

# Coming Policy Attractions – An Overview of On-Going Research & Potential Outreach

Presentation for Discussion  
at a Meeting of Donor Cooperating Partners  
and  
The ACF/ FSRP Research/Outreach Team  
ACF Offices, June 2, 2009

*Research and Outreach Activities Supported By:*

FSRP/MATEP



The Agricultural Consultative Forum

## Overview of Presentation

- Selected results from various on-going ACF/FSRP studies
- Want to present a few slides to stimulate discussion
- Selected handouts will give more details

## ACF/FSRP Priorities -2009/10

- 1 - Facilitate information and stakeholder involvement in the coordination and steering of FNDP and CAADP implementation
- 2 - FSP Review and follow up applied analysis/orientation of reforms
- 3 - Livestock Development
- 4 - Research, Extension and Training
- 5 - Commodity and Value Chain Reviews

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## Sources: Written Materials Distributed & Work Underway

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- ACF- Concept Note on the development of a Livestock Development Strategy in Zambia
- 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 2007/08 Crop Marketing Seasons. Lungu, et al. (Draft for Review)
- Smallholder Access to Land – Draft Policy Brief
- Selected other tables from urban consumption survey & cassava production/marketing

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## Food/Livestock Production, Marketing, Consumption & Urban/Rural Consumers

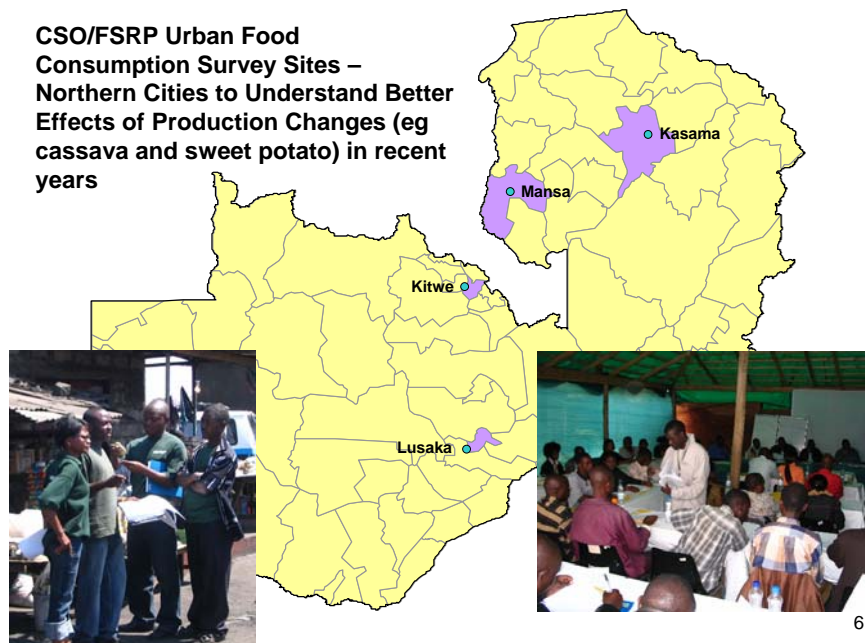
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- Concerns about small and medium-scale farmers producing more crops and livestock
- Production for own consumption and for sale
- Concerns about urban consumers (and rural net food buyers) being priced out of the market & urban markets not working well to keep consumer prices down

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**CSO/FSRP Urban Food Consumption Survey Sites – Northern Cities to Understand Better Effects of Production Changes (eg cassava and sweet potato) in recent years**



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**Table 6: Household per adult equivalents expenditure shares by urban area (% of total monthly expenditure)**

Expenditure items	Lusaka	Kitwe	Mansa	Kasama
N of households	267,934	78,398	9,305	20,769
Food share	49.1	52.4	56.4	61.8
Non-food share	50.9	47.6	43.6	38.2
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Food prepared at home	45.6	50.2	52.2	60.0
Food bought & consumed away from home	3.5	2.2	4.2	1.9
Housing (rent, electrical, water, sewage)	12.2	8.1	3.7	3.1
Gas, charcoal, firewood, paraffin, candles, batteries	4.8	6.4	6.4	7.6
Clothing and footwear	2.0	1.7	3.0	2.7
Transport and communication (telephone, cell phone, fares, fuel costs)	10.3	10.8	8.6	7.9
Education	3.4	3.8	4.2	2.9
Medical expenses	.4	.3	.3	.1
Health & beauty aids	2.4	2.6	2.9	2.2
Alcoholic beverages and tobacco	2.8	2.6	3.9	2.5
Social expenses (leisure, funeral, ceremonial, gifts)	2.4	1.8	2.6	1.7
Household furniture and appliances	1.7	2.5	1.2	1.0
Other large expenses (buying land or house, building materials, bicycle & motor vehicle purchases and maintenance)	1.2	1.0	1.7	1.7
All other expenses	7.4	5.9	5.1	4.7
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

**Table 11. Household per adult equivalent shares of broad food categories ranked by adult equivalent expenditure tertiles (% of total monthly expenditure) in four urban areas of Zambia**

Food items	Lusaka				Kitwe				Mansa			
	Overall Share %	Share Ranked By Expenditure Tertiles			Overall Share %	Share Ranked by Expenditure Tertiles			Overall Share %	Share Ranked by Expenditure Tertiles		
		low	mediu m	high		low	mediu m	high		low	mediu m	high
# of Households	267,934	97,737	93,006	77,192	78,398	30,479	27,301	20,619	9,305	3,572	3,103	2,631
Cereals & staples	24.0	28.1	24.1	18.7	27.2	31.6	26.2	21.8	27.9	32.2	27.2	23.1
Dairy items	5.2	3.4	5.8	6.7	3.5	2.0	3.7	5.7	1.7	.3	1.8	3.5
Meat & eggs	16.7	14.0	18.0	18.6	15.5	11.8	16.8	19.1	12.7	7.9	14.9	16.5
Red meats	6.8	5.2	7.4	8.7	5.3	3.7	5.6	7.2	3.7	1.5	4.4	6.0
Pork	1.2	1.4	1.3	.9	.6	.3	.7	.8	.8	.9	1.0	.5
Chicken/ poultry	6.5	5.7	6.6	7.4	7.5	5.9	8.2	8.7	6.2	4.6	7.2	7.1
Eggs	2.2	1.7	2.7	2.2	2.2	1.8	2.4	2.3	1.9	.8	2.4	2.9
Fish	7.6	8.7	7.3	6.5	8.3	8.9	8.5	7.4	12.3	13.6	12.6	10.3
Vegetables	13.6	17.3	12.9	9.7	14.9	18.5	14.2	10.4	11.4	13.0	11.2	9.5
Fruits	3.6	2.7	3.9	4.4	4.0	3.3	3.8	5.3	3.7	4.6	3.0	3.2
Legumes	3.7	4.7	3.4	2.8	3.3	3.6	3.4	2.9	3.7	4.6	3.4	2.9
Sugar & oils	7.9	10.0	7.5	5.5	8.9	10.1	8.9	7.0	8.5	8.0	9.0	8.7
Other foods	4.7	3.3	5.0	6.2	4.8	3.8	4.9	6.0	4.7	3.3	4.6	6.9
Tobacco & alcohol	5.3	2.9	5.6	7.8	4.8	3.9	4.5	6.7	6.3	6.8	5.0	7.3
Food away from home	7.8	4.8	6.5	13.1	4.8	2.5	5.1	7.8	6.9	5.7	7.2	8.1
Total %	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 13: Household per Adult Equivalent Shares of Staples and Other Food by Adult Equivalent Expenditure Terciles

Food items	Lusaka				Kitwe				Mansa			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
N of households	267,934	97,737	93,006	77,192	78,398	30,479	27,301	20,619	9,305	3,572	3,103	2,631
Maize	9.6	14.6	8.5	4.6	12.4	17.5	11.3	6.2	12.2	14.9	12.4	8.3
Rice	2.1	1.9	2.4	2.1	2.4	2.3	2.6	2.5	2.3	1.9	2.6	2.4
Wheat	9.8	9.2	10.7	9.6	9.9	9.1	10.0	10.8	5.0	2.0	5.6	8.4
Cassava	.2	.2	.2	.2	.5	.6	.6	.3	5.7	9.9	4.0	1.9
Other staples	2.4	2.5	2.4	2.2	2.2	2.3	2.1	2.2	2.8	3.4	2.6	2.0
Sugar	3.4	4.5	3.2	2.2	3.5	3.9	3.6	2.8	3.3	2.8	3.6	3.5
Dairy	5.2	3.5	5.9	6.7	3.6	2.0	3.7	5.7	1.7	.3	1.8	3.5
Animal protein	24.4	22.9	25.3	25.1	24.0	20.8	25.5	26.6	25.1	21.6	27.6	26.8
Fruits & vegetables	17.3	20.3	16.8	14.1	19.1	22.0	18.2	15.8	15.1	17.7	14.2	12.6
Other food prepared at home	18.3	16.7	18.3	20.2	18.3	17.4	18.1	19.7	20.0	19.7	18.4	22.4
Food away from home	7.3	3.8	6.3	12.9	4.3	2.0	4.3	7.5	6.9	5.7	7.2	8.1
	100	100	100	100	100	100	100	100	100	100	100	100

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

Table 16: Retail channels used for staple food purchases by adult equivalent expenditure terciles

Retail channel	Lusaka				Kitwe				Mansa			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
	%	%	%	%	%	%	%	%	%	%	%	%
Market stand / stall	31.82	32.52	34.70	27.92	41.47	43.16	45.29	35.18	48.47	54.58	53.55	38.62
Mobile and street vendors	8.02	9.09	7.95	7.08	6.91	8.23	6.51	5.94	9.61	15.48	5.97	9.07
KaSector (Katable/ Kantemba/Kashop (kiosk)	18.32	22.86	19.34	12.83	13.85	17.56	12.41	11.56	9.85	8.86	10.08	10.33
Retail/whole grocer / general dealer / shop	30.33	30.89	29.92	30.25	25.79	22.97	27.74	26.52	14.37	10.65	14.84	16.64
Mini-mart / small supermarket	1.45	.28	.70	3.40	.26	.07	.06	.68	.04	.00	.00	.12
Large supermarket, independent	.63	.00	.15	1.77	.15	.09	.00	.39	.00	.00	.00	.00
Large supermarket, chain	6.76	1.24	3.94	15.18	5.88	1.18	2.30	15.11	9.60	2.73	7.75	16.63
Bakery	.61	.71	.68	.44	2.55	2.46	2.61	2.59	5.54	4.07	5.63	6.55
Private household	1.55	1.95	1.76	.93	2.48	3.36	2.38	1.64	2.34	3.54	1.91	1.89
Other	.52	.48	.84	.20	.68	.92	.70	.40	.18	.10	.27	.15

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Table 25: Retail channels used for fruit and vegetable purchases by adult equivalent expenditure tertiles

Retail Channel	Lusaka				Kitwe				Mansa			
	Overall	low	medium	high	Overall	low	medium	high	Overall	low	medium	high
	%	%	%	%	%	%	%	%	%	%	%	%
Market stand / stall	68.04	71.59	69.69	62.47	70.48	67.58	72.43	71.41	68.29	74.94	72.62	59.11
Mobile and street vendors	14.05	12.43	13.89	15.93	13.57	13.60	14.24	12.71	13.07	14.45	10.73	14.27
KaSector (Katable/ Kantemba/Kashop (kiosk)	12.53	13.83	13.09	10.55	9.68	12.96	9.45	6.22	11.74	6.85	12.02	15.16
Retail/whole grocer / general dealer / shop	.35	.15	.33	.57	.51	.59	.24	.73	.30	.06	.41	.39
Mini-mart / small supermarket	.49	.00	.12	1.42	.12	.00	.11	.26	.00	.00	.00	.00
Large supermarket, independent	.24	.00	.00	.77	.00	.00	.00	.00	.00	.00	.00	.00
Large supermarket, chain	2.46	.24	.77	6.68	2.35	.26	.87	6.51	4.34	.12	2.41	9.38
Bakery	.01	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00
Private household	1.82	1.75	2.11	1.59	3.30	5.01	2.65	2.14	2.26	3.59	1.81	1.70
Other	.00	.00	.00	.00	.01	.00	.00	.02	.00	.00	.00	.00

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008.

Figure 2: Percent of Households Indicating Maize Grain is not Available for Specific Months

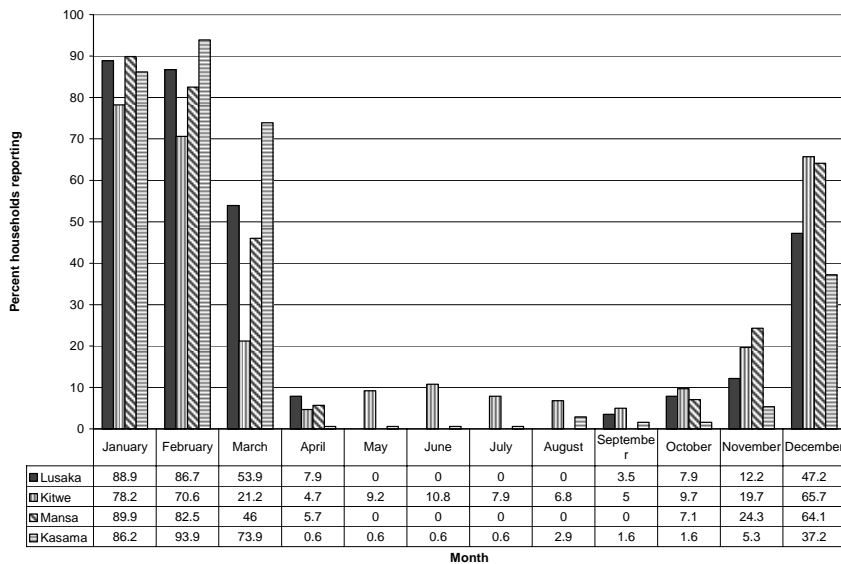
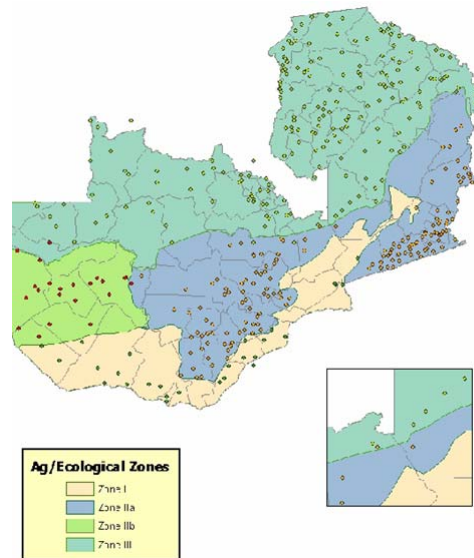


Table 32: Percent of Households Participating in Urban Agriculture – All Gardens/Fields

	Lusaka	Kitwe	Mansa	Kasama
HH growing field or horticultural crops	40.7	79.3	92.2	93.4
Households with a garden	86.0	91.6	94.6	89.2
Households with a field	39.0	48.0	70.4	83.3
Households growing...				
Maize	57.3	46.8	44.3	74.7
Sweet potatoes	7.3	20.4	18.0	47.9
Cassava	2.5	12.9	54.2	36.4
Vegetables	58.2	69.2	87.8	88.2
Fruit	57.1	73.0	71.8	73.2

Source: CSO/MACO/FSRP Urban Consumption Survey, 2007-2008

**Empirical Data on Smallholders in Zambia – Nation Wide Random Surveys**



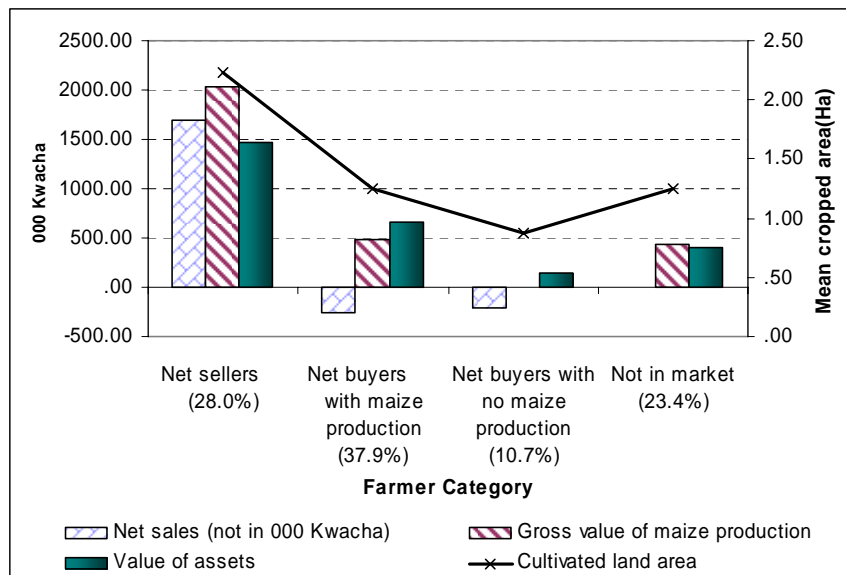
Map of Central Statistical Office Statistical Enumeration Areas (SEAs) Sampled in the CSO/MACO/FSRP Post Harvest and Supplemental Surveys in 2001, 2004 and 2008 by Zambia's Agro-Ecological Zones

## Selected Concepts - Smallholder Production & Marketing

- Sustainable use of fertilisers & other cash inputs-depends on raising productivity (research & extension)
- For growth in overall input use, GRZ needs to encourage and especially avoid displacement of private purchases
- Which small and medium-scale farmers does GRZ wish to assist affects displacement as well as farmer dependency patterns
- Targeting to households who would not purchase anyway?
- Basic types of small and medium-scale farmers
- Who is using the current FSP, commercial markets, PAM & their household asset positions?

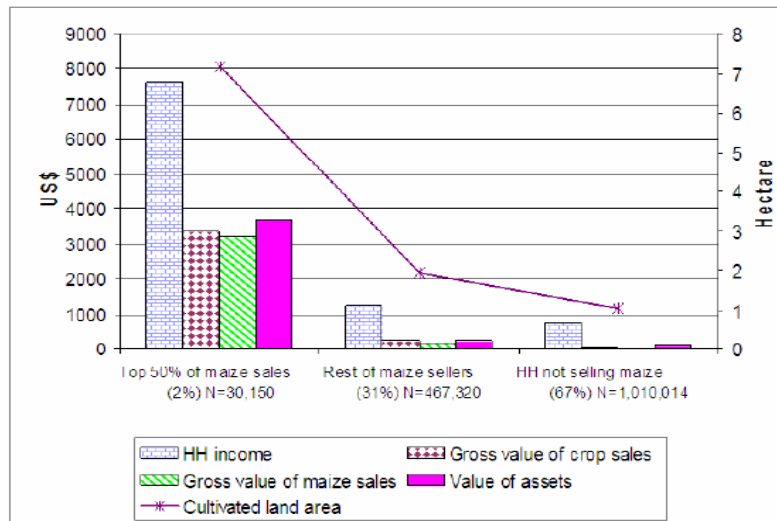
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### 2008 SS - Big Picture Empirical Results – Characteristics of Small & Medium-Scale Farm Households (Maize Production, Sales and Assets all Linked)



2008 (07/08 Crop Marketing Season)

### Characteristics of Small & Medium-Scale Households by Maize Market Selling Position Zambia 2007/2008 Marketing Season



### Location in Zambia of Small and Medium-Scale Crop-Growing Households Ranked by Quintiles of Household Per Capita Land Use 2008

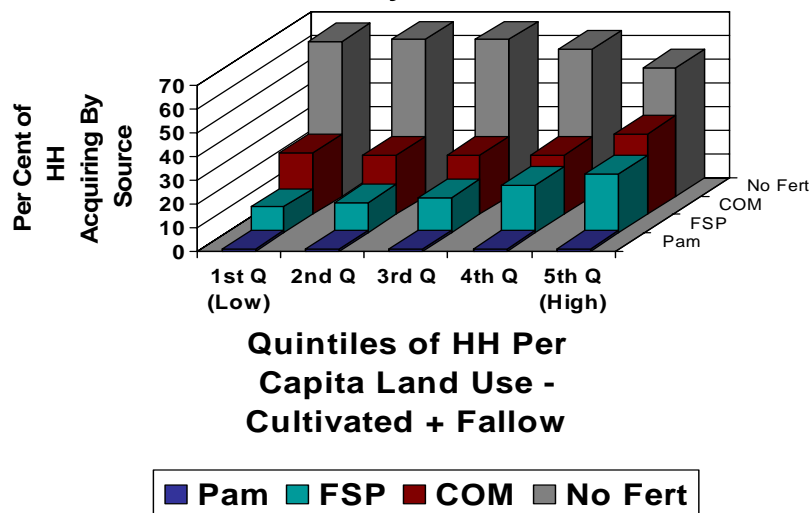
	2008 Ranked by Quintiles of CROP GROWING HHs Land Use Household Per Capita (Cultivated + Fallow)					2008
	Low	2	Mid	4	High	All Small-holders (0-20 ha)
	Land holding size household per capita -cultivated plus fallow. (ha/hh/pc)	0.08	0.16	0.26	0.41	1.01
Percent of all small households	18.72	21.9	19.36	20.01	20	100
% hhs in AEC Zone 1	21.37	19.7	18.72	22.29	25.5	21.5
% hhs in AEC Zone 2a	21.48	22.95	24.85	26.74	32.36	25.69
% hhs in AEC Zone 2b	12.76	15.27	14.95	12.61	9.97	13.15
% hhs in AEC Zone 3	44.39	42.08	41.47	38.36	32.16	39.67
% hhs in Northern	18.27	19.09	20	18.27	15.3	18.19
% hhs in Luapula	10.31	13.02	10.43	11.33	8.39	10.75
% hhs in Northwestern	10.8	9.13	9.42	7.02	5.74	8.4
% hhs in Copperbelt	7.34	4.43	5.87	4.58	5.51	5.5
% hhs in Central	12.15	10.65	10.91	12.43	13.86	11.98
% hhs in Eastern	10.47	18.33	21.05	21.89	22.95	19.02
% hhs in Lusaka	6.26	3.52	1.35	1.42	1.76	2.84
% hhs in Southern	9.62	9.01	10.37	13.59	19.62	12.43
% hhs in Western	14.79	12.81	10.59	9.47	6.87	10.89
TOTAL Households (Unweighted)	1,209	1,502	1,352	1,456	1,929	7,448
(Weighted)	279,581	326,945	289,117	298,862	298,692	1,493,197

### Village Leader Indication of Maize Grain Shortages in Their Areas When HHs Want To Buy

	Northern	LUA	NW	CB	Central	Eastern	Lusaka	Southern	Western	National
Number of Village Leaders Interviewed	179	119	67	41	61	238	27	163	158	1,053
% of Leaders saying there are months of year when hhs in village who want to buy maize but none available	93	87	97	85	88	97	96	94	95	93
Most Common Month	12	1	11	10	12	1	12	12	10	12
2 <sup>nd</sup> Month	1	2	12	11	1	2	1	1	11	1
3 <sup>rd</sup> Month	2	3	1	12	2	3	2	2	12	2

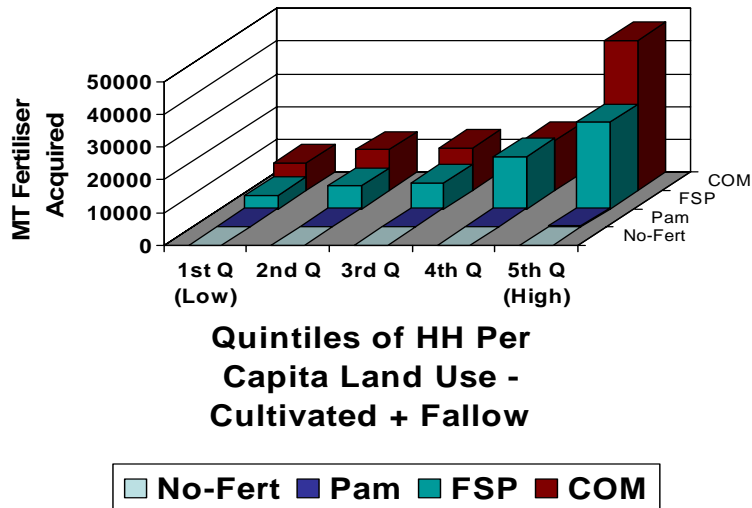
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### 2008 SS - Percentage of Fertiliser Use/Nonuse By HH Land Quintile



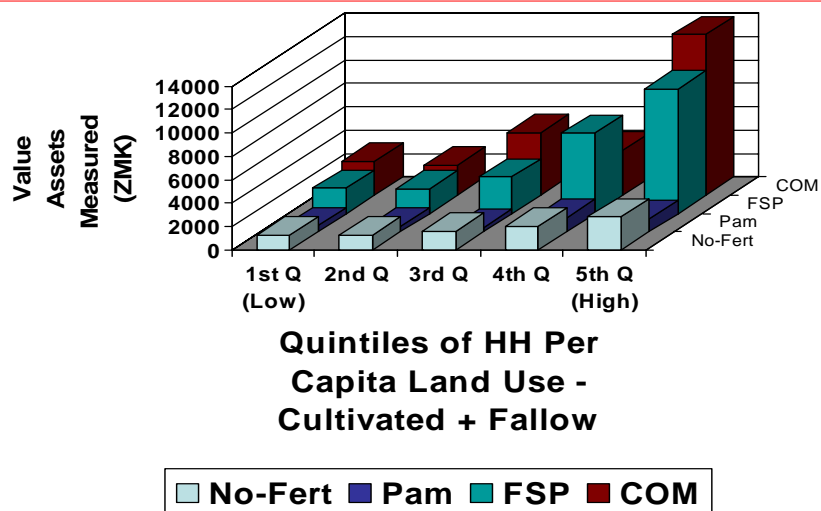
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## 2008 SS - Sources & Quantities of Fertiliser Acquired By Land Quintile



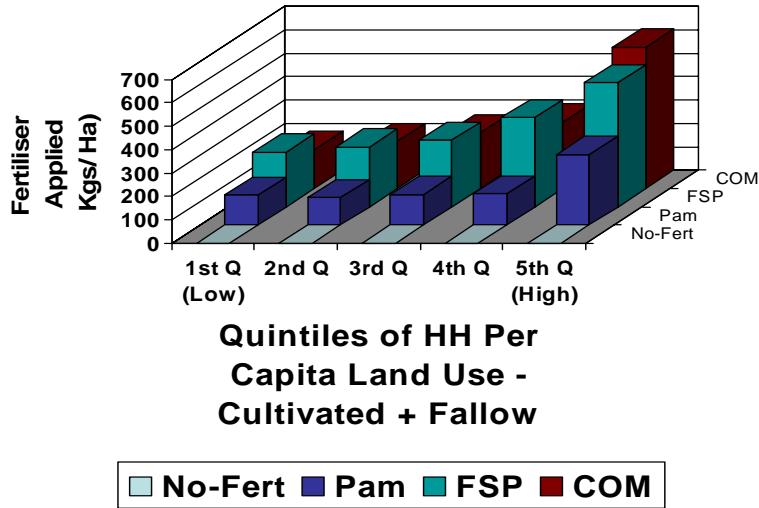
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## 2008 SS - Asset Situation By HH Land Quintile & Fertiliser Source



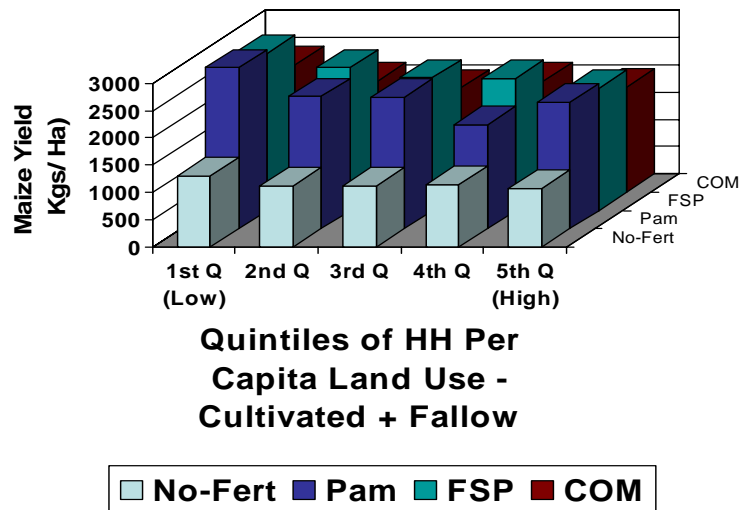
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## 2008 SS – Fertiliser Use (Kgs/ha) By HH Land Quintile & Fertiliser Source



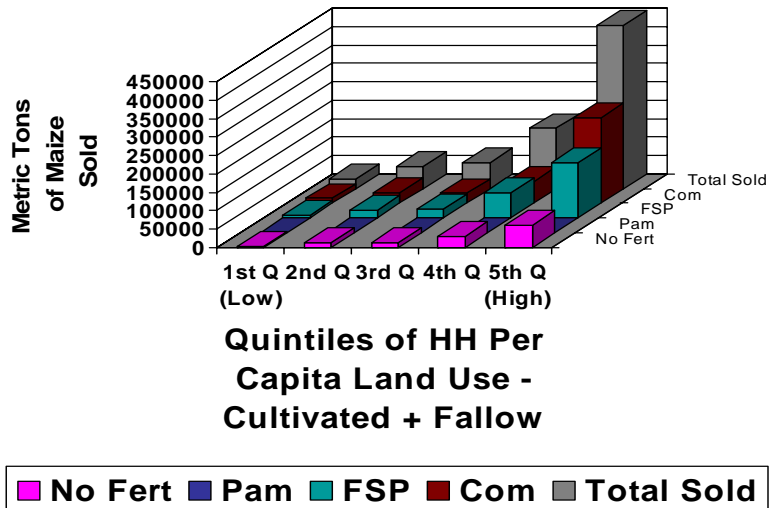
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## 2008 SS – Maize Yield (Kgs/ha) By HH Land Quintile & Fertiliser Source



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## 2008 SS – Metric Tons of Maize Sold By HH Land Quintile & Fertiliser Source



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## Public sector policies to keep urban/rural staple food prices at tolerable levels

1. Increase the availability of maize grain and other foodstuffs in public markets during the lean season for net buyers in both urban and rural areas.
2. Expand staple food options available to urban consumers to facilitate substitution in consumption when some retail food prices increase
  - Keep grain available in public markets
  - Promote marketing of cassava, sweet potatoes, etc.
  - Promote urban agriculture

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## Public sector policies to keep urban/rural staple food prices at tolerable levels (cont.)

3. Improved traditional storage for rural sellers and net buyer households – hold more maize grain supplies in rural areas?
4. Strengthen/improve crop forecasting and food balance sheet approach to determine need for imports/exports
5. Facilitate imports in a timely manner when needed

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## Other elements of a comprehensive strategy to keep food prices at tolerable levels for urban consumers

1. Investment in agricultural public goods (e.g., research & extension, MIS, infrastructure) to stimulate supply response and ag. productivity growth
2. Facilitate regional trade – plan to supply these key markets
3. Improve incentives for staple food imports/exports by the private sector; engender trust between public and private sectors
4. Expand, strengthen, and improve targeting of safety net programs & social protection

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Zikomo Kwambili,  
Natotela sana,  
L'i tumezi ahulu,  
Twalumba kapati,

**Thank you to Zambian smallholders,  
traders, consumers and to policy makers  
for opportunities to obtain/share  
information and ideas – we welcome  
questions and comments**

### Targeting Findings – 2008 SS (07/08 Marketing Season)

Indicators/Attributes	Means for Household Quintile Categories Ranked by Household Per Capita Farm Size Cropping HHs (Cultivated + Fallow)					Overall Small-holders
	1 Low	2.	3. Mid	4.	5. High	
HH PC Land Hold Size ha/hh	.08	.16	.26	.41	1.01	.38 ha/hh
Number of smallholders	279,581	326,945	289,117	298,862	298,692	1,493,197
% smallholders	18.72	21.90	19.36	20.01	20	100 %
Average HH Assets 000 ZMK	1,362 k	1,378	2,227	2,763	6,008 k	2,749 (000 ZMK)
Land size per HH ha/hh	.54	1.03	1.53	2.18	4.21	1.90
FSP As Source of Fertiliser	4,026 mt	7,049 mt	7,907 mt	15,881 mt	26,385 mt	61,248 mt *
FSP HHs Value of HH Assets	2,176 k	2,104 k	3,122 k	6,857 k	10,622 k	6,077 (000 ZMK)
Commercial Purchase Source	8,521 mt	12,414 mt	13,106 mt	15,371 mt	45,626 mt	95,039 mt
Pur. HHs Value of HH Assets	2,876 k	2,558 k	5,345 k	3,891 k	13,725 k	6,290 (000 ZMK)
PAM Food Security Pk Source	209 mt	110 mt	228 mt	315 mt	432 mt	1,294 mt
PAM HH Value of HH Assets	547 k	503 k	353 k	1,220 k	1,124 k	797 (000 ZMK)
Non-Fertiliser Users Assets	1,269 k	1,314 k	1,640 k	2,071 k	2,830 k	1,808 (000 ZMK)
Zambia Total Smallholder Fertiliser Used mt	12,756 mt	19,573 mt	21,241 mt	31,567 mt	72,443 mt	157,581 mt

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\* FSP records show that 84,000 mt of fertiliser were distributed for this production year

**Table 1 Annex. Small & Medium Farm Household Sources and Use of Fertilizer - Used Mostly for Maize**

Year	Crop Forecast Survey/SS – Main Source of Fertilizer Identified as FSP		CFS/SS Main Source –of Fertilizer Identified as Private/Commercial Purchase		Total Fertilizer Use (All Types of Fertiliser)	
	# Small-holders	Metric Tons Fertilizer	# Small-holders	Metric Tons Fertilizer	# Small -holders	Metric Tons fertilizer
02/03 SS	102,450	28,956	207,080	50,476	309,530	79,432
03/04 SS	101,139	33,034	171,274	41,507	272,413	74,541
06/07 SS	164,229	61,248	303,697	95,169	467,926	156,417
07/08 SS	140,612	43,596	286,514	89,951	427,126	133,547
07/08 CFS*	85,666	22,218	337,122	77,471	163,137	99,689
08/09 CFS	192,897	55,114	247,546	57,124	440,443	112,238

\*CFS – Needs Adjustment Per 2009 CSO Corrections In Population Weights

**Table 2 Annex. Comparison of Small & Medium Farm Source of Acquisition of Fertilizer - Mostly for Maize**

Year	Crop Forecast Survey/SS – Main Source of Fertilizer Identified as FSP		FSP Data on Program Accomplishments		CFS/SS Main Source –of Fertilizer Identified as Private/Commercial Purchase	
	# Small-holders	Metric Tons Fertilizer	# Small-holders	Metric Tons Fertilizer	# Small -holders	Metric Tons fertilizer
02/03 SS	102,450	28,956	120,000	48,000	207,080	50,476
03/04 SS	101,139	33,034	150,000	60,000	171,274	41,507
06/07 SS	164,229	61,248	210,000	84,000	303,697	95,169
07/08 SS	140,612	43,596	125,000	50,000	286,514	89,951
07/08 CFS*	85,666	22,218	125,000	50,000	337,122	77,471
08/09 CFS	192,897	55,114	200,000	80,000	247,546	57,124

\* Estimates - Adjusted Per 2009 CSO Corrections In Population Weights

Farmers' declarations FSP fertilizer received

FSP Records of fertilizer distributed to farmers

Farmers' declarations of open mkt purchases