

# Modernizing Africa's Fresh Produce Supply Chains without Rapid Supermarket Takeover

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## Towards a definition of Research and Investment Priorities

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Foundation  
Seattle

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- Slow growth and long slog for supermarkets
    - So how to invest productively in the chaotic “traditional” sector?
  - Farm level marketing
  - Downstream structure and issues
  - Prices
  - Process of change

# #1: Supermarkets will not dominate for many years

- Are present and will grow as economies modernize
- But growth in fresh produce market share has been very slow
  - Little if any apparent change in Nairobi from 2003 to 2009

## Fresh produce market share of retail channels by income quintile, Nairobi 2009 & urban Zambia 2007/08

Kenya (Nairobi) 2009							
Per capita income quintile	Super-market Chains	Small Super-markets	Duka/shop	Open Market	Kiosk	Butchery	Other minor outlets
----- % of total expenditure over 70 food items -----							
1 (lowest)	0.2%	0.1%	0.8%	37.8%	56.7%	0.0%	4.4%
2	0.1%	0.0%	0.5%	34.8%	60.9%	0.0%	3.7%
3	0.4%	0.0%	0.9%	35.9%	53.9%	0.0%	8.8%
4	0.9%	0.1%	0.8%	42.8%	39.2%	0.0%	16.2%
5 (highest)	15.6%	0.9%	0.1%	46.2%	30.3%	0.0%	6.8%
Overall	3.4%	0.2%	0.6%	39.5%	48.2%	0.0%	8.0%

Source: Tegemeo/MSU urban household expenditure survey, 2009

Zambia (four cities) 2007/08							
Per capita expenditure quintile	Mean per capita expenditure (USD)	Super-market Chains	Indep. Super-markets & Mini-marts	Grocers	Open Market	Ka Sector	Other minor outlets
----- % of total expenditure over 80 food items -----							
1 (lowest)	256	0.4%	0.0%	0.2%	67.8%	29.0%	2.6%
2	437	0.2%	0.0%	0.1%	69.4%	27.3%	2.9%
3	638	0.7%	0.0%	0.6%	72.6%	23.9%	2.2%
4	974	2.2%	1.1%	0.4%	63.4%	30.6%	2.3%
5 (highest)	2,582	9.1%	3.1%	1.0%	57.7%	27.3%	1.7%
Overall	977	3.1%	1.1%	0.5%	65.5%	27.6%	2.3%

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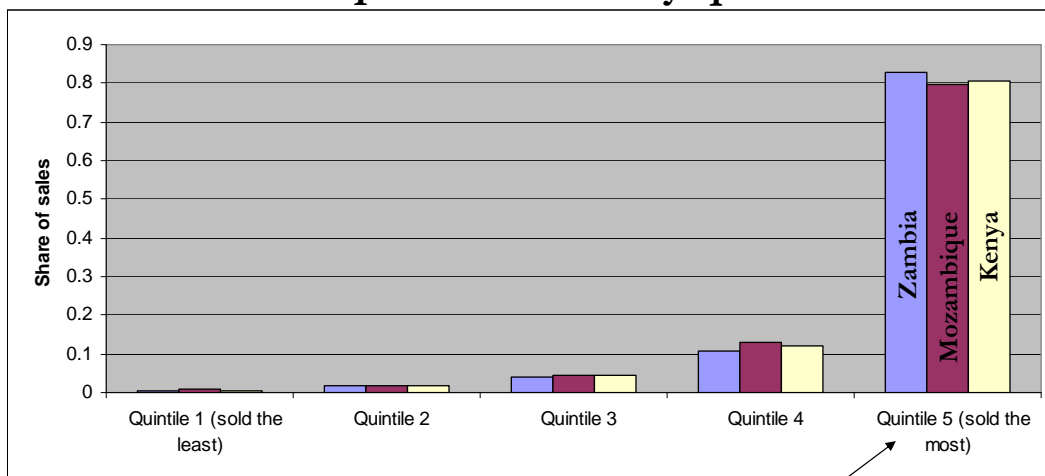
# #1: Supermarkets will not dominate for many years

## □ The 20/20/20 Challenge

- Across most of the continent, fresh produce sales by supermarkets will have to grow:
  - 20% in real terms
  - For 20 years
  - To reach a 20% market share
- 14% per year in Zambia and Kenya
- So must focus on how to improve the currently chaotic “traditional” sector

# #2: Sales are highly concentrated

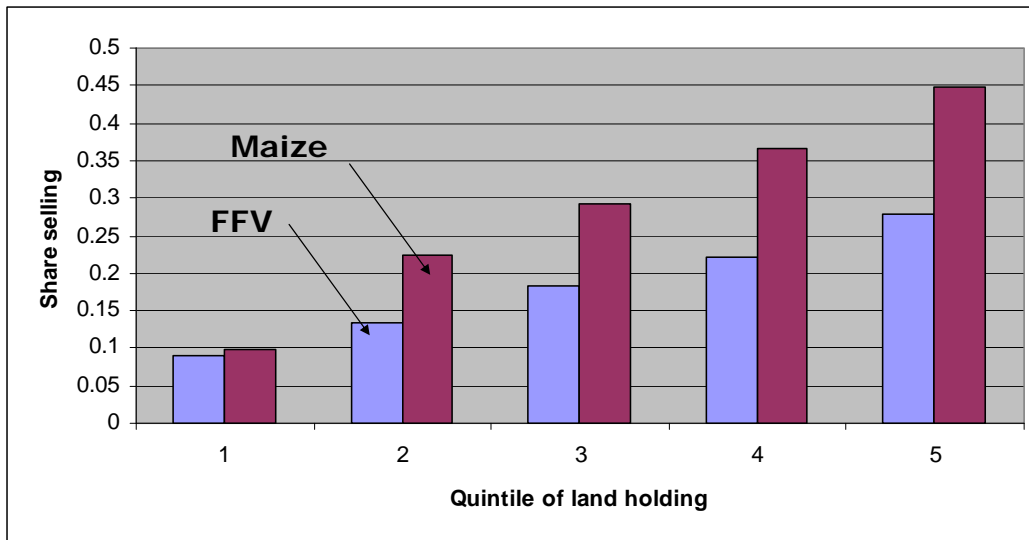
## Share of fresh produce sales by quintile of sales



3%-4% of rural hhs in Zambia, Mozambique, 15% in Kenya

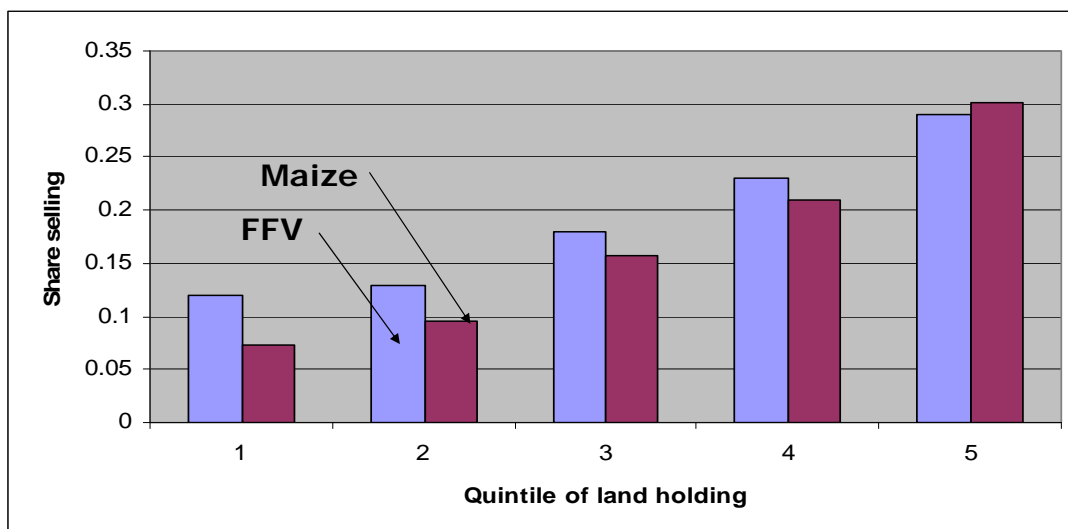
### #3: Except for Kenya, hort not playing major role for land constrained farmers

#### Share selling ffv and maize, by quintile of land holding ZAMBIA



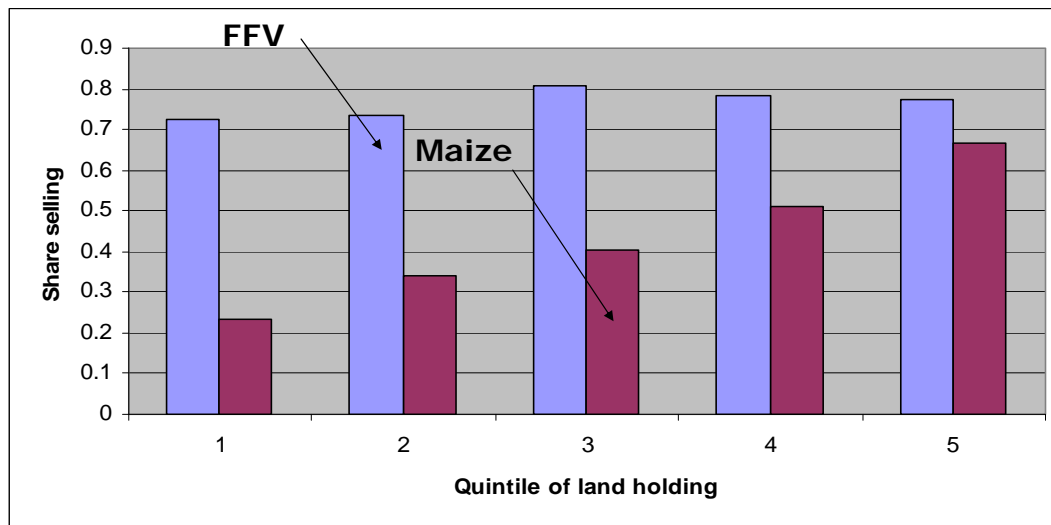
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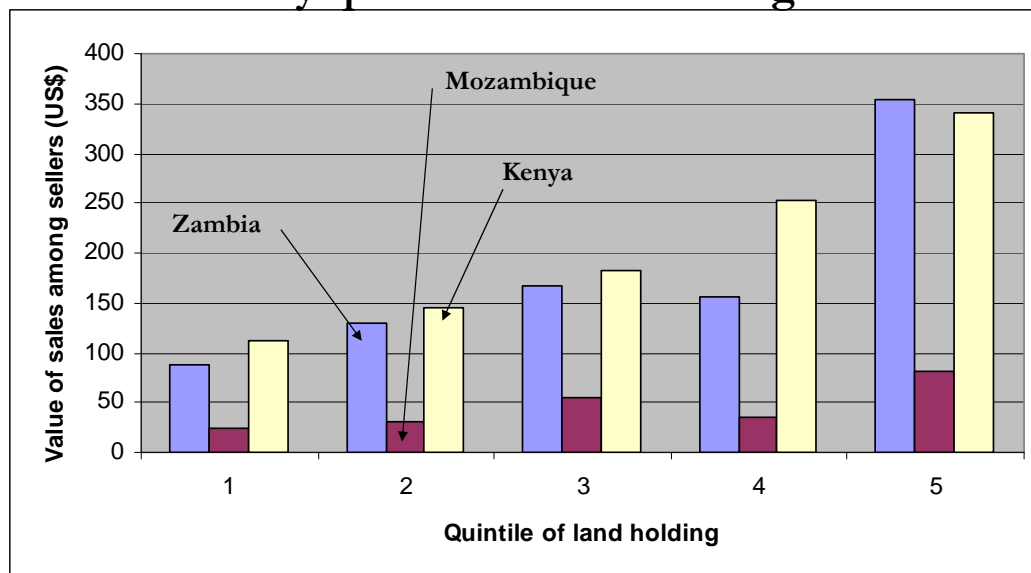


### #3: Except for Kenya, hort not playing major role for land constrained farmers

#### Share selling ffv and maize, by quintile of land holding KENYA



#### Mean earnings from FFV sales, among sellers, by quintile of land holding



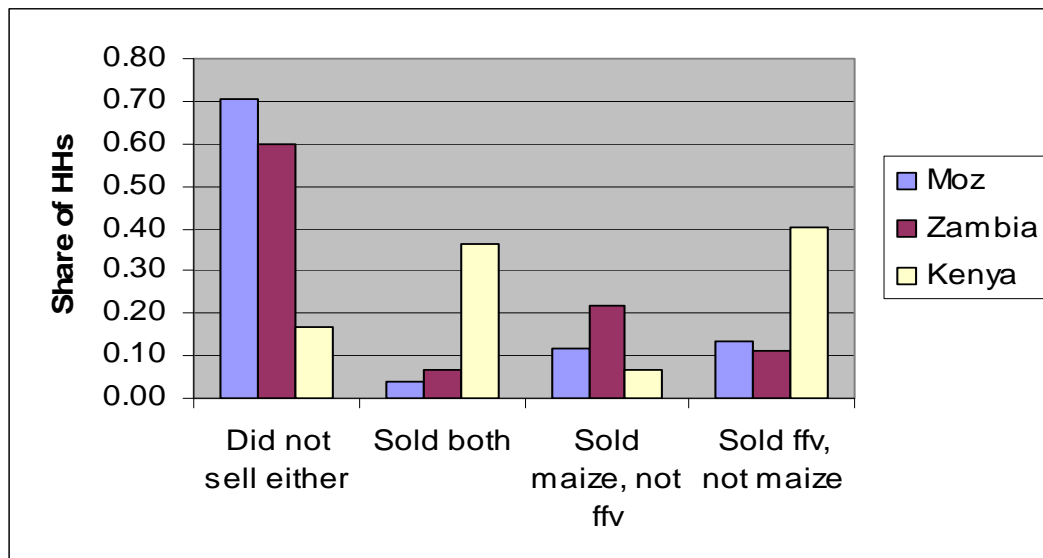
# Why is Kenya different?

## □ Hypotheses

- Population density
  - access to markets
- More off-farm income
  - cash to finance inputs, absorb risk
- Higher input use in general
- Higher education

## #4: Hort does play role for those not selling maize

### HH classification by sales behavior on maize and FFV



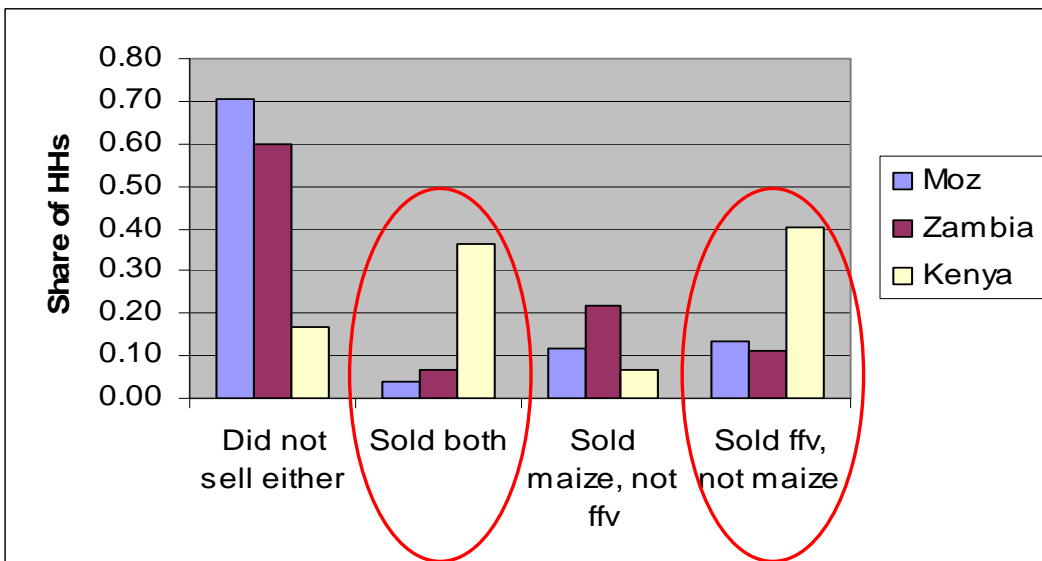
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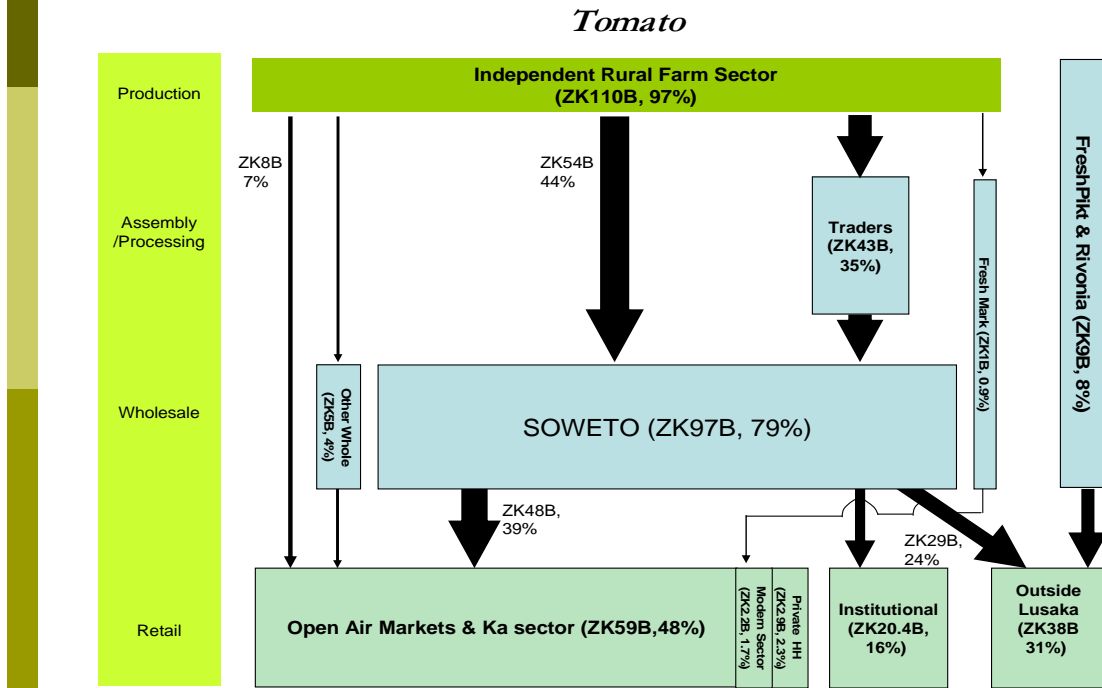


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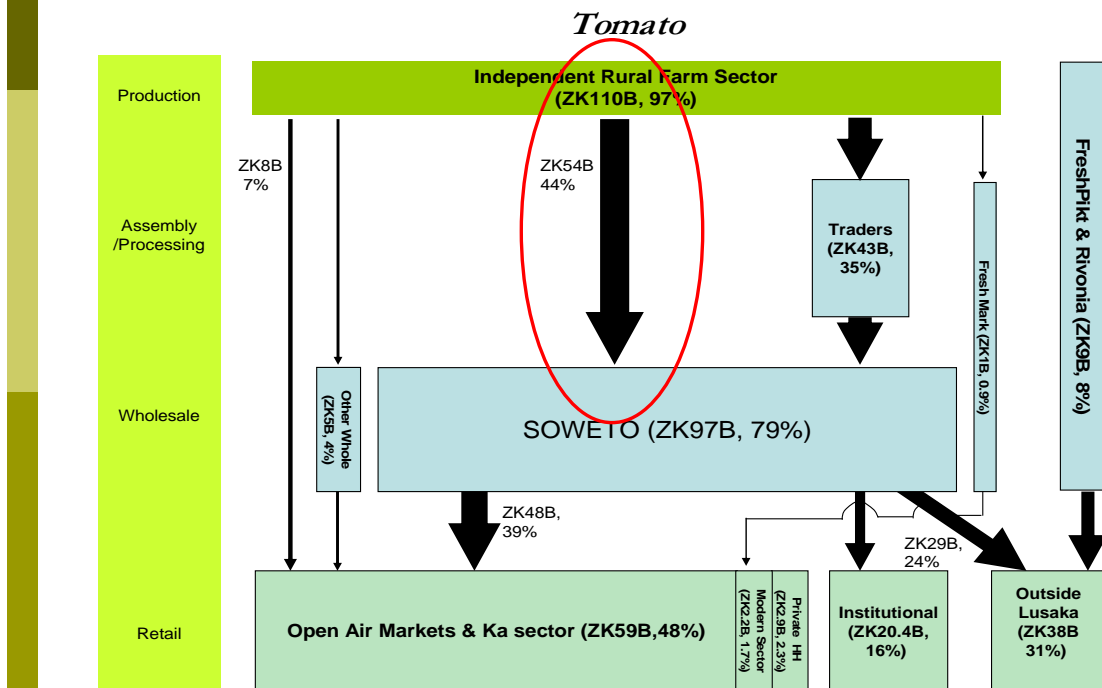
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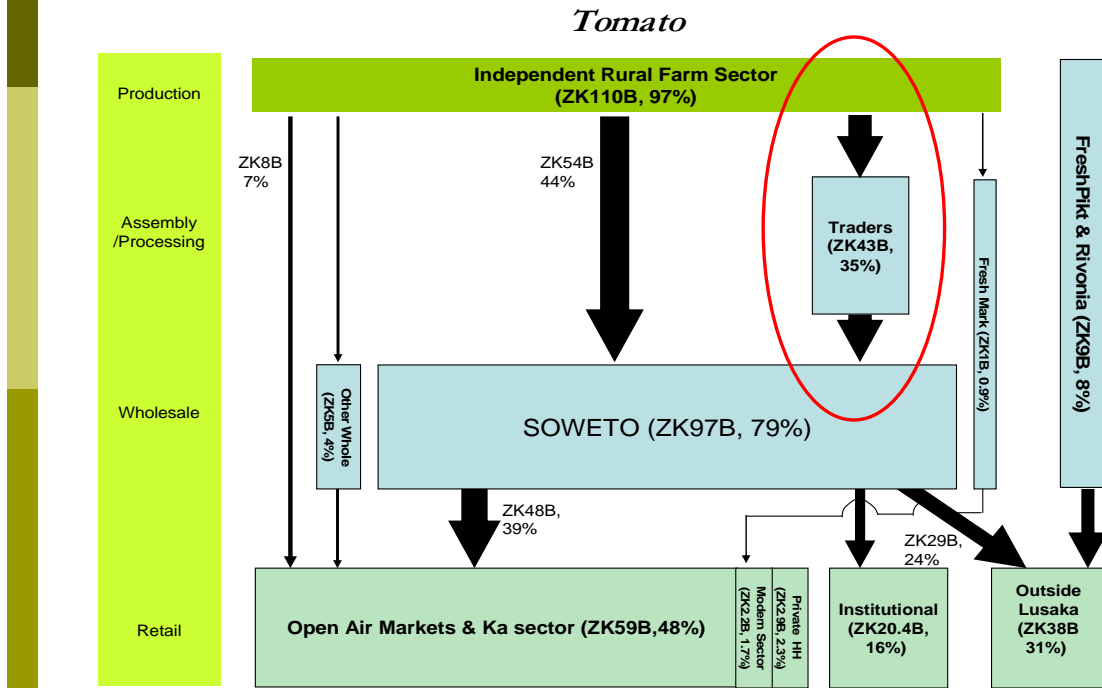
# #5: Supply chains are short (illustrated by Zambia)



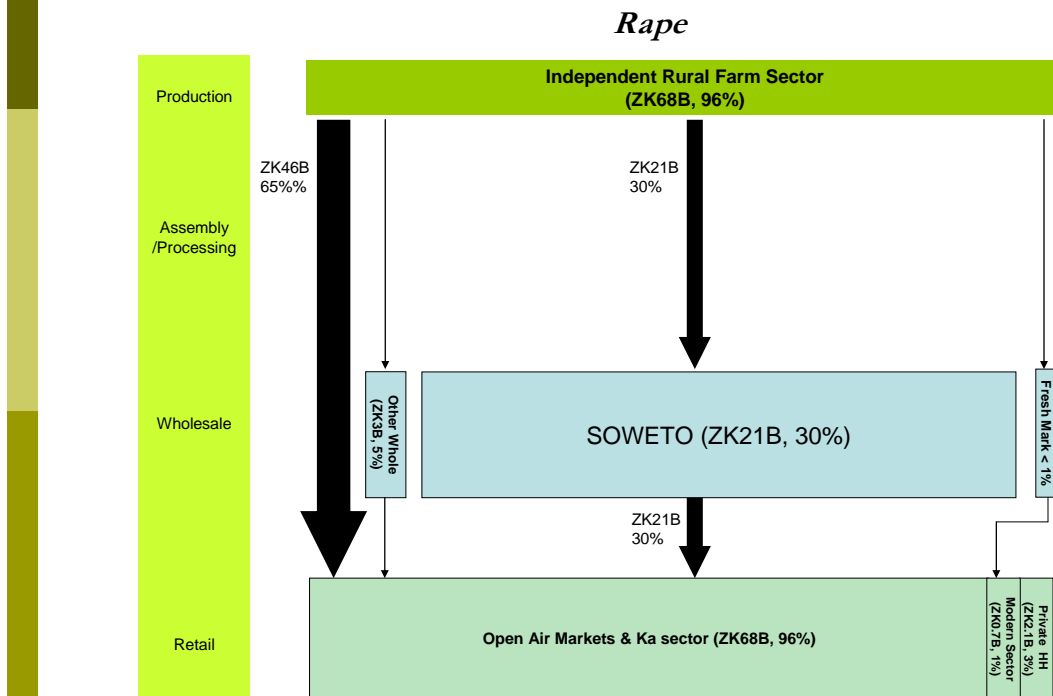
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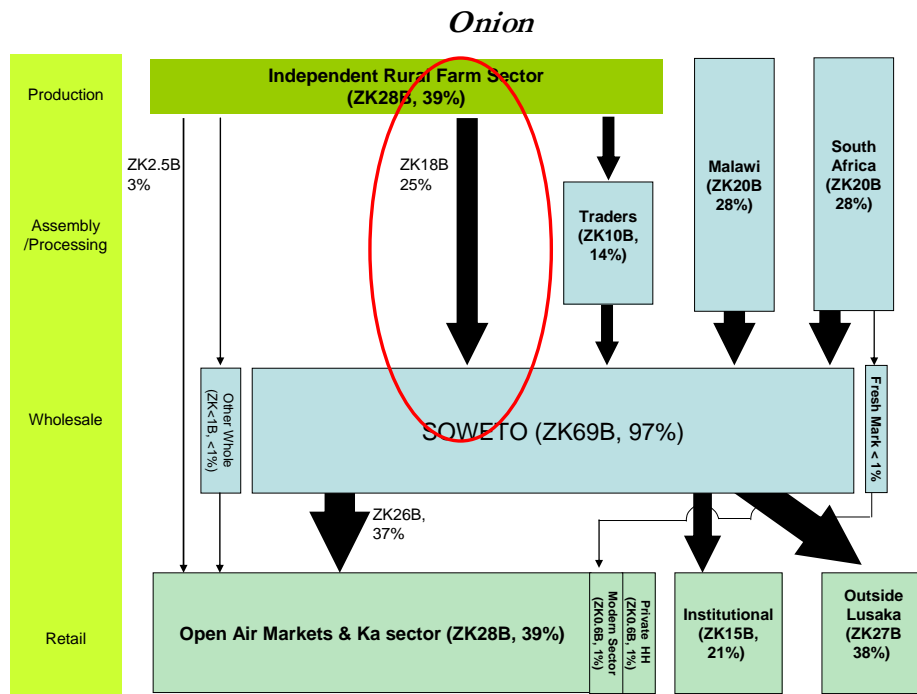


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## #5: Supply chains are short

- Chains are bit longer in Kenya
  - More rural assembly
  - So more scope for shortening chain

## #6: Wholesaling has decentralized with no strategic vision

- And little or no investment
- Far too little consultation and use of empirical information in many investment that have been made
- Maputo a partial exception
  - Zimpeto market ... but clear emerging problems
  - Possible emerging Matola market
- Kenya may be on verge of bucking the trend
- Possibly the very beginnings of a process in Zambia for better planning

## #7: Prices are highly unstable, driven by even more unstable quantities

### Measures of price variability at wholesale, Lusaka

Variability measure	Tomato		Rape		Onion	
	Price	Quantity	Price	Quantity	Price	Quantity
CV	0.51	0.31	0.48	0.41	0.41	0.47
Mean day-to-day absolute % change	20%	29%	30%	32%	7%	56%
Share of day-to-day changes > 20%	39%	51%	52%	56%	5%	64%

Source: FSRP Vegetable Market Volumes and Prices Monitoring Data January 2007 to January 2009.

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- Very poor information flows
- Issue of brokers, how they operate, lack of any regulation
- Address these issues before trying to put in cold chains

## Emerging conclusions/recommendations

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- Hort not a silver bullet for land constrained farmers
  - But it can reach farmers who either cannot or do not sell maize
  - Need to examine this group more carefully

## Emerging conclusions/recommendations

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- Where chains are short (Zambia, Mozambique), focus on efficiency of wholesaling
  - Where they are longer (Kenya), may be payoff to more directly linking farmers to wholesale traders
- Must improve information flow in system
  - Incoming quantities
  - Signs of pest problems seen in markets
  - Extension to farmers
  - Regulatory changes a necessary condition for technology platforms (sms) to add value



## Emerging conclusions/recommendations

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- Soft infrastructure 1<sup>st</sup>, hard infrastructure 2<sup>nd</sup>
  - Legislative and regulatory frameworks
    - Rethinking public vs. private roles and facilitating this legislatively
    - The role of brokers
  - Information systems
- Wholesale 1<sup>st</sup>, retail 2<sup>nd</sup>
  - The opposite of what's been done in Zambia
  - Maputo has some good lessons
    - But didn't deal sufficiently with ownership/mgmt issues



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*Thank you*