduces mean consumption (foods include cooking oil)	Small. Reduces standard error from 0.16L to 0.10L.
Possible data entry errors in amount consumed over past seven days for food measured in pieces.	7 observations were improbably high. For example, one family of five reported eating 450 eggs in seven days. Observations over 42 pieces were excluded from the analysis (this cut-off begins at the 99th percentile).	5 observations	Reduces mean (foods impacted include eggs, sweets, buns/cakes, bread).	Small. Reduces standard error from 0.835 to 0.255
Possible data entry errors when recording the amount of food consumed in kilograms or grams that came from purchase.	In 101 observations, the total amount of food that was consumed from purchases exceeds the total amount of food consumed (e.g. is over 100%). Five of these observations were within one ten thousandth of a	101 observations	Reduces mean.	Small; despite the large number of observations excluded from analysis, there is minimal effect on the mean, which

	decimal point of 100% but were not excluded from the analysis.			drops from 2.8 to 2.5. The standard error decreases from 0.5 to 0.47.
Possible data entry errors when recording the total amount spent on food consumed measured in kilograms.	Six outliers were identified by dividing the price paid for food "i" by the amount of food "i" consumed from purchases. Six observations of fish (fresh and dried), rice, oil, and pulses that were valued at or over $600,000 TSH (or ~$500 USD) per kg were removed from analysis.	6 observations	Reduces mean.	Negligible. The mean value per kg of foods consumed that came from purchase reduces by less than 30TSH (or less than $US 0.02) each.
Possible data entry errors when recording the total amount spent on food consumed measured in litres.	Observations of oil, milk, honey, or local brews over 100,000 TSH (or US$84) per litre were removed from the analysis. These observations were all in the 99th percentile.	14 observations	Reduces mean.	Negligible. The mean value per litre of foods consumed that came from purchase reduces by less than 30 TSH (or less than US$0.02 USD) each.
Amount consumed from self-production measured in kilograms.	There were 17 observations where the total amount consumed from self-production exceeded the total amount consumed. Spinach, other leafy greens, and maize (green, cob) were the most impacted food items.	17 observations	Reduces mean.	The mean for maize (green, cob) drops by 2.3 kg (from 9.6 to 7.3) when 3 outliers are removed from analysis. The mean for spinach consumption drops from 2.6kg to 2.3 kg.
Amount consumed from self-production measured in pieces.	One observation of chicken consumption from self-production was 500% of total chicken consumption. One observation of spinach consumption was 1800 pieces in one week.	2 observations	Reduces mean.	Negligible.