

## 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

## 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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Open air markets and kiosks dominate

## 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*

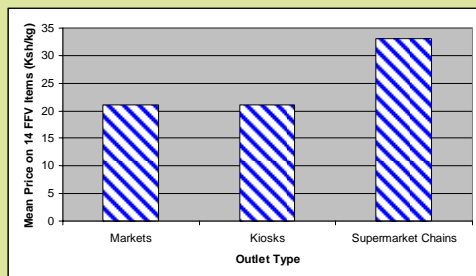
## Characteristics of shoppers (3)

- 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