

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

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Appendix: LSMS-ISA: Intercropping

The tables below provide the details for analysis in EPAR Brief #216, including 95% confidence intervals, the number of observations, and p-values where available. All tables specify the season and type of crops included. “All seasons and crops” include the long rainy season, short rainy season, fruit, and permanent crops.

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NOTE: The findings and conclusions contained within this material are those of the authors and do not necessarily reflect positions or policies of the Bill & Melinda Gates Foundation.

Intercropping Patterns

Estimated Proportion of Intercropped Crops by Crop Planted, All Seasons and Crops

Crop	Estimated Proportion	Confidence Interval (95%)	Observations
Maize	73%	[70%, 76%]	1872 out of 2732
Beans	32%	[28%, 36%]	751 out of 2732
Groundnuts	16%	[14%, 18%]	383 out of 2732
Sweet Potatoes	11%	[9%, 14%]	257 out of 2732
Sorghum	8%	[6%, 10%]	239 out of 2732
Cowpeas	6%	[5%, 8%]	167 out of 2732
Rice	4%	[3%, 5%]	144 out of 2732
Millet	3%	[2%, 4%]	71 out of 2732
Cassava	2%	[1%, 2%]	144 out of 2732
Yams	0.5%	[0.2%, 0.8%]	25 out of 2732

Estimated Proportion of Crops Planted with Maize on Intercropped Plots, All Seasons and Crops

Crop	Estimated Proportion	95% C.I.	Observations
Maize	--	--	--
Beans	39%	[34%, 44%]	671 out of 1872
Banana	30%	[26%, 33%]	525 out of 1872
Mango	28%	[25%, 31%]	502 out of 1872
Groundnuts	17%	[14%, 19%]	292 out of 1872
Papaya	12%	[10%, 14%]	217 out of 1872
Sweet Potatoes	11%	[9%, 13%]	171 out of 1872
Avocado	9%	[7%, 12%]	152 out of 1872
Orange	9%	[7%, 10%]	178 out of 1872
Cowpeas	7%	[5%, 9%]	133 out of 1872
Guava	7%	[5%, 8%]	116 out of 1872
Sorghum	7%	[6%, 9%]	164 out of 1872
Lemon	4%	[3%, 5%]	71 out of 1872
Rice	4%	[2%, 5%]	75 out of 1872
Jack Fruit	3%	[2%, 4%]	48 out of 1872
Mandarin	3%	[2%, 4%]	44 out of 1872
Millet	2%	[1%, 3%]	45 out of 1872
Cassava	1%	[0%, 2%]	37 out of 1872
Durian	1%	[0%, 2%]	32 out of 1872
Passion Fruit	1%	[0%, 3%]	23 out of 1872
Yams	0%	[0%, 0%]	7 out of 1872

Estimated Proportion of Plots Intercropped by Crop Planted, All Seasons and Crops			
Crop	Estimated Proportion	95% C.I.	Observations
Cowpeas	93%	[88%, 97%]	167 out of 184
Beans	91%	[87%, 94%]	751 out of 834
Sweet Potatoes	86%	[81%, 90%]	257 out of 312
Yams	85%	[67%, 102%]	25 out of 32
Groundnuts	83%	[78%, 88%]	383 out of 462
Maize	76%	[73%, 79%]	1872 out of 2422
Sorghum	70%	[62%, 78%]	239 out of 320
Cassava	57%	[48%, 67%]	144 out of 288
Millet	56%	[44%, 69%]	71 out of 115
Rice	28%	[22%, 34%]	144 out of 559

Estimated Proportion of Plots Intercropped by Season/Crop			
Season/Crop	Estimated Proportion	95% C.I.	Observations
Long Rainy Season	54%	[51%, 57%]	1756 out of 3355
Short Rainy Season	67%	[62%, 72%]	494 out of 786
Fruit	82%	[79%, 86%]	1303 out of 1650
Permanent Crops	78%	[75%, 82%]	1311 out of 1790
Total	63%	[60%, 65%]	2732 out of 4561

Proportion of Plots Intercropped by Zone, All Seasons and Crops			
Zone	Estimated Proportion	95% C.I.	Observations
Central	40%	[31%, 50%]	122 out of 298
Eastern	68%	[59%, 77%]	208 out of 298
Southern Highlands	51%	[44%, 57%]	395 out of 772
Lake	75%	[67%, 82%]	355 out of 470
Northern	74%	[67%, 80%]	406 out of 549
Southern	64%	[60%, 69%]	642 out of 1001
Western	71%	[64%, 78%]	432 out of 617
Zanzibar	33%	[26%, 40%]	172 out of 556

Estimated Proportions of Top Three Crops Intercropped by Zone, All Seasons and Crops				
Zone	Crop	Estimated Proportion	95% C.I.	Observations
Central	Maize	64%	[53%, 76%]	78 out of 122
	Groundnut	46%	[34%, 58%]	56 out of 122
	Sorghum	31%	[19%, 43%]	39 out of 122
Eastern	Maize	62%	[52%, 71%]	119 out of 208
	Banana	43%	[33%, 54%]	87 out of 208
	Mango	38%	[30%, 47%]	72 out of 208
Southern Highlands	Maize	85%	[80%, 90%]	337 out of 395
	Beans	47%	[38%, 57%]	198 out of 395
	Banana	29%	[20%, 37%]	114 out of 395

Lake	Maize	69%	[60%, 78%]	247 out of 355
	Beans	48%	[35%, 60%]	177 out of 355
	Banana	41%	[28%, 54%]	152 out of 355
Northern	Maize	80%	[74%, 87%]	329 out of 406
	Banana	42%	[32%, 52%]	168 out of 406
	Beans	37%	[28%, 47%]	158 out of 406
Southern	Maize	63%	[57%, 68%]	401 out of 642
	Banana	21%	[16%, 26%]	126 out of 642
	Mango	21%	[16%, 26%]	133 out of 642
Western	Maize	80%	[73%, 88%]	348 out of 432
	Beans	36%	[27%, 44%]	151 out of 432
	Groundnut	32%	[25%, 40%]	140 out of 432
Zanzibar	Cassava	56%	[48%, 65%]	94 out of 172
	Banana	45%	[35%, 56%]	82 out of 172
	Mango	19%	[10%, 28%]	31 out of 172

Proportion of Households Intercropping by Zone, All Seasons and Crops			
Zone	Estimated Proportion	95% C.I.	Observations
Central	63%	[51%, 74%]	85 out of 134
Eastern	76%	[67%, 85%]	135 out of 173
Southern Highlands	76%	[69%, 83%]	256 out of 338
Lake	90%	[86%, 95%]	217 out of 239
Northern	82%	[76%, 88%]	265 out of 322
Southern	86%	[82%, 90%]	381 out of 447
Western	87%	[82%, 92%]	263 out of 305
Zanzibar	54%	[46%, 63%]	134 out of 260

Characteristics of Intercropping Households and Plot Decision-Makers

Average Age of Plot Decision-Maker for Intercropped and Monocropped Plots, All Seasons and Crops

Plot	Mean	95% C.I.	Observations	Wald Test
Intercropped	49	[47, 50]	2133	.0302
Monocropped	47	[45, 48]	1948	

Average Age of Household Head for Intercropping and Monocropping Households, All Seasons and Crops

Household	Mean	95% C.I.	Observations	Wald Test
Intercropping	47.9	[46.9, 48.9]	1736	.0370
Monocropping	46.0	[44.4, 47.6]	482	

Average Number of Household Members for Intercropping and Monocropping Households, All Seasons and Crops

Household	Mean	95% C.I.	Observations	Wald Test
Intercropping	5.51	[5.33, 5.68]	1736	.0039
Monocropping	5.01	[4.72, 5.30]	482	

Average Landholding Size for Intercropping and Monocropping Households, All Seasons and Crops, Hectares

Household	Mean	95% C.I.	Observations	Wald Test
Intercropping	2.47	[2.00, 2.93]	1736	.0038
Monocropping	1.73	[1.44, 2.02]	482	

Mean Plot Size for Intercropped and Monocropped Plots, All Seasons and Crops, Hectares

	Mean	95% C.I.	Observations	Wald Test
Intercropped	0.97	[0.87, 1.07]	2726	.0068
Monocropped	0.81	[0.69, 0.92]	1827	

Mean Plot Size by Crop for Intercropped and Monocropped Plots, All Seasons and Crops, Hectares

Crop	Plot	Mean	95% C.I.	Observations	Wald Test
Maize	Intercropped	1.05	[0.93, 1.18]	1871	.0021
	Monocropped	0.82	[0.69, 0.95]	549	
Beans	Intercropped	0.97	[0.77, 1.16]	751	.0606
	Monocropped	0.67	[0.43, 0.92]	83	
Cowpeas	Intercropped	1.14	[0.87, 1.40]	167	.5743
	Monocropped	1.30	[0.77, 1.82]	17	
Groundnut	Intercropped	1.30	[1.03, 1.58]	382	.0486
	Monocropped	0.96	[0.66, 1.26]	79	
Cassava	Intercropped	0.96	[0.68, 1.24]	144	.6394
	Monocropped	0.79	[0, 1.72]	143	
Rice	Intercropped	1.28	[1.00, 1.57]	144	.0044
	Monocropped	0.78	[0.56, 1.00]	415	
Sweet Potato	Intercropped	1.03	[0.81, 1.24]	257	.4287
	Monocropped	0.83	[0.37, 1.29]	55	

Yams	Intercropped	--	--	--	--
	Monocropped	--	--	--	--
Sorghum	Intercropped	1.39	[1.01, 1.76]	239	.7003
	Monocropped	1.25	[0.57, 1.93]	81	
Millet	Intercropped	1.66	[1.12, 2.20]	71	.0048
	Monocropped	0.86	[0.66, 1.06]	44	

Size of Plots for Male Plot Decision-Makers on Intercropped and Monocropped Plots, All Seasons and Crops, Hectares				
Plot	Mean	95% C.I.	Observations	Wald Test
Intercropped	1.28	[1.04, 1.52]	812	.0022
Monocropped	0.87	[0.73, 1.02]	700	

Size of Plots for Female Plot Decision-Makers on Intercropped and Monocropped Plots, All Seasons and Crops, Hectares				
Plot	Mean	95% C.I.	Observations	Wald Test
Intercropped	0.62	[0.53, 0.70]	552	.0123
Monocropped	0.50	[0.43, 0.57]	367	

Size of Plots for Male and Female Plot Decision-Makers, All Seasons and Crops, Hectares				
Gender	Mean	95% C.I.	Observations	Wald Test
Male	1.09	[0.93, 1.25]	1578	.0000
Female	0.57	[0.50, 0.64]	957	

Estimated Proportion of Intercropped Plots by Gender of Decision-Maker, All Seasons and Crops				
Gender	Estimated proportion	95% C.I.	Observations	Wald Test
Male	57%	[53%, 62%]	814 out of 2463	M/S .0003
Female	64%	[59%, 68%]	552 out of 2463	M/F .0221
Shared	67%	[63%, 71%]	1097 out of 2463	F/S .1357

Estimated Proportion of Intercropping Households by Gender of Household Head, All Seasons and Crops				
Gender	Estimated Proportion	95% C.I.	Observations	Wald Test
Male	71.3%	[68%, 74.7%]	1289	.2031
Female	67.6%	[62.1%, 73.1%]	590	

Average Distance to Nearest Road for Intercropping and Monocropping Households, All Seasons and Crops, in km				
Household	Mean	95% C.I.	Observations	Wald Test
Intercropping	18.72	[16.21, 21.22]	1531	.6716
Monocropping	19.31	[16.08, 22.55]	453	

Average Distance to Nearest Road for Intercropping and Monocropping Female Headed Households, All Seasons and Crops, in km				
Household	Mean	95% C.I.	Observations	Wald Test
Intercropping	16.80	[13.87, 19.72]	365	.0211
Monocropping	22.44	[17.54, 27.34]	121	

Average Distance to Market for Intercropping and Monocropping Households, All Seasons and Crops, in km				
Household	Mean	95% C.I.	Observations	Wald Test
Intercropping	77.68	[70.84, 84.51]	1531	.5947
Monocropping	79.65	[72.63, 86.67]	453	

Average Distance to Nearest Population Center with 20,000+ for Intercropping and Monocropping Households, All Seasons and Crops, in km				
Household	Mean	95% C.I.	Observations	Wald Test
Intercropping	53.10	[47.73, 58.46]	1531	.1441
Monocropping	48.59	[42.65, 54.53]	453	

Reasons for Intercropping

Reason for Intercropping				
Reason	Estimated Proportion	95% C.I.	Observations	
More fertile for the soil	7%	[6%, 8%]	206 out of 2733	
Substitute if principle crop fails	87%	[85%, 90%]	2388 out of 2733	
Other	12%	[9%, 14%]	292 out of 2733	

Organic Fertilizer Use on Intercropped and Monocropped Plots by Season					
Season	Plot	Estimated Proportion	95% C.I.	Observations	Wald Test
Combined Seasons (Long Rainy Season and Short Rainy Season)	Monocropped	12%	[9%, 15%]	170 out of 1678	.0353
	Intercropped	16%	[13%, 18%]	301 out of 2026	
Long Rainy Season	Monocropped	11%	[8%, 15%]	150 out of 1587	.0799
	Intercropped	15%	[12%, 17%]	235 out of 1748	
Short Rainy Season	Monocropped	17%	[9%, 24%]	44 out of 283	.8900
	Intercropped	17%	[12%, 22%]	89 out of 485	

Inorganic Fertilizer Use on Intercropped and Monocropped Plots by Season					
Season	Plot	Estimated Proportion	95% C.I.	Observations	Wald Test
Combined Seasons (Long Rainy Season and Short Rainy Season)	Monocropped	14%	[10%, 18%]	235 out of 1678	.0398
	Intercropped	10%	[8%, 13%]	229 out of 2026	
Long Rainy Season	Monocropped	14%	[10%, 18%]	226 out of 1587	.1809
	Intercropped	12%	[9%, 14%]	216 out of 1748	
Short Rainy Season	Monocropped	10%	[3%, 18%]	29 out of 283	.0228
	Intercropped	2%	[1%, 4%]	15 out of 485	

Quantity of Organic Fertilizer Applied on Intercropped and Monocropped Plots in the Long Rainy Season (kg/hectare)				
Plot	Mean	95% C.I.	Observations	Wald Test
Intercropped	7339	[5277, 9400]	235	.6417
Monocropped	5958	[294, 11,623]	150	

Quantity of Inorganic Fertilizer Applied on Intercropped and Monocropped Plots in the Long Rainy Season (kg/hectare)				
Plot	Mean	95% C.I.	Observations	Wald Test
Intercropped	1211	[-499, 2921]	216	.5564
Monocropped	2816	[-2259, 7891]	226	

Organic Fertilizer Use on Intercropped Plots Citing Soil Fertility as Intercropping Reason and Plots Citing All Other Reasons , Long Rainy Season and Short Rainy Season Combined				
Reason	Estimated Proportion	95% C.I.	Observations	Wald Test
Not Cited Plots	15%	[13%, 18%]	270 out of 1900	.0096
Cited Plots	26%	[18%, 35%]	31 out of 126	

Inorganic Fertilizer Use on Intercropped Plots Citing Soil Fertility as Intercropping Reason and Plots Citing All Other Reasons , Long Rainy Season and Short Rainy Season Combined

Reason	Estimated Proportion	95% C.I.	Observations	Wald Test
Not Cited Plots	10%	[7%, 13%]	213 out of 1900	.4115
Cited Plots	13%	[5%, 21%]	16 out of 126	

Intercropping and Plot Productivity

Average Plot Land Productivity for Intercropped and Monocropped Plots, All Seasons and Crops

Plot	Land Productivity, USD/ha	95% C.I.	Observations	Wald Test
Monocropped	\$383	[\$272, \$493]	1760	.4284
Intercropped	\$436	[\$355, \$518]	2673	

Average Plot Land Productivity for Intercropped and Monocropped Plots, by Gender of Decision-Maker, All Seasons and Crops

Gender	Plot	Land Productivity, USD/ha	95% C.I.	Observations	Wald Test
Male	Monocropped	\$509	[\$251, \$767]	685	.1460
	Intercropped	\$318	[\$269, \$366]	807	
Female	Monocropped	\$323	[\$160, \$486]	358	.1013
	Intercropped	\$581	[\$307, \$855]	546	
Shared	Monocropped	\$285	[\$215, \$356]	526	.0054
	Intercropped	\$459	[\$355, \$564]	1075	

Average Plot Land Productivity for Intercropped and Monocropped Plots, by Plot Size, All Seasons and Crops

Plot Size	Plot	Land Productivity, USD/ha	95% C.I.	Observations	Wald Test
Under 0.2 ha	Monocropped	\$915	[\$373, \$1456]	273	.0837
	Intercropped	\$1612	[\$1025, \$2198]	308	
0.2-0.4 ha	Monocropped	\$434	[\$255, \$613]	402	.4033
	Intercropped	\$539	[\$366, \$712]	426	
0.4-0.8 ha	Monocropped	\$271	[\$199, \$343]	535	.6454
	Intercropped	\$290	[\$247, \$334]	814	
0.8-1.2 ha	Monocropped	\$445	[\$37, \$853]	246	.3817
	Intercropped	\$262	[\$222, \$302]	421	
Over 1.2 ha	Monocropped	\$148	[\$114, \$183]	303	.1839
	Intercropped	\$174	[\$152, \$196]	703	

Average Plot Labor Productivity for Intercropped and Monocropped Plots, Long Rainy Season or Short Rainy Season

Season	Plot	Labor Productivity, USD/day	95% C.I.	Observations	Wald Test
Long Rainy Season	Monocropped	\$2.12	[\$1.84, \$2.40]	1581	.9152
	Intercropped	\$2.10	[\$1.84, \$2.36]	1744	
Short Rainy Season	Monocropped	\$2.66	[\$1.61, \$3.72]	280	.0404
	Intercropped	\$1.59	[\$120, \$197]	484	

Average Plot Labor Productivity for Intercropped and Monocropped Plots, by Gender of Plot Decision-Maker, Long Rainy Season Only					
Gender	Plot	Labor Productivity, USD/day	95% C.I.	Observations	Wald Test
Male	Monocropped	\$2.23	[\$1.80, \$2.66]	644	.3930
	Intercropped	\$2.49	[\$1.96, \$3.02]	584	
Female	Monocropped	\$1.88	[\$1.41, \$2.34]	369	.3230
	Intercropped	\$1.62	[\$1.33, \$1.91]	386	
Shared	Monocropped	\$2.17	[\$1.80, \$2.54]	552	.6869
	Intercropped	\$2.07	[\$1.73, \$2.42]	770	

Average Plot Labor Productivity for Intercropped and Monocropped Plots, by Plot Size, Long Rainy Season Only					
Plot Size	Plot	Labor Productivity, USD/day	95% C.I.	Observations	Wald Test
Under 0.2 ha	Monocropped	\$1.90	[\$0.94, \$2.86]	217	.2323
	Intercropped	\$1.36	[\$1.08, \$1.65]	182	
0.2-0.4 ha	Monocropped	\$1.78	[\$1.39, \$2.17]	359	.5781
	Intercropped	\$1.64	[\$1.31, \$1.96]	234	
0.4-0.8 ha	Monocropped	\$1.95	[\$1.56, \$2.33]	486	.5073
	Intercropped	\$1.78	[\$1.43, \$2.12]	521	
0.8-1.2 ha	Monocropped	\$2.50	[\$1.96, \$3.04]	233	.6254
	Intercropped	\$2.33	[\$1.86, \$2.79]	287	
Over 1.2 ha	Monocropped	\$2.47	[\$1.92, \$3.04]	285	.7341
	Intercropped	\$2.59	[\$2.13, \$3.06]	518	

Average Plot Land Productivity for Intercropped and Monocropped Plots, Excluding Plots Planted without Legumes, Long Rainy Season Only					
Plot	Land Productivity, USD/ha	95% C.I.	Observations	Wald Test	
Monocropped	\$142	[\$115, \$168]	206	.0426	
Intercropped	\$173	[\$158, \$189]	973		

Average Plot Labor Productivity for Intercropped and Monocropped Plots, Excluding Plots Planted without Legumes, Long Rainy Season Only					
Plot	Labor Productivity, USD/day	95% C.I.	Observations	Wald Test	
Monocropped	\$1.75	[\$1.25, \$2.24]	204	.0421	
Intercropped	\$2.34	[\$1.95, \$2.73]	971		

Average Plot Land Productivity for Intercropped Plots with and without Legumes, Long Rainy Season or Short Rainy Season					
Season	With/Without Legumes	Land Productivity, USD/ha	95% C.I.	Observations	Wald Test
Long Rainy Season	With Legumes	\$173	[\$158, \$189]	973	.4068
	Without Legumes	\$161	[\$137, \$185]	777	
Short Rainy Season	With Legumes	\$139	[\$114, \$165]	317	.5689
	Without Legumes	\$128	[\$93, \$162]	176	

Average Plot Labor Productivity for Intercropped Plots with and without Legumes, Long Rainy Season or Short Rainy Season					
Season	With/Without Legumes	Labor Productivity, USD/day	95% C.I.	Observations	Wald Test
Long Rainy Season	With Legumes	\$2.34	[\$1.96, \$2.73]	773	.0119
	Without Legumes	\$1.75	[\$1.50, \$2.01]	971	
Short Rainy Season	With Legumes	\$1.51	[\$1.19, \$1.83]	171	.6251
	Without Legumes	\$1.74	[\$0.86, \$2.62]	313	

Maize Total Land Productivity and Labor Productivity by Season for Intercropped and Monocropped Plots					
Productivity Measure	Plot	\$	95% C.I.	Observations	Wald Test
Total Land Productivity USD/ha	Monocropped	\$174	[\$149, \$199]	546	0.0000
	Intercropped	\$281	[\$256, \$306]	1839	
Long Rainy Season Labor Productivity USD/day	Monocropped	\$1.91	[\$1.61, \$2.20]	660	0.1147
	Intercropped	\$2.19	[\$1.92, \$2.46]	1377	
Short Rainy Season Labor Productivity USD/day	Monocropped	\$1.31	[\$0.88, \$1.75]	128	0.1226
	Intercropped	\$1.65	[\$1.23, 2.07]	406	

Rice Total Land Productivity and Labor Productivity by Season for Intercropped and Monocropped Plots					
Productivity Measure	Plot	\$	95% C.I.	Observations	Wald Test
Total Land Productivity USD/ha	Monocropped	\$490	[\$377, \$602]	411	0.0185
	Intercropped	\$356	[\$266, \$447]	143	
Long Rainy Season Labor Productivity USD/day	Monocropped	\$2.39	[\$1.95, \$2.83]	418	0.0347
	Intercropped	\$1.69	[\$1.15, \$2.22]	100	
Short Rainy Season Labor Productivity USD/day	Monocropped	\$4.44	[\$1.73, \$7.15]	72	0.4854
	Intercropped	\$3.07	[\$0.07, \$6.07]	13	

Beans Total Land Productivity and Labor Productivity by Season for Intercropped and Monocropped Plots					
Productivity Measure	Plot	\$	95% C.I.	Observations	Wald Test
Total Land Productivity USD/ha	Monocropped	\$190	[\$117, \$264]	83	0.0014
	Intercropped	\$323	[\$282, \$363]	736	
Long Rainy Season Labor Productivity USD/day	Monocropped	\$1.63	[\$0.98, \$2.28]	102	0.1171
	Intercropped	\$2.24	[\$1.81, \$2.66]	526	
Short Rainy Season Labor Productivity USD/day	Monocropped	\$2.15	[\$0.34, \$3.95]	38	0.4057
	Intercropped	\$1.38	[\$1.06, \$1.70]	265	

Sorghum Total Land Productivity and Labor Productivity by Season for Intercropped and Monocropped Plots

Productivity Measure	Plot	\$	95% C.I.	Observations	Wald Test
Total Land Productivity USD/ha	Monocropped	\$106	[\$74, \$137]	80	0.0008
	Intercropped	\$183	[\$144, \$223]	231	
Long Rainy Season Labor Productivity USD/day	Monocropped	\$1.15	[\$0.74, \$1.56]	85	0.0519
	Intercropped	\$1.72	[\$1.26, \$2.19]	208	
Short Rainy Season Labor Productivity USD/day	Monocropped	\$0.75	[\$0.44, \$1.06]	7	0.2372
	Intercropped	\$4.55	[\$-1.91, 11.02]	20	

Pre-Harvest Losses

Reasons Cited for the Difference Between Area Planted and Area Harvested on Intercropped and Monocropped Plots, Long Rainy Season and Short Rainy Season

Reason	Plot	Estimated Proportion	95% C.I.	Observations	Wald Test
Total Losses	Monocropped	28%	[24%, 31%]	417 out of 1688	.0000
	Intercropped	42%	[38%, 45%]	791 out of 2036	
Drought	Monocropped	53%	[46%, 61%]	202 out of 441	.0302
	Intercropped	20.2%	[17.1%, 23.3%]	347 out of 825	
Rain	Monocropped	9%	[6%, 13%]	41 out of 441	.2313
	Intercropped	12%	[9%, 15%]	92 out of 825	
Insects	Monocropped	12%	[8%, 15%]	83 out of 441	.0107
	Intercropped	18%	[14%, 21%]	167 out of 825	
Animals	Monocropped	6%	[3%, 8%]	26 out of 441	.0349
	Intercropped	9%	[7%, 12%]	82 out of 825	
Disease/Community Problems	Monocropped	5%	[2%, 7%]	23 out of 441	.6187
	Intercropped	4%	[2%, 6%]	29 out of 825	
Other	Monocropped	18%	[14%, 23%]	46 out of 770	.0004
	Intercropped	29%	[25%, 33%]	226 out of 825	

Pre-Harvest Losses on Intercropped and Monocropped Plots, Long Rainy Season and Short Rainy Season

Reason	Plot	Estimated Proportion	95% C.I.	Observations	Wald Test
Total Losses	Monocropped	40.9%	[36.7%, 45.0%]	770 out of 1686	.0000
	Intercropped	51.1%	[47.6%, 54.5%]	1024 out of 2038	
Birds	Monocropped	31.8%	[25.3%, 38.3%]	223 out of 770	.0013
	Intercropped	20.2%	[17.1%, 23.3%]	195 out of 1024	
Insects	Monocropped	20.6%	[16.0%, 25.1%]	153 out of 770	.0000
	Intercropped	34.6%	[30.5%, 38.6%]	349 out of 1024	
Animals	Monocropped	27.5%	[22.4%, 32.7%]	183 out of 770	.0023
	Intercropped	37.4%	[33.3%, 41.5%]	385 out of 1024	
Disease	Monocropped	4.1%	[2.4%, 5.7%]	93 out of 770	.0097
	Intercropped	8.0%	[5.3%, 10.7%]	95 out of 1024	
Theft	Monocropped	14.0%	[10.1%, 18.0%]	98 out of 770	.2185
	Intercropped	16.9%	[13.7%, 20.0%]	173 out of 1024	
Other	Monocropped	5.7%	[3.3%, 8.2%]	46 out of 770	.4352
	Intercropped	6.8%	[4.9%, 8.8%]	69 out of 1024	

Consumption and Nutrition Measures

Consumption Measures for Intercropping and Monocropping Households, All Seasons and Crops

Consumption Measure	Household	Estimated Proportion	95% C.I.	Observations	Wald Test
Under \$1.25/per adult equivalent per day	Monocropping	67%	[61%, 72%]	327 out of 482	0.4761
	Intercropping	64%	[62%, 67%]	1096 out of 1736	
Under \$2.00/per adult equivalent per day	Monocropping	88%	[84%, 91%]	425 out of 482	0.8646
	Intercropping	88%	[86%, 90%]	1510 out of 1736	
Over \$3/per adult equivalent per day	Monocropping	5.4%	[2.8%, 8.0%]	22 out of 482	0.3296
	Intercropping	4.0%	[2.9%, 5.2%]	79 out of 1736	

Children under Five with Malnutrition in Households with Consumption under \$2.00/day, by Intercropping and Monocropping households, All Seasons and Crops

Nutrition Measure	Household	Estimated Proportion	95% C.I.	Observations	Wald Test
Stunting	Monocropping	45.00%	[37.70%, 52.25%]	105 out of 268	.0873
	Intercropping	52.15%	[48.16%, 56.15%]	464 out of 929	
Underweight	Monocropping	22.07%	[16.41%, 27.73%]	57 out of 268	.7865
	Intercropping	22.92%	[19.80%, 26.03%]	201 out of 929	
Wasting	Monocropping	3.70%	[0.94%, 6.45%]	15 out of 268	.8154
	Intercropping	4.07%	[2.68%, 5.46%]	43 out of 929	
Low BMI for age	Monocropping	2.72%	[0.25%, 5.18%]	9 out of 268	.3818
	Intercropping	4.01%	[2.64%, 5.38%]	40 out of 929	
Overweight	Monocropping	3.46%	[0.98%, 5.93%]	10 out of 268	.0250
	Intercropping	6.78%	[4.80%, 8.75%]	65 out of 929	