

Changing Horticultural Supply Chains in Africa: Implications for Government and Donor Investments

Evidence from Kenya and Implications for Africa

David Tschirley and Milton Ayieko
Michigan State University and Tegemeo Institute of Agricultural
Policy and Development, Nairobi

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Focus

- ❑ What is the current mix of “traditional” and “modern” supply chains in horticultural markets of Africa?
- ❑ How is this mix likely to evolve over the next 10-20 years? What are the key factors that will influence this evolution?
- ❑ What does this imply about government and donor investment programs over the next decade?

Roadmap

- Concerns about supermarket growth in Africa
- Basic conditions of supply and demand in Africa
- Current shares of supermarkets and “traditional” channels in the fresh produce market in Kenya
 - Growth scenarios
- Characteristics of shoppers in supermarkets and “traditional” channels
- Implications for government and donor investments

Concerns about Supermarkets

- Exclusion of small farmers due to:
 - Heavy emphasis on quality, timeliness, and safety
 - Tough for small farmers to meet these conditions
 - Many failures in attempts to help them do this
 - Rapid movement towards centralized distribution and “preferred supplier” programs
 - Smaller number of larger farmers delivering to centralized distribution warehouses
 - Rapid take-over of market share

Key point: all these factors have to come together for exclusion to be a major policy issue

Basic conditions of supply in Africa

- Jo Swinnen makes a very simple but very important observation in Eastern Europe:
 - “in some cases, small farmers represent the vast majority of the potential supply base”
- This is absolutely true in Africa outside of South Africa
 - Small farm sizes (typically > 90% farm < 4 ha)
 - Safety first orientation

Basic conditions of demand in Africa

- Very few consumers own vehicles or refrigeration
 - Locational convenience is key
- 59% of FFV in Nairobi purchased by hhs with per capita incomes < \$2/day
 - Price levels are key
- In rural areas of Kenya, 79% is purchased by such hhs
- In Uganda, Tanzania, Mozambique, Malawi, Zambia ... these characteristics even more accentuated

These basic production and consumption patterns don't change overnight

Are they even moving in the "right" direction?

Production and consumption patterns in Africa: Two Questions

- ❑ How will these patterns affect the *rate* at which modern retail outlets grow?
- ❑ How will they affect *the way* in which they grow?

- ❑ Will they be able to reach a 20-30% market share without depending on smallholders?
- ❑ Will they be able to reach such shares while emphasizing quality as the main driver?
- ❑ What mix of quality and reduced cost is needed to really grow market share, given characteristics of farmers and consumers?

Current supermarket shares

- “Basic foods”
- Fresh produce
- Rural areas

Market shares of various retail outlets in sales of “*basic foods*”, Nairobi, October 2003

Per capita Income Quintile	Mean Per Capita Income (Ksh)	Market Outlet						
		Super- market Chains	Small super- market	Duka/shop	Open Market	Kiosk	Butchery	Other Minor Outlets
----- % of total expenditure over 40 food items -----								
1 (lowest)	7,407	2.5%	4.0%	33.9%	20.6%	19.6%	12.0%	7.4%
2	19,199	6.4%	5.0%	33.0%	17.4%	15.0%	16.2%	7.0%
3	33,567	2.8%	5.7%	34.7%	21.6%	13.4%	15.9%	6.0%
4	59,560	9.0%	4.3%	30.0%	19.8%	15.0%	18.3%	3.8%
5 (highest)	276,698	25.7%	4.9%	19.0%	15.7%	12.0%	18.1%	4.6%
Overall	79,079	11.5%	4.8%	28.7%	18.7%	14.3%	16.7%	5.4%

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Slightly more than 1 in 10 Ksh spent on “basic foods” are spent in supermarket chains ...

... but these purchases are concentrated among wealthiest 20% of the population

Market shares of various retail outlets in sales of *fresh fruits and vegetables*,
Nairobi, October 2003

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*Fewer than 1 in 20 Ksh
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*Open air markets and
kiosks dominate*

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What about rural areas?

- ❑ Survey of 2,300 smallholder households
- ❑ Over 90% purchased FFV last month
- ❑ 40% of the national fresh produce market is in rural areas
- ❑ Supermarkets have essentially no share in this market

Growth scenarios

- To reach a 20% market share in 10 years, supermarket FFV sales would have to grow, *in real terms*, 31%/year over the decade
- 22%/year to reach a 10% market share
- Neven and Reardon report that *total* supermarket sales have grown 18%/year over past 5 years
 - Fresh produce sales have grown more slowly than this
- Uchumi announced that it would close 7 stores this year

Characteristics of shoppers

- Highly diverse shopping habits
 - 94% used at least 3 outlet types last month
 - 75% used at least 4
 - This was true across the income spectrum
 - 15% of the poorest households (bottom quintile) visited a supermarket last month
 - 77% of the richest (top quintile) visited a Duka/small shop or an open air market
 - 62% of the richest visited a kiosk

Characteristics of shoppers (2)

□ Supermarket shoppers:

- Older
- More educated
- Larger households
- Female-headed
- Much wealthier (mean incomes >3x higher; median income >2x higher)
- Much more likely to own a car (45% vs. 5%) and a refrigerator (50% vs. 8%)

Education, female-headedness, income, and ownership of car or refrigerator hold up in regression analysis

Characteristics of shoppers (3)

□ Bottom two-thirds of the income distribution:

- One-quarter of all shoppers in supermarket chains (N&R report one-half)
- One-fifth of total food expenditures in supermarket chains (N&R report one-third)

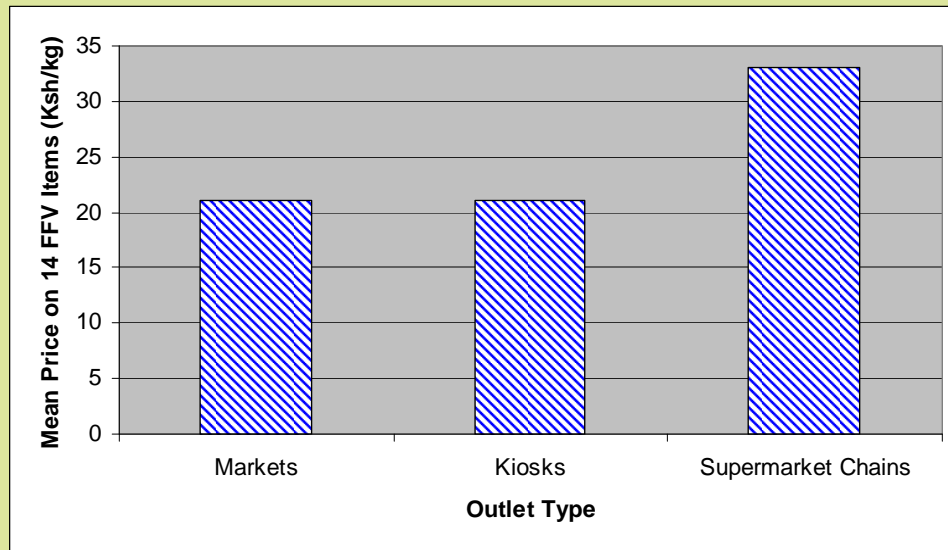
□ The top 10% of earners

- 40% of all shoppers
- One-half of all expenditures

Our data suggest that supermarket chains remain highly dependent on high income shoppers

Prices on comparable FFV items are 60% higher

Mean prices of 14 FFV items in open air markets, kiosks, and Supermarket chains, Nairobi, October 2003



Implications

- All these results point to the persistence for the foreseeable future of a **highly diversified** system, especially in FFV
- Supermarkets will be one part of this
 - A small part in most African countries' FFV systems
- Supermarkets in Kenya will have, at most, 10-20% of the FFV market in 10 years' time
 - Less in less urbanized and poorer countries of Africa
- Remember that in Latin America (with exception of Argentina and Brazil), supermarket FFV shares are all 20% or lower

Implications (2)

- We come back to the need to focus on the traditional marketing system
 - Modernize the whole supply chain
 - Role of traditional market intermediaries
 - Wholesale, retail, and assembly market places
 - Vertical linkages up and down the chain
 - How to establish an *on-going decision making process* informed by applied research

Implications (3)

- Market information, grades & standards, packaging
 - Extension throughout the chain
- Training and increased access to capital for traditional market intermediaries
- Invest in wholesale and retail (and assembly?) market places
 - Keep them clean
 - Traffic flow
 - Simple value-added (washing, slicing & dicing, packaging)

Implications (4)

- Invest in a *decision making process* informed by applied research
 - Supply chain development task force with permanent analytical staff
 - Applied research and outreach
 - Involve municipal authorities
 - A *partnering approach* with public officials, traders, farmers, donors, NGOs