

**Characteristics of Small and Medium-Scale Crop-Growing
Households in Zambia: Preliminary Comparison of Results From
CSO/MACO/FSRP National-Level Supplemental Surveys in 2003/04 and
2007/2008 Crop Marketing Seasons**

*With Emphasis on Household Income, Demographics, Cropping Patterns, Assets, Land Access,
Fertiliser Use, Maize Sales and Food Security Indicators*

By

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**Table 1: Small and Medium-Scale Crop-Growing Household Income and Other Characteristics
Ranked by Quintiles of Household Per Capita Land Use *2004 and 2008**

	2004					2008					2004	2008
	Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					All Small-holders (0-20 ha)	All Small-holders (0-20 ha)
	Low	2	Mid	4	High	Low	2	Mid	4	High		
Land holding size household per capita - cultivated plus fallow. (ha/hh/pc)	0.09	0.18	0.28	0.44	1.06	0.08	0.16	0.26	0.41	1.01	0.41	0.38
Percent of all small households	19.91	20	20.08	20.18	19.83	18.72	21.9	19.36	20.01	20	100	100
Total HH income (000 ZMK)	1,952	2,173	2,172	2,464	3,571	3,720	3,294	2,966	3,487	5,832	2,465	3,857
HH per capita income (000 ZMK)	295	308	328	457	906	556	522	522	649	1,324	458	714
% Income from Crops	63.47	72.28	78.17	76.06	80.43	43	55.89	61.98	65.5	68.08	74.09	59.02
% Income from Livestock	3.55	4.61	3.54	3.79	4.34	4.5	4.45	4.55	5.31	6.46	3.97	5.05
Off farm Income (%)	31.94	22.81	18.19	19.91	15.12	52.18	39.41	33.47	29.18	25.46	21.59	35.81
% from salary and wages	16.64	8.53	6.68	7.92	4.82	17.12	8.73	6.29	5.29	4.5	8.92	8.29
% from formal/informal business	12.97	12.41	9.93	10.51	8.65	22.18	20.26	17.5	15.16	12	10.9	17.41
% from remittances	2.32	1.87	1.57	1.48	1.99	12.24	9.78	9.4	8.52	8.68	1.84	9.7
% households reporting off farm income	56.01	51	48.17	54.1	47.12	84.01	80.83	81.05	79.42	78.14	51.29	80.65
TOTAL Households (Unweighted)	1,014	1,019	1,039	1,079	1,164	1,209	1,502	1,352	1,456	1,929	5,315	7,448
(Weighted)	247,612	248,805	249,769	250,949	246,675	279,581	326,945	289,117	298,862	298,692	1,243,811	1,493,197

Source: CSO/MACO/FSRP Supplemental Survey 2004 and 2008. * Note all measures of value for 2004 are expressed in terms of 2008 ZMK.

**Table 2: Demographic Characteristics of Small and Medium-Scale Crop-Growing Households
Ranked by Quintiles of Household Per Capita Land Use *2004 and 2008**

	2004					2008					2004	2008
	Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					All Small- holders (0-20 ha)	All Small- holders (0-20 ha)
	Low	2	Mid	4	High	Low	2	Mid	4	High		
Land holding size household per capita - cultivated plus fallow. (ha/hh/pc)	0.09	0.18	0.28	0.44	1.06	0.08	0.16	0.26	0.41	1.01	0.41	0.38
Percent of all small households	19.91	20	20.08	20.18	19.83	18.72	21.9	19.36	20.01	20	100	100
Number of hh family Members	7.11	6.6	6.09	5.3	4.16	7.07	6.39	6.01	5.44	4.62	5.85	5.9
Number of Adults age >=12 (weighted)	4.18	4.01	3.75	3.43	2.89	4.26	3.93	3.74	3.51	3.22	3.65	3.73
Number of Prime age adults ages 15 to 59	3.57	3.44	3.19	3.02	2.57	3.3	3.13	2.97	2.78	2.62	3.17	2.96
Number of Adult equivalents in HH	4.04	3.79	3.47	3	2.36	5.77	5.23	4.96	4.49	3.88	3.33	4.86
% of hh with with elderly members	24.17	26.08	28.33	28.32	31.82	24.78	24.84	26.08	31.25	35.33	27.74	28.45
Number of Elderly people (>=60 years)	1.24	1.17	1.25	1.23	1.24	1.2	1.25	1.29	1.28	1.28	1.23	1.26
Female headed hh (%)	26.16	22.61	20.25	23.24	24.24	25.66	24.51	19.93	25.1	23.51	23.29	23.76
% Single female headed hh	22.72	18.44	17.07	19.91	19.92	21.48	21.12	16.85	23.66	20.93	19.61	20.83
% Married female headed hh	3.44	4.17	3.18	3.33	4.09	4.18	3.39	3.08	1.43	2.58	3.64	2.92
HHs with orphans(%)	19.4	14.36	13.78	13.56	9.95	19.51	14.21	11.66	11.66	9.69	14.21	13.29
% HHs with single orphans	16.85	11.79	10.85	10.88	7.27	16	11.67	8.98	9.13	7.43	11.53	10.6
% HHs with double orphans	4.81	4.12	3.66	3.18	3.4	5.4	3.51	3.37	3.02	2.87	3.83	3.61
Number of orphans in the HH	0.29	0.19	0.18	0.16	0.12	0.28	0.2	0.16	0.15	0.12	0.19	0.18
Age of head of household	46.85	46.38	47	48.17	49.44	47.14	47.36	47.98	49.19	51.74	47.57	48.68
Level of education of head in years	6.02	6.12	5.94	6.03	5.6	6.69	6.18	6.32	6.02	5.8	5.95	6.2
Yrs of education most highly educated male	6.18	6.26	6.12	6.05	5.67	6.93	6.33	6.49	6.16	5.91	6.06	6.35
Yrs of ed. most highly educated female	5.64	5.33	5.47	5.59	5.15	0	0	0	0	0	5.44	0
% of HH with chronically ill adults	16.83	16.24	17.02	14.47	15.03	4.68	3.49	4.41	4.01	5.1	15.92	4.32
% of HH with death of male prime-age adult	4.33	5.36	3.92	5.95	3.53	4	3.43	3.27	3.61	3.92	4.62	3.64
% of HH with death - female prime-age adult	6.16	5.42	4.33	5.44	4.99	3.81	3.56	3.27	4.65	6.08	5.27	4.27
TOTAL Households (Unweighted)	1,014	1,019	1,039	1,079	1,164	1,209	1,502	1,352	1,456	1,929	5,315	7,448
(Weighted)	247,612	248,805	249,769	250,949	246,675	279,581	326,945	289,117	298,862	298,692	1,243,811	1,493,197

Source: CSO/MACO/FSRP Supplemental Survey 2004 and 2008 * Note all measures of value for 2004 are expressed in terms of 2008 ZMK.

**Table 3: Land Characteristics of Small and Medium-Scale Crop-Growing Households
Ranked by Quintiles of Household Per Capita Land Use * 2004 and 2008**

	2004					2008					2004	2008
	Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					All Small-holders (0-20 ha)	All Small-holders (0-20 ha)
	Low	2	Mid	4	High	Low	2	Mid	4	High		
Land holding size household per capita - cultivated plus fallow. (ha/hh/pc)	0.09	0.18	0.28	0.44	1.06	0.08	0.16	0.26	0.41	1.01	0.41	0.38
Percent of all small households	19.91	20	20.08	20.18	19.83	18.72	21.9	19.36	20.01	20	100	100
% of hhs cultivating crops	100	100	100	100	100	100	100	100	100	100	100	100
Area cultivated among cropping hhs	0.6	1.08	1.47	1.91	2.91	0.52	0.95	1.34	1.81	2.99	1.59	1.52
% of hhs with fallow fields	13.68	28.85	36.62	43.58	50	5.94	16.91	27.64	35.67	50.59	34.56	27.42
Avg area under fallow among those with fallow	0.35	0.47	0.7	0.93	2.28	0.31	0.51	0.69	1.05	2.42	1.14	1.38
Land holding size per household ha/hh	0.65	1.21	1.72	2.32	4.05	0.54	1.03	1.53	2.18	4.21	1.99	1.9
% hh using HH labour only	54.95	61.93	54.9	49.48	45.22	67.59	62.23	57.99	47.21	36.41	53.3	54.24
% hh using hired labour	8.33	8.86	13.51	16.49	17.89	8.76	11.15	12.83	16.34	17.05	13.02	13.25
% hh using draught animals (own, hired or borrowed)	20.52	22.71	27.58	28.29	33.71	21.06	26.03	28.77	35.89	45.64	26.56	31.53
% hh using hired/bolrrowed animals for ripping/ploughing	13.45	12.98	14.6	13.98	13.73	14.79	16.79	16.13	16.01	18.86	13.75	16.54
% hh using mechanical (own, hired or borrowed)	3.41	1.41	1.27	2.91	2	2.49	1.16	1.29	1.66	2.72	2.2	1.85
TOTAL Households (Unweighted)	1,014	1,019	1,039	1,079	1,164	1,209	1,502	1,352	1,456	1,929	5,315	7,448
(Weighted)	247,612	248,805	249,769	250,949	246,675	279,581	326,945	289,117	298,862	298,692	1,243,811	1,493,197

Source: CSO/MACO/FSRP Supplemental Survey 2004 and 2008. * Note all measures of value for 2004 are expressed in terms of 2008 ZMK.

**Table 4: Cropping Characteristics of Small and Medium-Scale Crop-Growing Households
Ranked by Quintiles of Household Per Capita Land Use *2004 and 2008**

	2004					2008					2004	2008
	Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					All Small-holders (0-20 ha)	All Small-holders (0-20 ha)
	Low	2	Mid	4	High	Low	2	Mid	4	High		
Land holding size household per capita - cultivated plus fallow. (ha/hh/pc)	0.09	0.18	0.28	0.44	1.06	0.08	0.16	0.26	0.41	1.01	0.41	0.38
Percent of all small households	19.91	20	20.08	20.18	19.83	18.72	21.9	19.36	20.01	20	100	100
% of hhs growing no crops	0	0	0	0	0	0	0	0	0	0	0	0
% of hhs growing 1 crop only	44.32	20.2	14.83	12.4	9.68	57.66	32.23	18.66	18.52	15.89	20.26	28.35
% of hhs growing 2 crops	35.13	34.64	30.08	26.55	27.66	30.51	36.81	34.72	33.65	32.59	30.81	33.75
% of hhs growing 3 crops	12.79	28.21	28	29.03	26.65	9.18	21.16	29.32	28.46	28.44	24.95	23.41
% of hhs growing maize	72.7	79.97	86.39	85.24	87.45	77.21	81.63	84.16	85.5	89.89	82.36	83.72
Area planted of maize by maize growing hhs	0.41	0.61	0.75	0.98	1.44	0.42	0.63	0.8	1.11	1.93	0.86	1
% of hhs growing cotton	3.49	8.27	13.73	11.18	16.65	1.54	5.82	12.41	13.21	17.28	10.66	10.07
Area planted of cotton by cotton growing hhs	0.38	0.52	0.69	0.92	1.47	0.39	0.48	0.68	0.87	1.36	0.93	0.93
% of hhs growing maize and cotton	3.4	8.16	13.65	11.11	16.58	1.54	5.75	12.35	13.09	17.28	10.58	10.02
Area planted of maize & cotton by growing hhs	0.8	1.17	1.52	2.02	3.05	0.88	1.16	1.55	2.03	3.2	2	2.18
% of hhs growing just cassava	12.93	6.14	3.56	3.99	2.76	13.27	9.04	5.1	4.11	2.33	5.87	6.74
Area planted of cassava by cassava growing hhs	0.37	0.55	0.65	0.86	1.18	0.34	0.51	0.64	0.81	1.03	0.73	0.67
% of hhs growing ground nuts	25.05	40.87	45.04	52.31	54.43	20.11	35.6	44.88	49.78	55.26	43.55	41.27
Area planted of ground nuts by growing hhs	0.17	0.26	0.3	0.34	0.48	0.18	0.24	0.27	0.34	0.46	0.33	0.32
% of hhs with access to extension	39.11	45.22	49.74	50.04	55.12	42.91	54.1	57.7	57.84	64.22	47.85	55.47
TOTAL Households (Unweighted)	1,014	1,019	1,039	1,079	1,164	1,209	1,502	1,352	1,456	1,929	5,315	7,448
(Weighted)	247,612	248,805	249,769	250,949	246,675	279,581	326,945	289,117	298,862	298,692	1,243,811	1,493,197

Source: CSO/MACO/FSRP Supplemental Survey 2004 and 2008. * Note all measures of value for 2004 are expressed in terms of 2008 ZMK.

**Table 5: Asset Ownership Characteristics of Small and Medium-Scale Crop-Growing Households
Ranked by Quintiles of Household Per Capita Land Use *2004 and 2008**

	2004					2008					2004	2008
	Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					All Small-holders (0-20 ha)	All Small-holders (0-20 ha)
	Low	2	Mid	4	High	Low	2	Mid	4	High		
Land holding size household per capita - cultivated plus fallow. (ha/hh/pc)	0.09	0.18	0.28	0.44	1.06	0.08	0.16	0.26	0.41	1.01	0.41	0.38
Percent of all small households	19.91	20	20.08	20.18	19.83	18.72	21.9	19.36	20.01	20	100	100
% hh owning agric. Implements	12.24	13.69	20.33	18.78	26.23	8.48	11.57	13.94	20.58	32.14	18.25	17.36
% hh owning small livestock	68.01	77.37	80.1	78.31	80.32	57.56	68.27	70.49	73.6	75.99	76.83	69.31
% hh owning large livestock	12.58	15.54	19.87	19.38	27.08	9.27	15.14	16.72	23.03	33	18.89	19.5
% hh owning draught power	6.75	8.38	11.29	12.16	17.22	5.08	8.44	9.22	14.74	22.29	11.16	11.99
Number of cattle owned	13.96	9.99	8.1	8.44	10.99	8.24	6.43	9.77	8.52	11.15	10.08	9.24
Number of goats owned	5.86	5.59	5.99	6.07	7.76	5.86	5.96	6.28	6.68	8.37	6.36	6.83
% Ownership of bicycles	39.46	48.06	52.37	50.97	54.31	44.51	52.66	57.96	60.28	62.86	49.04	55.73
Productive assets in ZMK (04 & 08)	1,135,968	1,084,742	1,135,287	1,189,787	2,124,438	1,362,473	1,378,488	2,226,817	2,763,045	6,008,057	1,332,478	2,742,941
All animal / eqpt assets SS08 (ZWK per HH)						1,533,964	1,450,312	2,281,004	2,829,948	6,187,593		2,850,573
TOTAL Households (Unweighted)	1,014	1,019	1,039	1,079	1,164	1,209	1,502	1,352	1,456	1,929	5,315	7,448
(Weighted)	247,612	248,805	249,769	250,949	246,675	279,581	326,945	289,117	298,862	298,692	1,243,811	1,493,197

Source: CSO/MACO/FSRP Supplemental Survey 2004 and 2008. * Note all measures of value for 2004 are expressed in terms of 2008 ZMK.

**Table 6: Fertiliser Use by Small and Medium-Scale Crop-Growing Households
Ranked by Quintiles of Household Per Capita Land Use * 2004 and 2008**

	2004					2008					2004	2008
	Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					All Small-holders (0-20 ha)	All Small-holders (0-20 ha)
	Low	2	Mid	4	High	Low	2	Mid	4	High		
Land holding size household per capita - cultivated plus fallow. (ha/hh/pc)	0.09	0.18	0.28	0.44	1.06	0.08	0.16	0.26	0.41	1.01	0.41	0.38
Percent of all small households	19.91	20	20.08	20.18	19.83	18.72	21.9	19.36	20.01	20	100	100
% of hhs using fertilizer	25.64	22.88	31.12	33.03	37.04	26.64	27.6	29.05	32.51	41.32	29.94	31.43
% of hhs using fertilizer on Maize	23.88	21.91	28.92	31.9	35.51	26.64	27.44	28.72	32.32	41.16	28.42	31.26
Number of HHs using fertilizer on maize	59,131	54,521	72,233	80,055	87,602	74,484	89,729	83,032	96,582	122,942	353,541	466,768
Amt used by maize farmers using fert. kg/ha	120	74.95	92.92	86.22	95.6	382.85	305.2	284.54	268.22	224.39	93.35	284.98
Total fertilizer used per ha cropped (kgs/ha)	73.03	37.46	51.1	39.13	43.53	311.11	202.87	160.06	153.61	142.26	48.4	186.25
Total Qty of fertilizer used Mts	7,812	8,557	15,845	19,370	32,426	12,757	19,573	21,241	31,567	72,443	84,009	157,580
Total Qty of fertilizer used on maize (Mts)	8,937	8,710	16,639	18,873	33,245	12,774	18,840	20,438	30,578	64,144	86,405	146,774
% hhs growing maize and using fertilizer that sell maize	29.6	41.14	52.17	57.08	62.36	40.17	52.72	53.33	64.92	69.14	50.33	57.68
Sales of maize by fertilizer users (mts/hh)	0.61	0.6	0.85	1.36	2.99	0.54	0.7	0.81	1.44	3.23	1.58	1.62
Maize yield on area planted with fertilizer	2.13	1.95	1.98	1.92	1.92	2.46	2.17	2.03	2.13	2	1.97	2.14
% maize growing hhs using fertilizer who obtained FSP fertilizer	6.59	6.64	8.53	12.44	14.84	10.59	13.17	14.62	20.58	25.43	9.69	17.13
Number of HHs using FSP fertilizer # HHs	14,117	14,286	18,096	26,033	29,917	17,292	27,589	27,789	41,666	49,894	102,450	164,229
Total quantity of FSP fertilizer (Mts – mostly for maize) acquired by Maize growers	2,152	2,974	4,412	7,553	11,865	4,026	7,049	7,907	15,881	26,385	28,956	61,248
Amt of FSP fertilizer used per hh kg/hh	162	216	269	315	435	233	255	284	381	529	306	373
HH income of those hhs obtaining FSP fertilizer (000 ZMK)	5,004	3,698	3,391	4,304	8,357	9,116	6,267	5,063	6,113	9,335	5,338	7,256
Value of hh assets for hhs obtaining FSP fertilizer (000 ZMK)	658	2,075	2,382	2,556	4,917	2,176	2,104	3,122	6,857	10,622	2,886	6,077
Maize yield among hhs using FSP fertilizer (mt/ha)	2.07	2.23	1.98	2.02	1.97	2.87	2.61	2.43	2.41	2.24	2.04	2.44
% maize growing hhs using fertilizer who obtained COMM fertilizer	14.59	12.64	19.26	19.22	23.74	26.15	25.43	25.21	25.03	33.9	17.79	27.17
Number of HHS using commercial fert.	33,735	32,022	44,784	43,688	52,440	50,970	61,915	54,937	54,063	75,668	206,669	297,553
Total quantity of COMM fertilizer (Mts – mostly for maize) acquired by Maize growers	5,262	4,937	10,460	10,583	19,505	8,521	12,414	13,106	15,371	45,626	50,746	95,039

Amt of Commercial fert used per hh kg/hh	165	180	251	266	405	167	201	239	284	603	269	319
HH income of those hhs obtaining COMM fertilizer (000 ZMK)	4,356	3,727	4,735	5,020	6,003	8,143	6,115	5,186	5,950	11,859	4,899	7,722
Value of hh assets for hhs obtaining COMM fertilizer (000 ZMK)	850	824	1,606	1,805	3,833	2,876	2,558	5,345	3,891	13,725	1,968	6,209
Maize yield among hhs using COMM fertilizer (mt/ha)	2.34	1.98	2.07	2.02	2.05	2.33	2.03	1.91	2.04	1.93	2.09	2.04
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% maize growing hhs using fertilizer who obtained PAM fertilizer	2.12	3.41	3.94	4.63	2.88	0.99	0.53	1.09	1.2	0.98	3.39	0.95
Number of HHs using PAM fertilizer # HHs	4,503	7,279	8,594	10,053	4,988	1,637	940	1,764	2,354	1,436	35,417	8,131
Total quantity of PAM fertilizer (Mts – mostly for maize) acquired by Maize growers	398	645	974	1,234	1,056	209	110	228	315	432	4,307	1,294
Amt of fertilizer used per farm kg/hh	98	94	135	150	224	128	117	129	134	301	139	159
HH income of those hhs obtaining PAM fertilizer (000 ZMK)	1,659	1,639	2,420	3,240	3,212	2,061	5,994	3,358	3,440	4,313	2,507	3,594
Value of hh assets for hhs obtaining PAM fertilizer (000 ZMK)	147	1,146	1,478	718	3,276	547	503	353	1,220	1,124	1,278	797
Maize yield among hhs using PAM fertilizer (mt/ha)	1.94	2.01	2.08	1.76	1.72	2.95	2.42	2.41	1.9	2.32	1.91	2.36
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% of hhs growing maize NOT using fertilizer on Maize	76.12	78.09	71.08	68.1	64.49	65.5	66.38	65.87	62.2	54.21	71.58	62.66
HH income of hhs not using fertilizer on Maize from any source (000 ZMK)	1,338	1,867	1,445	1,582	1,902	2,232	2,308	2,188	2,439	2,868	1,623	2,391
Value of assets for hhs not using fertilizer on Maize (000 ZMK)	1,245	1,059	908	909	1,059	1,269	1,314	1,640	2,071	2,830	1,040	1,808
Maize yield on area planted WITH NO fertilizer	1.48	1.28	1.35	1.19	1.25	1.31	1.12	1.13	1.14	1.08	1.31	1.16
TOTAL Households (Unweighted)	1,014	1,019	1,039	1,079	1,164	1,209	1,502	1,352	1,456	1,929	5,315	7,448
(Weighted)	247,612	248,805	249,769	250,949	246,675	279,581	326,945	289,117	298,862	298,692	1,243,811	1,493,197

Source: CSO/MACO/FSRP Supplemental Survey 2004 and 2008. * Note all measures of value for 2004 are expressed in terms of 2008 ZMK.

**Table 7: Location in Zambia of Small and Medium-Scale Crop-Growing Households
Ranked by Quintiles of Household Per Capita Land Use * 2004 and 2008**

	2004					2008					2004	2008
	Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					All Small-holders (0-20 ha)	All Small-holders (0-20 ha)
	Low	2	Mid	4	High	Low	2	Mid	4	High		
Land holding size household per capita - cultivated plus fallow. (ha/hh/pc)	0.09	0.18	0.28	0.44	1.06	0.08	0.16	0.26	0.41	1.01	0.41	0.38
Percent of all small households	19.91	20	20.08	20.18	19.83	18.72	21.9	19.36	20.01	20	100	100
% hhs in AEC Zone 1	25.31	20.27	17.62	20.33	19.95	21.37	19.7	18.72	22.29	25.5	20.69	21.5
% hhs in AEC Zone 2a	19.33	24.58	30.67	26.61	30.37	21.48	22.95	24.85	26.74	32.36	26.32	25.69
% hhs in AEC Zone 2b	12.54	14.47	12.84	13.36	12.16	12.76	15.27	14.95	12.61	9.97	13.08	13.15
% hhs in AEC Zone 3	42.82	40.68	38.87	39.7	37.51	44.39	42.08	41.47	38.36	32.16	39.91	39.67
% hhs in Northern	16.29	17.59	17.51	20.72	19.27	18.27	19.09	20	18.27	15.3	18.28	18.19
% hhs in Luapula	13.3	11.21	10.04	11.28	10.02	10.31	13.02	10.43	11.33	8.39	11.17	10.75
% hhs in Northwestern	9.41	10.13	10.2	7.17	4.26	10.8	9.13	9.42	7.02	5.74	8.24	8.4
% hhs in Copperbelt	6	5.52	4.79	4.66	6.69	7.34	4.43	5.87	4.58	5.51	5.53	5.5
% hhs in Central	10.18	10.32	11.66	9.96	14.34	12.15	10.65	10.91	12.43	13.86	11.29	11.98
% hhs in Eastern	12.84	20.56	22.88	20.44	22.08	10.47	18.33	21.05	21.89	22.95	19.77	19.02
% hhs in Lusaka	4.55	2.03	1.59	3.64	2.26	6.26	3.52	1.35	1.42	1.76	2.81	2.84
% hhs in Southern	15.12	11.59	9.8	11.63	11.49	9.62	9.01	10.37	13.59	19.62	11.92	12.43
% hhs in Western	12.3	11.05	11.52	10.49	9.59	14.79	12.81	10.59	9.47	6.87	10.99	10.89
TOTAL Households (Unweighted)	1,014	1,019	1,039	1,079	1,164	1,209	1,502	1,352	1,456	1,929	5,315	7,448
(Weighted)	247,612	248,805	249,769	250,949	246,675	279,581	326,945	289,117	298,862	298,692	1,243,811	1,493,197

Source: CSO/MACO/FSRP Supplemental Survey 2004 and 2008. * Note all measures of value for 2004 are expressed in terms of 2008 ZMK.

**Table 8: Market Behaviour and Access of Small and Medium-Scale Crop-Growing Households
Ranked by Quintiles of Household Per Capita Land Use *2004 and 2008**

	2004					2008					2004	2008
	Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					All Small-holders (0-20 ha)	All Small-holders (0-20 ha)
	Low	2	Mid	4	High	Low	2	Mid	4	High		
Land holding size household per capita - cultivated plus fallow. (ha/hh/pc)	0.09	0.18	0.28	0.44	1.06	0.08	0.16	0.26	0.41	1.01	0.41	0.38
Percent of all small households	19.91	20	20.08	20.18	19.83	18.72	21.9	19.36	20.01	20	100	100
Total national maize production (Mts)	124,807	171,101	259,253	306,086	503,857	150,204	239,914	272,170	437,928	860,477	1,365,103	1,960,692
% of maize growing hhs selling maize	13.49	21.24	31.56	37.43	40.91	22.42	32.12	34.75	44.42	51.09	28.93	37.54
Amount of maize sold by selling hhs (kgs/hh)	427	417	585	959	1,960	541	702	814	1,439	3,234	1,029	1,624
Total National maize sales (Mts)	14,266	22,055	46,120	90,109	197,782	26,195	60,186	68,798	163,362	443,552	370,332	762,093
% of total smallholder maize production	9.14	12.53	18.99	22.42	36.91	7.66	12.24	13.88	22.34	43.89	100	100
% of total smallholder maize sales	3.85	5.96	12.45	24.33	53.41	3.44	7.9	9.03	21.44	58.2	100	100
% hhs growing maize and using fertilizer that sell maize	29.6	41.14	52.17	57.08	62.36	40.17	52.72	53.33	64.92	69.14	50.33	57.68
Sales of maize by fertilizer users (mts/hh)	0.61	0.6	0.85	1.36	2.99	0.54	0.7	0.81	1.44	3.23	1.58	1.62
% of total maize sales by fertilizer users	2.9	3.6	8.7	16.75	44.15	2.9	6.18	7.12	17.43	50.24	76.06	83.85
% of FSP fertilizer users on maize selling maize	34.07	45.89	49.77	57.59	66.98	49.76	72.57	74.57	77.88	80.35	53.95	74.22
Sales of maize by FSP fertilizer users (mt/hh)	0.2	0.46	0.46	0.85	2.23	0.96	1.09	1.36	2.44	4.87	1.03	2.73
Total national maize sales by FSP user (Mts)	2,689	5,431	7,335	18,077	56,801	8,094	20,418	26,177	69,828	149,886	90,332	274,402
% of total maize sales by FSP fertilizer users on maize	0.73	1.7	2.02	5.5	16.44	1.09	2.87	3.7	10.41	25.6	26.4	43.66
% of Commercial fertilizer users on maize selling maize	31.09	42.51	54.87	60.9	64.03	39.98	45.87	45.49	58.6	64.59	52.67	51.86
Sales of maize by Commercial fertilizer users (mt/hh)	0.23	0.28	0.52	1.04	2.17	0.68	1.1	1.2	2.13	5.31	0.97	2.61
Total national maize sales by Commercial user (Mts)	7,287	6,874	21,346	38,699	99,824	13,472	28,270	27,403	60,061	231,217	174,030	360,423
% of total maize sales by Commercial fertilizer users on maize	1.97	2.09	5.85	11.1	28.21	1.81	4.09	3.95	8.87	34.04	49.22	52.77
% of non-fertilizer using on maize sell maize	47.59	57.55	52.19	51.34	45.87	9	16.2	19.54	25.11	29.68	50.56	19.5
Sales of maize by non-fertilizer users (Mt/hh)	0.22	0.29	0.34	0.58	0.74	0.23	0.34	0.36	0.6	1.16	0.49	0.62
Total national maize sales by non-fertilizer users (Mts)	3,557	8,705	14,004	28,084	34,289	4,195	13,087	14,570	30,567	60,682	88,640	123,100
% of total maize sales by non-fertilizer users on maize	0.96	2.35	3.78	7.58	9.26	0.55	1.72	1.91	4.01	7.96	23.94	16.15

% of hhs selling cotton	3.49	8.11	13.34	11.1	16.37	1.5	5.77	11.92	12.82	16.8	10.48	9.78
Amount of cotton (kgs) sold by selling hhs	558	490	784	926	1,284	650	467	590	755	1,200	909	829
% of hhs selling groundnuts	8.32	16.64	22.27	24.83	30.5	6.7	14.77	19.92	25.06	26.6	20.52	18.68
Amount of groundnuts (kgs) sold sold by selling hhs	64	74	94	92	121	71	67	80	96	136	96	97
TOTAL Households (Unweighted)	1,014	1,019	1,039	1,079	1,164	1,209	1,502	1,352	1,456	1,929	5,315	7,448
(Weighted)	247,612	248,805	249,769	250,949	246,675	279,581	326,945	289,117	298,862	298,692	1,243,811	1,493,197

Source: CSO/MACO/FSRP Supplemental Survey 2004 and 2008. * Note all measures of value for 2004 are expressed in terms of 2008 ZMK.

Table 9: Food Security Indicator (Market Behavior BY Mutually Exclusive Net Buyer and Net Seller Position) and Access of Small and Medium-Scale Crop-Growing Households Ranked by Quintiles of Household Per Capita Land Use * 2004 and 2008

	2004					2008					2004	2008
	Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					All Small-holders (0-20 ha)	All Small-holders (0-20 ha)
	Low	2	Mid	4	High	Low	2	Mid	4	High		
Land holding size household per capita - cultivated plus fallow. (ha/hh/pc)	0.09	0.18	0.28	0.44	1.06	0.08	0.16	0.26	0.41	1.01	0.41	0.38
Percent of all small households	19.91	20	20.08	20.18	19.83	18.72	21.9	19.36	20.01	20	100	100
% of hhs who only sell maize	7.77	14.77	21.34	26.97	32.5	8.53	13.33	15.67	23.15	31.48	20.68	18.48
% of hhs who buy maize (but do produce)	35.94	29.58	24.05	20.06	17.23	43.25	39.63	36.92	28.87	26.11	25.37	34.92
% of hhs who buy maize (but do not produce)	13.41	9.95	6.48	7.15	4.64	16.52	12.39	10.72	8.37	5.62	8.32	10.68
% of hhs not in the maize market as buyers nor sellers	37.16	39.22	37.91	35.37	37.22	22.92	21.77	23.12	24.79	22.34	37.37	22.96
% of hhs who both buy & sell maize(net sellers)	2.91	3.07	5.36	7.21	5.78	5.46	8.22	10.52	11.67	11.88	4.87	9.57
% of hhs who both buy & sell maize(net buyers)	2.8	3.39	4.85	3.05	2.62	2.9	4.48	2.89	2.81	2.25	3.35	3.1
% of hhs who buy & sell maize (net=0)				0.21		0.43	0.19	0.17	0.35	0.31	0.04	0.29
TOTAL Households (Unweighted)	1,014	1,019	1,039	1,079	1,164	1,209	1,502	1,352	1,456	1,929	5,315	7,448
(Weighted)	247,612	248,805	249,769	250,949	246,675	279,581	326,945	289,117	298,862	298,692	1,243,811	1,493,197

Source: CSO/MACO/FSRP Supplemental Survey 2004 and 2008. * Note all measures of value for 2004 are expressed in terms of 2008 ZMK.

Table 10: Food Security Indicator (Market Behavior BY Mutually Exclusive Net Buyer and Net Seller Position) and Access of Small and Medium-Scale Rural Households Ranked by Quintiles of Household Per Capita Land Use *2004 and 2008

	2004					2008					2004 All Small- holders (0-20 ha)	2008 All Small- holders (0-20 ha)
	Ranked by Quintiles of Rural HHs Land Use Household Per Capita (Cultivated + Fallow)					Ranked by Quintiles of Rural HHs Land Use Household Per Capita (Cultivated + Fallow)						
	Low	2	Mid	4	High	Low	2	Mid	4	High		
Land holding size household per capita - cultivated plus fallow. (ha/hh/pc)	0.09	0.18	0.28	0.44	1.06	0.08	0.16	0.26	0.41	1.01	0.41	0.38
Percent of all small households	20.07	19.95	19.95	19.8	20.23	20.35	19.6	20.04	20.66	19.35	100	100
% of hhs who only sell maize	7.57	14.54	20.78	26.86	31.69	4.93	12.73	14.93	22.16	31.02	20.29	17.07
% of hhs who buy maize (but do produce)	34.5	29.36	24.01	19.76	16.88	28.83	38.53	38.87	28.63	26.55	24.9	32.26
% of hhs who buy maize (but do not produce)	15.58	11	7.52	8.34	5.54	42.03	12.91	11.01	9.02	6.02	9.6	16.32
% of hhs not in the maize market as buyers nor sellers	36.79	38.74	37.58	34.92	37.46	19.19	23.29	21.97	25.31	22.14	37.1	22.39
% of hhs who both buy & sell maize(net sellers)	2.83	3.02	5.31	7	5.77	2.76	8.15	9.95	11.73	11.7	4.78	8.84
% of hhs who both buy & sell maize(net buyers)	2.73	3.34	4.8	2.91	2.66	1.98	4.15	3.13	2.78	2.27	3.28	2.86
% of hhs who buy & sell maize (net=0)				0.21		0.28	0.22	0.15	0.38	0.3	0.04	0.27
TOTAL Households (Unweighted)	1,049	1,034	1,051	1,075	1,210	1,254	1,449	1,510	1,613	1,999	5,419	7,825
(Weighted)	254,373	252,781	252,737	250,920	256,334	329,004	316,882	323,928	333,896	312,755	1,267,145	1,616,464

Source: CSO/MACO/FSRP Supplemental Survey 2004 and 2008. * Note all measures of value for 2004 are expressed in terms of 2008 ZMK.

