EVANS SCHOOL OF PUBLIC AFFAIRS

UNIVERSITY of WASHINGTON

Evans School Policy Analysis and Research (EPAR)

LSMS - INTEGRATED SURVEYS ON AGRICULTURE UNITED REPUBLIC OF TANZANIA: MAIZE APPENDIX

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Appendix: LSMS-ISA: Maize

The tables below provide the details for analysis done in EPAR Brief #187, including 95% confidence intervals, the number of observations, and p-values where available.

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Maize Cultivation Frequency

Estimated Proportion of Agricultural Households Cultivating Maize by Zone (Long and Short Rainy Seasons combined)

Zone	Estimated Proportion	95% C.I.	Observations	Wald test P-value
Tanzania	83%	[80%, 85%]	1694 of 2298	
Western	95%	[92%, 98%]	304 of 320	<0.0001
Southern Highlands	93%	[89%, 96%]	332 of 343	
Northern	88%	[83%, 93%]	299 of 340	
Lake	80%	[72%, 88%]	199 of 246	
Central	79%	[69%, 89%]	107 of 136	
Southern	74%	[68%, 81%]	332 of 456	
Eastern	69%	[57%, 80%]	121 of 195	
Zanzibar	6%	[0%, 12%]	15 of 262	

Estimated Proportion of Agricultural Households Cultivating Maize by Gender of Household Head (Long Rainy Season)

Household Head	Estimated Proportion	95% C.I.	Observations	Wald test P-value
Male	82%	[80%, 85%]	1047 of 1740	0.9506
Female	83%	[79%, 86%]	346 of 558	

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Maize Consumption

Estimated Proportion of Agricultural Households Reporting Consumption Over Last 7 Days					
Food ItemEstimated Proportion95% C.I.Observations (of n= 2474)					
Maize (flour)	82%	[79%, 84%]	1,969		
Maize (grain)	24%	[21%, 27%]	508		
Maize (green, cob)	18%	[15%, 21%]	383		

Estimated Proportion of Agricultural Households that Produced a Portion of Priority Foods Consumed Over the Last Seven Days					
Food Item	Estimated Proportion	95% C.I.	Observations		
Maize (grain)	63%	[58%, 68%]	316 of 508		
Maize (flour)	49 %	[46%, 53%]	838 of 1969		

Maize Inputs

Estimated Proportion of Maize Plots Planted with Improved Variety Seeds (Long Rainy Season)					
Сгор	Estimated Proportion	95% C.I.	Observations		
Long Rainy Season	16%	[13%, 19%]	299 of 1995		
Short Rainy Season	15%	[11%, 19%]	119 of 780		

Estimated Proportion of Maize Plots Planted with Improved Variety Seeds by Zone (Long Rainy Season)						
Estimated Proportion 95% C.I. Observations						
Northern	33%	[24%, 41%]	114 of 344			
Lake	21%	[11%, 30%]	24 of 119			
Eastern	14%	[8%, 19%]	23 of 152			
Western	14%	[8%, 19%]	28 of 229			
Southern Highlands	13%	[7%, 20%]	68 of 533			
Central	11%	[4%, 18%]	16 of 140			
Zanzibar	8%	[-10%, 27%]	1 of 15			
Southern	5%	[2%, 7%]	25 of 463			

Estimated Proportion of	Estimated Proportion of Input Use on Plots					
Organic Fortilizor		Estimated	95% Confidence	Observations		
Organic Tertitizei		Рторогстоп	Interval	Observacions		
Long Rainy Season	Primarily Maize	16%	[13%,18%]	238 of 1607		
	Maize	15%	[12%,17%]	277 of 2017		
Short Rainy Season	Primarily Maize	16%	[12%,20%]	95 of 566		
	Maize	14%	[11%,18%]	117 of 784		
Inorganic Fortilizor						
inorganic i er titizer						
Long Rainy Season	Primarily Maize	16%	[12%,20%]	276 of 1607		
	Maize	14%	[10%,17%]	305 of 2017		
Short Rainy Season	Primarily Maize	4%	[1%,6%]	24 of 566		
	Maize	3%	[1%, 4%]	27 of 784		
Dostisidos Horbisidos F	ungicidos					
Pesticides, nerdicides, r	ungicides					
Long Rainy Season	Primarily Maize	11%	[7%,14%]	179 of 1607		
	Maize	11%	[8%,14%]	232 of 2017		
Short Rainy Season	Primarily Maize	4%	[2%,7%]	27 of 566		
	Maize	4%	[2%,6%]	34 of 784		

Maize Yields

Plot Maize Yields by Zone in the Long Rainy Season (Area Harvested)					
	Median Yield	90 th Percntile Yield			
Zone	(t/ha)	(t/ha)	Observations		
Tanzania	0.66	2.00	1811		
Southern Highlands	0.94	2.67	507		
Northern	0.74	2.47	287		
Western	0.59	1.78	221		
Central	0.59	1.48	137		
Eastern	0.49	1.78	126		
Southern	0.49	1.48	409		
Lake	0.41	1.37	110		

*Insufficient observations to calculate yields for Zanzibar (less than 30).

Maize Yields for Plots of Male and Female Headed Households (Area Harvested)							
Season	Head of Household	Median Yield (t/ha)	Average Yield (t/ha)	95% C.I.	Observations	Wald test P-value	
Long Rainy Season	Male	0.71	0.94	[0.88, 1.01]	1413	0.0553	
	Female	0.59	0.84	[0.73, 0.94]	398		
Short Rainy Season	Male	0.49	0.72	[0.63, 0.94]	302	0.0783	
	Female	0.36	0.54	[0.36, 0.75]	94		

Maize Yields				
Long Rainy Season				
		Mean Yield (t/ha)	Confidence Interval	Observations
Country	Harvested	0.80		1811
	Planted	0.56		1888
Household	Harvested	0.91	[0.85, 0.96]	1284
	Planted	0.72	[0.67, 0.77]	1324
Plot	Harvested	0.92	[0.86, 0.98]	1811
	Planted	0.75	[0.70, 0.81]	1888
Short Rainy Season				
Country	Harvested	0.60		396
	Planted	0.35		440
Household	Harvested	0.70	[0.59, 0.81]	311
	Planted	0.50	[0.41, 0.60]	339
Plot	Harvested	0.67	[0.58, 0.77]	396
	Planted	0.49	[0.41, 0.57]	440

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Average and Median Plot Yields by Input Use (Long Rainy Season)						
	Median Yield (t/ha)	Mean Yield (t/ha)	95% Confidence Interval	Observations	Wald test P-value*	
No Fertilizer or IV Seed	0.59	0.80	[0.74, 0.85]	1184		
Organic Fertilizer Only	0.95	1.20	[1.02, 1.37]	153	.0000	
Inorganic Fertilizer Only	0.91	1.16	[0.94, 1.38]	167	.0019	
IV Seed Only	0.62	0.89	[0.71, 1.07]	145	.3227	
Organic Fertilizer and IV Seed	0.49	0.78	[0.51, 1.06]	40	.9291	
Inorganic Fertilizer and IV Seed	1.42	1.71	[1.12, 2.30]	55	.0019	

*Compared to plots with neither fertilizer nor IV seed in the same sample.

Correlation Between Maize Plot size and Plot Yield for Area Harvested Yield Calculations					
Season	eason Correlation Coefficient Significance Observations				
Long Rainy Season	-0.0634	0.007	1809		
Short Rainy Season	0.0032	0.95	396		

Correlation Between Maize Plot size and Plot Yield for Area Harvested Yield Calculations						
Plot Size	Mean Yield (t/ha)	95% C.I.	Observations	Wald test P- value		
< 0.81 acres (2 acres)	0.98	[0.89, 1.07]	959	0.0078		
≥0.81 ha	0.84	[0.77, 0.91]	598			

Maize Constraints and Pre-Harvest Losses

Estimated Proportion of Agricultural Households that Own Farm Implements					
	Estimated Proportion who Own Implement	Mean Number Owned	Observations (of n=2297)		
Hoes	92.1%	3.1	2077		
Plough etc.	7.7%	1.3	144		
Spraying machine	4.5%	1.3	100		
Water pumping set †	0.9%	-	23		
Trailer for tractors etc. †	0.5%	-	8		
Hand milling machine †	0.4%	-	10		
Tractor †	0.2%	-	4		
Harrow †	0.2%	-	3		
Reapers †	0.0%	-	1		
Harvesting & threshing machine	0.0%	-			
Fertilizer distributor	0.0%	-			

† Insufficient observations to calculate reliable mean for number owned

Estimated Proportion of Maize Plots Not Fully Planted Due to Constraints					
Estimated Proportion 95% C.I. Observations					
Long Rainy Season	12.3%	[10.2%,14.4%]	215 of 1770		
Short Rainy Season	11.4%	[7.7%, 15.1%]	39 of 368		

Constraints Impeding Planting of Entire Plot of Maize Plots that were not Fully Planted, Long Rainy Season					
Causes	Estimated Proportion	95% C.I.	Observations (of n=215)		
Lack of Tools/Equipment	47.8%	[39.7%, 55.8%]	104		
Lack of Agricultural Equipment	33.8%	[25.6%, 42%]	72		
Lack of Seeds	9.8%	[5.6%, 14%]	20		
Drought	5.3%	[2.2%, 8.4%]	13		
Floods	2.2%	[0.1%, 4.4%]	4		
Lack of Loans	1.1%	[-0.6%, 2.9%]	2		

Estimated Proportion of Maize Plots with Area Harvested Less than Area Planted				
Estimated Proportion 95% C.I. Observations				
Long Rainy Season	30%	[26%, 33%]	522 of 1862	
Short Rainy Season	48%	[40%, 55%]	188 of 400	

Reasons for Harvesting a Smaller Area of Plot than the Area Planted, Maize (Long Rainy Season)				
Causes	Estimated Proportion	95% C.I.	Observations (of n= 531)	
Drought	52%	[46%, 58%]	262	
Other	22%	[17%, 26%]	125	
Rain	9%	[6%, 13%]	46	
Insects	6%	[3%, 8%]	31	
Animals	6%	[4%, 9%]	41	
Diseases and Community Problems	3%	[1%, 4%]	13	
Crop Theft	2%	[0%, 3%]	9	
Lack of Casual Labor	1%	[0%, 2%]	4	
Fire	0%	-		

Estimated Proportion of Maize Plots with Pre-Harvest Losses					
Estimated Proportion 95% C.I. Observations					
Long Rainy Season	34%	[30%, 37%]	656 of 1864		
Short Rainy Season	39%	[32%, 45%]	153 of 400		

Causes of Pre-Harvest Losses, Maize (Long Rainy Season)					
Causes	Estimated Proportion	95% C.I.	Observations (of n=656)		
Animals	50%	[44%, 55%]	330		
Theft	25%	[20%, 30%]	160		
Insects	18%	[14%, 22%]	116		
Other	3%	[2%, 5%]	23		
Birds	3%	[2%, 5%]	19		
Diseases	1%	[0%, 2%]	8		

High and Low Producing Plot Differences

Input Use for Plots Yielding Below and Above the 90 th Percentile, Long Rainy Season					
Input	Plot Yield	Estimated Proportion	95% C.I.	Observations	Wald test P-value
Any Input	< 90 th Percentile	37%	[32%, 41%]	589 of 1625	.0000
	≥ 90 th Percentile	59 %	[49%, 70%]	107 of 181	
Any Fertilizer	< 90 th Percentile	24%	[20%, 28%]	388 of 1625	.0000
	≥ 90 th Percentile	49 %	[38%, 60%]	89 of 181	
Inorganic Fertilizer	< 90 th Percentile	13%	[10%, 16%]	231 of 1625	.0068
	≥ 90 th Percentile	27%	[16%, 38%]	53 of 181	
Organic Fertilizer	< 90 th Percentile	14%	[11%, 16%]	207 of 1625	.0001
	≥ 90 th Percentile	28%	[21%, 35%]	48 of 181	
IV Seed	< 90 th Percentile	14%	[12%, 17%]	218 of 1630	.0265
	≥ 90 th Percentile	24%	[15%, 33%]	41 of 181	
Pesticide/Herbicide	< 90 th Percentile	9 %	[7%, 12%]	162 of 1625	.0021
	≥ 90 th Percentile	22%	[14%, 30%]	42 of 181	

Loam Soil for Plots Yielding Below and Above the 90 th Percentile, Long Rainy Season					
Estimated					
Plot Yield	Proportion	95% C.I.	Observations	P-value	
< 90 th Percentile	68 %	[64%, 71%]	1086 of 1626	.0001	
≥ 90 th Percentile	81%	[74%, 88%]	145 of 181		

Average Plot Size for Plots Yielding Below and Above the 90 th Percentile, Long Rainy Season					
Average Plot					
Plot Yield	Size (ha)	95% C.I.	Observations	P-value	
< 90 th Percentile	1.35	[0.97, 1.73]	1630	.0116	
≥ 90 th Percentile	0.83	[0.68, 0.99]	181		

Maize Plot Intercropping and Productivity

Estimated Proportion of Maize Plots Intercropped					
	Estimated Proportion	95% C.I.	Observations		
Long Rainy Season	65%	[61%, 68%]	617 of 1864		
Short Rainy Season	74%	[68%, 80%]	291 of 400		

Reasons	for	Intercropping	Plots (for al	l crops)	
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	Estimated Proportion	95% C.I.	Observations (of n=2733)
More fertile for soil	4%	[3%, 5%]	121
Substitute if either crop fails	82%	[79%, 85%]	2243
Other	8%	[6%, 11%]	218
Combination of reasons	6%	[5%, 7%]	151

Maize Yields for Not Intercropped and Intercropped Plots (area harvested)							
AverageSeasonYield (t/ha)95% C.I.Observations							
Long Rainy Season	Not Intercropped	1.06	[0.96, 1.17]	581	0.0000		
	Intercropped	0.84	[0.78, 0.90]	1230			
Short Rainy Season	Not Intercropped	0.74	[0.60, 0.87]	106	0.2579		
	Intercropped	0.65	[0.55, 0.76]	290			

Estimated Proportion of Plots Intercropped by Crop Planted (Long Rainy Season)						
Crop	Estimated Proportion 95% C.I. Observations					
Cowpeas	91 %	[86%, 96%]	119 of 129			
Beans	84%	[78%, 89%]	92 of 557			
Groundnut	72%	[66%, 78%]	254 of 346			
Yams	71%	[44%, 99%]	15 of 22			
Maize	65%	[61%, 68%]	617 of 1864			
Sorghum	63%	[55%, 71%]	185 of 273			
Sweet potatoes	62%	[53%, 72%]	130 of 213			
Cassava	46%	[36%, 57%]	84 of 207			
Millet	45%	[32%, 58%]	51 of 110			
Paddy	20%	[14%, 26%]	82 of 502			

Maize Land Productivity (Long Rainy Season)							
	Mean Land Productivity			Wald test P-			
	(USD/ha)	95% C.I.	Observations	value			
Not Intercropped	\$151.82	[\$133.29, \$170.33]	572	0.2169			
Intercropped	\$165.51	[\$152.88, \$178.11]	955				

Maize Labor Productivity (Long Rainy Season)						
	Mean Labor Productivity (USD/day)	95% C.I.	Observations	Wald test P- value		
Not Intercropped	\$1.72	[\$1.47, \$1.98]	572	0.1122		
Intercropped	\$1.94	[\$1.75, \$2.14]	954			

Maize Sales and Value

Estimated Proportion 95% C.I. Observations Long Rainy Season 28% [25%, 31%] 374 out of 1337 Short Rainy Season 17% [12%, 22%] 55 out of 322 Maize Sales by Zone (Long and Short Rainy Seasons) 9% C.I. Observations Zanzibar 82% [53%, 112%] 11 out of 13 Southern Highlands 43% [35%, 52%] 129 out of 297 Central 27% [17%, 36%] 28 out of 106 Lake 26% [17%, 36%] 28 out of 85 Northern 24% [18%, 31%] 57 out of 320 Southern 23% [17%, 30%] 72 out of 320 Western 21% [14%, 27%] 38 out of 177 Eastern 17% [9%, 25%] 16 out of 109 Mead of Mean (SUS) 95% C.I. Observations Value Male \$96,73 [578.21, 5115.25] 305 0.0062 Female 555.64 [532.62, 578.66] 69 Value Season Household	Estimated Proportion of Households that Sold Priority Crops (Long and Short Rainy Seasons)						
Long Rainy Season 28% [25%, 31%] 374 out of 1337 Short Rainy Season 17% [12%, 22%] 55 out of 322 Maize Sales by Zone (Long and Short Rainy Seasons) 55 out of 100 22 Zanzibar 82% [53%, 112%] 11 out of 13 Southern Highlands 43% [35%, 52%] 129 out of 297 Central 27% [17%, 36%] 28 out of 106 Lake 26% [17%, 35%] 23 out of 85 Northern 23% [17%, 30%] 72 out of 320 Southern 23% [17%, 30%] 72 out of 100 Lake 21% [14%, 27%] 38 out of 177 Eastern 17% [9%, 25%] 16 out of 109 Mean Value of Maize Sales by Gender of Household Head (Long Rainy Season) Wald test P- Head of Male [578.21, \$115.25] 305 0.0062 Female 556.4 [532.62, \$78.66] 69 Estimated Proportion of Households Selling Maize Produced by Gender of Household Head Value Long Rainy Season Male 31% <td></td> <td>Es</td> <td>timated Proportic</td> <td>on 95% C.I.</td> <td>Observations</td> <td></td>		Es	timated Proportic	on 95% C.I.	Observations		
Short Rainy Season 17% [12%, 22%] 55 out of 322 Maize Sales by Zone (Long and Short Rainy Seasons) Observations Observations Zanzibar 82% [53%, 112%] 11 out of 13 Southern Highlands 43% [35%, 52%] 129 out of 297 Central 27% [17%, 36%] 28 out of 106 Lake 26% [17%, 35%] 23 out of 85 Northern 24% [18%, 31%] 57 out of 230 Southern 23% [17%, 30%] 72 out of 320 Western 21% [14%, 27%] 38 out of 107 Eastern 17% [9%, 25%] 16 out of 109 Mean Value of Maize Sales by Gender of Household Head (Long Rainy Season) Wald test P- value Value Male \$96.73 [578.21, \$115.25] 305 0.0062 Female \$55.64 [532.62, \$78.66] 69 Value Season Head of Estimated Proportion of Suscendu Estimated Value Season Male 31% [27%, 34%] 305 out of 237 <	Long Rainy Season	28	%	[25%, 31%]	374 out of 1337	7	
Maize Sales by Zone (Long and Short Rainy Seasons) Estimated Proportion 95% C.I. Observations Zanzibar 82% [53%, 112%] 11 out of 13 Southern Highlands 43% [35%, 52%] 129 out of 297 Central 27% [17%, 36%] 28 out of 106 Lake 26% [17%, 35%] 23 out of 85 Northern 24% [18%, 31%] 57 out of 230 Southern 230 Southern 23% [17%, 30%] 72 out of 320 Western 21% [14%, 27%] 38 out of 107 Eastern 17% [9%, 25%] 16 out of 109 I6	Short Rainy Season	17	%	[12%, 22%]	55 out of 322		
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Estimated Proportion 95% C.I. Observations Zanzibar 82% [53%, 112%] 11 out of 13 Southern Highlands 43% [35%, 52%] 129 out of 297 Central 27% [17%, 35%] 23 out of 85 Northern 24% [18%, 31%] 57 out of 230 Southern 23% [17%, 30%] 72 out of 320 Southern 23% [17%, 30%] 72 out of 320 Southern 23% [17%, 30%] 72 out of 320 Western 21% [14%, 27%] 38 out of 177 Eastern 17% [9%, 25%] 16 out of 109 Mean Value of Maize Sales by Gender of Household Head (Long Rainy Season) Value Value Head of [S78, 21, \$115.25] 305 0.0062 Female \$55.64 [S32.62, \$78.66] 69 Estimated Proportion of Households Selling Maize Produced by Gender of Household Head Wald test P-value Season Household Proportion 95% C.I. Observations Long Rainy Season Male 19% [13%,	Maize Sales by Zone	(Long and Short Rain	ny Seasons)				
Zanzibar 82% [53%, 112%] 11 out of 13 Southern Highlands 43% [35%, 52%] 129 out of 297 Central 27% [17%, 36%] 28 out of 106 Lake 26% [17%, 36%] 23 out of 85 Northern 24% [18%, 31%] 57 out of 230 Southern 23% [17%, 30%] 72 out of 320 Western 21% [14%, 27%] 38 out of 109 Eastern 17% [9%, 25%] 16 out of 109 Mean Value of Maize Sales by Gender of Household Head (Long Rainy Season) Value Value Head of Household Mean (SUS) 95% C.I. Observations Value Male \$96,73 [578,21, \$115.25] 305 0.0062 Female \$55.64 [532,62, \$78.66] 69 Estimated Proportion of Households Selling Maize Produced by Gender of Household Head Wald test P- Season Household Proportion 95% C.I. Observations Value Long Rainy Season Male 19% [13%, 24%] 45 out of 239 0.1304 Female 21% [16%,		Es	timated Proportic	on 95% C.I.	Observations		
Southern Highlands 43% [35%, 52%] 129 out of 297 Central 27% [17%, 36%] 28 out of 106 Lake 26% [17%, 35%] 23 out of 85 Northern 24% [18%, 31%] 57 out of 230 Southern 23% [17%, 30%] 72 out of 320 Western 21% [14%, 27%] 38 out of 107 Eastern 17% [9%, 25%] 16 out of 109 Mean Value of Maize Sales by Gender of Household Head (Long Rainy Season) Wald test P- Head of gr8, 215, 15, 25] 305 0.0062 Female \$95, 6.1. Observations value Male \$96, 73 [578.21, \$115.25] 305 0.0062 Female \$55, 64 [532.62, \$78.66] 69 Value Season Head of Estimated Proportion 95% C.1. Observations Value Long Rainy Season Male 31%<[27%, 34%]	Zanzibar	82	%	[53%, 112%]	11 out of 13		
Central 27% [17%, 36%] 28 out of 106 Lake 26% [17%, 35%] 23 out of 85 Northern 24% [18%, 31%] 57 out of 230 Southern 23% [17%, 30%] 72 out of 320 Western 21% [14%, 27%] 38 out of 177 Eastern 17% [9%, 25%] 16 out of 109 Mean Value of Maize Sales by Gender of Household Head (Long Rainy Season) Wald test P-value Head of Mean (SUS) 95% C.1. Observations Male \$96,73 [578.21, \$115.25] 305 0.0062 Female \$55.64 [S32.62, \$78.66] 69 value Season Head of Estimated Proportion 95% C.1. Observations value Long Rainy Season Male 31% [27%, 34%] 305 out of 1,010 0.0011 Long Rainy Season Male 19% [13%, 24%] 45 out of 239 0.1304 Female 11% [3%, 20%] 9 out of 75 Season Crop	Southern Highlands	43	%	[35%, 52%]	129 out of 297		
Lake 26% [17%, 35%] 23 out of 85 Northern 24% [18%, 31%] 57 out of 230 Southern 23% [17%, 30%] 72 out of 320 Western 21% [14%, 27%] 38 out of 177 Eastern 17% [9%, 25%] 16 out of 109 Mean Value of Maize Sales by Gender of Household Head (Long Rainy Season) Wald test P- Head of Mean (SUS) 95% C.1. Observations value Male \$96.73 [\$78.21, \$115.25] 305 0.0062 Female \$55.64 [\$32.62, \$78.66] 69 9 Estimated Proportion of Households Selling Maize Produced by Gender of Household Head Wald test P- value Long Rainy Season Male 31% [27%, 34%] 305 out of 1,010 0.0011 Female 21% [16%, 26%] 69 out of 327 Short Rainy Season Male 19% [13%, 24%] 45 out of 239 0.1304 Season Crop Total Value (millions of \$USD) 1.304 1.305 1.304 1.305 </td <td>Central</td> <td>27</td> <td>%</td> <td>[17%, 36%]</td> <td>28 out of 106</td> <td></td>	Central	27	%	[17%, 36%]	28 out of 106		
Northern 24% [18%, 31%] 57 out of 230 Southern 23% [17%, 30%] 72 out of 320 Western 21% [14%, 27%] 38 out of 177 Eastern 17% [9%, 25%] 16 out of 109 Mean Value of Maize Sales by Gender of Household Head (Long Rainy Season) Wald test P-value Head of Household Mean (\$US) 95% C.I. Observations Value Male \$96.73 [\$78.21, \$115.25] 305 0.0062 Fermale \$55.64 [\$32.62, \$78.66] 69 Estimated Proportion of Households Selling Maize Produced by Gender of Household Head Wald test P-value Long Rainy Season Male 31% [27%, 34%] 305 out of 1,010 0.0011 Female 21% [16%, 26%] 69 out of 327 Short Rainy Season Male 19% [13%, 24%] 45 out of 239 0.1304 Female 11% [3%, 20%] 9 out of 75 Estimated Proportion of Xalue (millions of SUSD) Long Rainy Season Maize 34% 391	Lake	26	%	[17%, 35%]	23 out of 85		
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	Short Rainy Season	\$0.17	\$0.18	[\$0.12, \$0.2	.1] 54		