

---

## Improving Kenya's Domestic Horticultural Production and Marketing System: Current Competitiveness, Forces of Change, and Challenges for the Future

---

Kavoi Mutuku Muendo, David Tschirley, and Michael T. Weber

*Presented at Tegemeo Institute Conference on ....., 24 March 2004  
Nairobi*

---

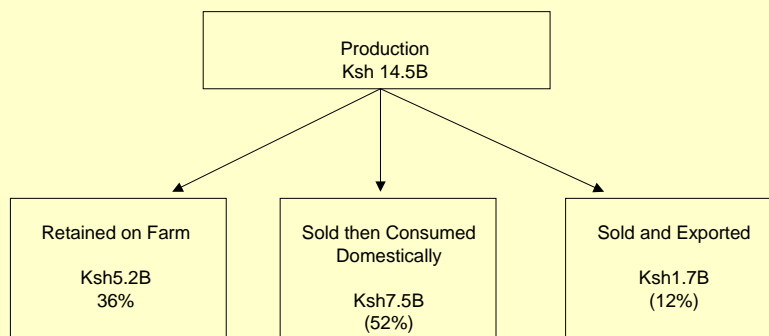
### Outline

- Relative sizes and future prospects for export and domestic horticulture
  - Horticulture in smallholder livelihoods
  - Regional competitiveness
  - Marketing channels
    - The traditional system and “the supermarket market”
  - The way forward
-

## Relative Sizes of Domestic and Export Systems

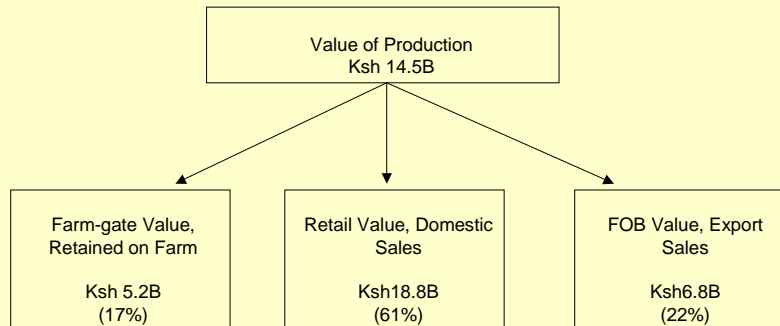
- Kenya's export horticulture has received far more attention than the domestic system
  - Google search for "Kenya Horticulture"
    - 31,700 entries
    - Of first 80, 40 were about export system, 5 about domestic system, and 35 about other issues
- Yet the domestic system is much larger, and has shown more absolute growth

Market channel shares (farm, local sales, export sales) of total vegetable production in Kenya, 1997-2001, valued at farm-gate prices



Source: Derived from Tegemeo/MSU 2000 household survey data, production data from MoALRD, and export data from HCDA

Total value added (and share) in farm, local sales, and export sales channels for vegetables in Kenya, 1997-2001



Source: Derived from Tegemeo/MSU 2000 household survey data, production data from MoALRD, and export data from HCDA

***Export horticulture is quite substantial and important, but domestic system is much larger ... and affects many more people***

## Future Prospects for Domestic and Export Horticulture

- Growth in exports has declined over past decade
  - To 4%/year from 17% during 1974-1983
  - Annual growth in demand in domestic system could exceed 5% on sustained basis if per capita income begins to rise
- Smallholder share in export market has fallen
  - 75% in early 1990s
  - Estimates of current share range from 55% to 11%
    - Most likely around 45%
  - Clear decline, and tough challenges ahead
  - Nearly all smallholders produce FFV, and about 70% sell, but only 2% produce for export market

## Future Prospects for Domestic and Export Horticulture (2)

- 4% annual growth in export horticulture is still substantial
  - But good policies and programs will be needed to maintain or slightly increase that growth rate ... and the rate could fall
  - Also a real chance that smallholder share could continue to fall
    - Traceability and process standards a big problem for smallholders
- Growth rates in domestic system could rival or exceed those in export sector over next several years
  - And domestic system is already much larger ...
  - ... and dominated by smallholder production

## Horticulture in Smallholder Livelihoods

- FFV income shares for smallholders range from about 7% to over 25%, depending on region
- Production and sales are quite concentrated
  - Top 20% of sellers – 15% of population – account for 80% of all sales
  - Concentration much higher for individual crops
- But income share of horticultural sales for even this top group is only 22%
  - 24% for off-farm work
  - More room for specialization!

## Regional Competitiveness

### Apparent Import Shares for Selected FFV in Kenya

Crop	Formal Imports,	Mean Production,	Domestic Marketed	Import Market Share	
	Nov 01 - Oct 02 (mt)	2001 and 2002 (mt)	Surplus, % of Production	Lower Bound	Upper Bound
Bananas	6,885	1,060,000	0.44	1.5	6.9
Tomato	3,255	262,500	0.72	1.7	7.9
Oranges	4,300	126,000	0.65	5.0	20.8
Onions	9,880	58,000	0.72	19.1	54.2

## Regional Competitiveness (2)

- Dualistic system
  - Export sector is internationally competitive
  - Traditional system is not even regionally competitive
    - Few if any regional exports
  - Determinants
    - Very high transport costs
    - “Policing” orientation in seed sector
      - Less varietal development and dissemination than in Tanzania
    - Tough disease problems, e.g., citrus greening

## Domestic Marketing Channels

- Dramatic language surrounding supermarket expansion
  - A “revolution” in food retailing
  - Market “saturation”
  - “Spilling over” into secondary cities
  - “Waves of investment” ... “brushfire of investment”
  - Supermarkets are “taking over” urban markets
  - “Disappearance” of small retail shops
  - “Overwhelmingly major force”

## Domestic Marketing Channels (2)

- Is the empirical evidence as dramatic?
  - “Despite the growth ..., expectations regarding ‘(supermarket’s) ... ability to displace traditional retailing have not been met.” (Schwentesi and Gomez, 2002; Mexico)
  - “The (traditional wholesale market) system is still dominant in the FFV wholesale system.” (Farina, 2002; Brazil)
  - Despite the rapid rise of supermarkets, ... small fruit and vegetable shops ... still dominate horticultural retail.” (Ghezán et al, 2002; Argentina)

## Domestic Marketing Channels (3)

- What about Kenya?
  - Likely supermarket share of FFV <10% in Nairobi, based on patterns in Central America and relative prices in Nairobi
    - Supermarket prices >50% higher than in traditional system
  - Well below 10% in rest of country
  - Being confirmed by emerging data from Tegemeo's urban survey
  - Also consistent with emerging estimates from independent research

## Domestic Marketing Channels (4)

- How rapidly is the supermarket FFV share likely to grow in Kenya?
- Demand-side determinants include
  - Per capita income and growth rate,
  - Urbanization

**Comparison of per capita incomes, urbanization, and supermarket share of FFV market in selected Latin American and African countries (sorted by PPP per capita income)**

Country	GNI	PPP GNI	Urban	FFV	Source of FFV share
	per capita	per capita	Pop. %	supermarket share	
Argentina	6,940	10,980	89	23 (1997)	Ghezán et al
<b>South Africa</b>	<b>2,820</b>	<b>10,910</b>	<b>55</b>	<b>15-20??</b>	<b>Weatherspoon, et al</b>
Costa Rica	4,060	9,260	52	18 (2002)	Berdegúe, et al
Chile	4,590	8,840	85	3-8 (2001)	Reardon and Berdegúe
Mexico	5,530	8,240	74	21 (2001)	Schwentesius and Gomez
Brazil	3,070	7,070	81	37 (1996)	Farina
Colombia	1,890	6,790	75		
El Salvador	2,040	5,160	47	11 (2002)	Berdegúe, et al
Guatemala	1,680	4,380	40	9 (2002)	Berdegúe, et al
Ecuador	1,080	2,960	62		
Honduras	900	2,760	47	12 (2002)	Berdegúe, et al
Bolivia	950	2,240	65		
Nicaragua	355	2,150	65	5 (2002)	Berdegúe, et al
<b>Kenya</b>	<b>350</b>	<b>970</b>	<b>33</b>	<b>5 (2002)</b>	

**Comparison of per capita incomes, urbanization, and supermarket share of FFV market in selected Latin American and African countries (sorted by % urban population)**

Country	GNI	PPP GNI	Urban	FFV	Source of FFV share
	per capita	per capita	Pop. %	supermarket Share	
Argentina	6,940	10,980	89	23 (1997)	Ghezán et al
Chile	4,590	8,840	85	3-8 (2001)	Reardon and Berdegúe
Brazil	3,070	7,070	81	37 (1996)	Farina
Colombia	1,890	6,790	75		
Mexico	5,530	8,240	74	21 (2001)	Schwentesius and Gomez
Bolivia	950	2,240	65		
Nicaragua	355	2,150	65	5 (2002)	Berdegúe, et al
Ecuador	1,080	2,960	62		
<b>South Africa</b>	<b>2,820</b>	<b>10,910</b>	<b>55</b>	<b>15-20??</b>	<b>Weatherspoon, et al</b>
Costa Rica	4,060	9,260	52	18 (2002)	Berdegúe, et al
El Salvador	2,040	5,160	47	11 (2002)	Berdegúe, et al
Honduras	900	2,760	47	12 (2002)	Berdegúe, et al
Guatemala	1,680	4,380	40	9 (2002)	Berdegúe, et al
<b>Kenya</b>	<b>350</b>	<b>970</b>	<b>33</b>	<b>5 (2002)</b>	

## Domestic Marketing Channels (5)

- Kenya's per capita purchasing power less than 1/2 that in poorest Latin American country
- Urbanization also the lowest of all these countries
- FFV market share of supermarkets generally 20% or less even in wealthiest Latin American countries
  - Brazil an exception at 37%
- Overall food shares of supermarkets can be much higher
  - 36% overall food share in Central America, only 10% on FFV
  - Similar patterns in South America
  - Almost certainly the same in Kenya, though data lacking

## Domestic Marketing Channels (6)

- Kenya's "traditional" marketing system will almost certainly maintain a very large share of the FFV market for the foreseeable future
  - At least 80%, probably higher
- What does this imply about policy?

## Domestic Marketing Channels (7)

- Recommendations out of the “supermarket literature”
  - “... development agencies must internalize the fact that, increasingly, ‘product markets’ will mean ‘supermarkets’.” (Reardon and Berdegúe, 2002)
  - “... a market-demand driven approach would start by identifying the principal buyers that are leading the market ... these change agents are the supermarket procurement officers of the leading chains ...” (Weatherspoon et al, 2003)

*We believe that, for FFV supply chains, these conclusions are overstated and risk misallocating government and donor development resources*

## Domestic Marketing Channels (8)

- We suggest that the rise of supermarkets does not alter the fundamental challenge facing development planners focusing on FFV:
  - How to expand domestic and regional markets and integrate smallholders into profitable supply chains
- Improving quality and reducing costs in wholesale markets and “traditional” retail outlets will be central to meeting this challenge
  - The rise of supermarkets creates one more competitive dynamic that may lend more urgency to these issues

## Domestic Marketing Channels (9)

- There is a vast literature on these issues
  - FAO’s “Food Into Cities” project
  - MSU’s work on Latin American food systems in 1970s and 1980s
  - Others (John Thompson and group at IIED)
- We need to “dust off” some of this work, adapt it to new realities, and keep our eyes on the broader food system

## Conclusions, Recommendations

- Need investment in three areas
  - Legal and regulatory environment
  - Technical production constraints
  - “Hard” and “soft” market infrastructure
- Resource needs far outstrip government’s ability to pay
  - Need partnering between government, various donors, private sector, and NGOs

## Conclusions, Recommendations (2)

- Legal/regulatory and technical aspects come together on seed
  - How to replicate Tanzania’s apparent success in village level Quality Declared Seed programs
  - Need a regulatory approach that facilitates innovation, avoids heavy policing approach

## Conclusions, Recommendations (3)

- Hard and soft market infrastructure
  - Traditional wholesale markets need to be a key focus
    - Improved logistical efficiency,
    - Hygiene,
    - Grades and standards, and price information by grade
  - Authorities need business orientation while realizing that they are creating a public good
    - Expanding access of smallholder farmers and poor consumers to more dynamic, lower cost marketing system
  - Public/private/NGO partnering is crucial

## Further Research

- Urban retailing
  - Market shares, costs, SOPs and bottlenecks in procurement of various retail outlet types
- Urban wholesaling
  - Identify specific investments to improve logistics, hygiene, and market information
  - Partnering is key
- Rural-urban links
  - What are the hallmarks of successful horticultural farmers?
    - Farmer characteristics and institutional supports that facilitate greater commercialization

---

## Further Research (2)

- Rural marketing
    - Many rural households likely to be net buyers
    - So performance of the rural marketing system will affect real incomes of net sellers and net buyers
-