WHERE DO CONSUMERS IN NAIROBI PURCHASE THEIR FOOD AND WHY DOES THIS MATTER? THE NEED FOR INVESTMENT TO IMPROVE KENYA’S “TRADITIONAL” FOOD MARKETING SYSTEM

David L. Tschirley, Miltone Ayieko, Mary Mathenge, and Michael T. Weber

There has been much interest recently in the professional and popular press regarding the “rapid rise” of supermarkets and the negative impact they may have on smallholder farmers in the country. Recent empirical research by Tegemeo Institute helps put these claims in perspective, and provides guidance for decision makers regarding “best bet” investment to improve the welfare of small farmers and poor consumers.

WHAT IS THE PROBLEM? Studies presented in recent professional conferences in Nairobi, and articles in the popular press have sounded the alarm regarding the “rapid growth” of supermarkets in the country and the negative impact this growth may have on smallholder farmers. Briefly put, these articles have indicated that supermarkets are rapidly taking over market share in Kenya’s food system, and that they are progressively by-passing smallholder farmers and traditional markets to obtain their supplies directly from medium- and large-scale farmers. These patterns are said to be consistent with those found throughout the developing world. As a result, it is claimed, small farmers may be increasingly confined to a rapidly shrinking and poorly functioning “traditional” marketing system, while larger farmers serve the growing -- and more profitable -- “modern” sector.

These arguments have been made especially for the fresh fruit and vegetable (FFV) sector, because it is in this sector that the impact of supermarket growth would be greatest, due to the fact that these products are not processed prior to consumption. Policy recommendations that have been put forth in these papers focus heavily on the need to help smallholder farmers of fresh produce to penetrate this growing “supermarket market”, and have stressed that the window of opportunity to do so is very small, perhaps only the next five years.

In this Policy Brief, we present results of empirical research on these issues, and ask “How should Kenyan policy makers respond to these warnings?” We first briefly describe how we studied these issues, then present our findings, and finally discuss the implications of these findings for policy and investment in Kenya.

HOW WE STUDIED THE PROBLEM: As part of its on-going program of research and outreach on matters of importance to decision makers in Kenya’s food and fiber system, Tegemeo Institute, in collaboration with Michigan State University, is involved in a detailed review of the country’s horticultural production and marketing system. This review has drawn on a recurring survey of 1,500 smallholder farmers, and on a survey of 524 consumers throughout Nairobi conducted in November, 2003. Additionally, the review has
conducted its own detailed interviews with wholesale and retail traders involved in domestic and regional horticultural trade.

**FINDINGS:** We present findings on two main issues: the types of retail outlets in which Nairobi consumers currently obtain their food, and how the relative shares of these outlets might change over the next 10 years. In each case, we examine how purchase patterns change with a household’s income level, presenting information first on a broad range of food purchases, then focusing on FFV.

Where do consumers in Nairobi currently obtain their food? Key findings on this topic include the following:

- Considering total consumer expenditures on “basic foods” (staples, dairy, meat and eggs, and fresh produce), 25% of this food budget is spent on FFV, and this share is essentially stable across income groups. Staples account for 33% of these expenditures, falling from 37% for the poorest one-fifth of households to 28% for the wealthiest one-fifth. Dairy, meat, and FFV account, respectively, for 19%, 24%, and 25% of basic food expenditures.

- Consumers in Nairobi spend slightly more than one shilling in 10 of their basic food budget in large supermarket chains (Uchumi, Nakumatt, and Metro; see Table 1); more than eight of the 10 shillings are spent in traditional outlets such as dukas, open air markets, roadside kiosks, dairies, and butcheries.

- Most of the expenditures in supermarket chains are made by the wealthiest 20% of the population; they spend one of every four (25%) of their food shillings in such stores, while the other 80% of consumers spends fewer than one in 10 in these outlets (Figure 1). Traditional dukas are by far the most important retail outlet for these consumers, followed by open air markets, kiosks and, for meat, butcheries.

- For fresh fruits and vegetables (FFV), fewer than one shilling in 20 (4%) in Nairobi is spent in supermarket chains (Table 2), and essentially all of these expenditures come from the wealthiest 20% of consumers; the bottom 80% of consumers spend 99 out of every 100 FFV shillings in open air markets, kiosks, or other traditional outlets.

- One major reason for the continuing dominance of open air markets and kiosks in FFV sales – and for supermarket chains’ heavy reliance on upper income consumers – is that the traditional outlets charge much lower prices (Figure 1). Two separate estimates made by Tegemeo show that, for the same FFV items, supermarket chains charge on average 50-60% more than do roadside kiosks and market stall vendors. While quality differences explain some of this difference for some FFV items, we do not find evidence of consistently higher produce quality in supermarket chains.

- Another major factor in the success of open air markets and kiosks is that they are much more convenient for the large mass of urban consumers, especially those (the vast majority) without vehicles. There are many markets throughout Nairobi and innumerable kiosks, making it very easy for consumers to purchase their fruits and vegetables close to home, frequently as they walk back from their place of work. Going to a supermarket is much less convenient, and expansion into lower income neighborhoods will not dramatically change this situation. Some kiosk owners and market stall vendors are also known to provide short-term credit to preferred customers, giving them an additional advantage over supermarket chains.

Though Tegemeo does not have comparable data for urban areas outside of Nairobi, other independent research shows that as much as 90% of all Kenya’s FFV sales through supermarket chains take place in Nairobi (Neven and Reardon, 2004). This suggests that, nationally in urban areas, not more than one out of every 50 shillings (2%) spent on FFV is spent in a supermarket chain.

Where might urban consumers in Kenya obtain their food in 10 years time? A major question for policymakers is at what rate the food market share of supermarket chains can be expected to grow. This question is especially important for FFV, because fresh produce moves from the farm through the
Table 1.  Market shares of various retail outlets in purchases of “basic foods”, Nairobi, October 2003

<table>
<thead>
<tr>
<th>Per capita Income Quintile</th>
<th>Mean Per Capita Income (Ksh)</th>
<th>Supermarket Chains</th>
<th>Small Supermarket</th>
<th>Duka/shop Open Market</th>
<th>Kiosk</th>
<th>Butchery</th>
<th>Other Minor Outlets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (lowest)</td>
<td>7,407</td>
<td>2.5%</td>
<td>4.0%</td>
<td>33.9%</td>
<td>20.6%</td>
<td>19.6%</td>
<td>12.0%</td>
</tr>
<tr>
<td>2</td>
<td>19,199</td>
<td>6.4%</td>
<td>5.0%</td>
<td>33.0%</td>
<td>17.4%</td>
<td>15.0%</td>
<td>16.2%</td>
</tr>
<tr>
<td>3</td>
<td>33,567</td>
<td>2.8%</td>
<td>5.7%</td>
<td>34.7%</td>
<td>21.6%</td>
<td>13.4%</td>
<td>15.9%</td>
</tr>
<tr>
<td>4</td>
<td>59,560</td>
<td>9.0%</td>
<td>4.3%</td>
<td>30.0%</td>
<td>19.8%</td>
<td>15.0%</td>
<td>18.3%</td>
</tr>
<tr>
<td>5 (highest)</td>
<td>276,698</td>
<td>25.7%</td>
<td>4.9%</td>
<td>19.0%</td>
<td>15.7%</td>
<td>12.0%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Overall</td>
<td>79,079</td>
<td>11.3%</td>
<td>4.8%</td>
<td>28.7%</td>
<td>18.7%</td>
<td>14.3%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

--- % of total expenditure over 40 food items  ---

Figure 1.  Mean prices of 14 FFV items in open air markets, kiosks, and supermarket chains, Nairobi, October 2003

Table 2.  Market shares of various retail outlets for purchases of FFV, Nairobi, October 2002

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<tr>
<th>Per capita Income Quintile</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1 (lowest)</td>
<td>7,407</td>
<td>0.0%</td>
<td>0.1%</td>
<td>0.2%</td>
<td>53.3%</td>
<td>42.9%</td>
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<tr>
<td>2</td>
<td>19,199</td>
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<td>0.4%</td>
<td>1.3%</td>
<td>56.7%</td>
<td>38.0%</td>
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<tr>
<td>3</td>
<td>33,567</td>
<td>0.0%</td>
<td>0.6%</td>
<td>0.0%</td>
<td>64.3%</td>
<td>33.9%</td>
<td>0.0%</td>
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</tr>
</tbody>
</table>

--- % of total FFV expenditure  ---

Fewer than 1 in 20 Ksh spent on fresh produce is spent in supermarket chains ...

... and nearly ALL of this occurs among the wealthiest 20% of the population
marketing chain and reaches consumers largely in the same form. Most staples, meat, and dairy products have to be processed before sale to consumers. This means, first, that retailers can, if they choose, deal directly with farmers in procuring fresh produce; they cannot do this for most other food items. Second, it means that the production and post-harvest practices of farmers have an extremely important impact on the quality and safety of the fresh produce reaching farmers. Farmer practices also matter for staples, meat, and dairy, but in less direct ways.

In assessing how rapidly supermarket food shares might grow, it is instructive to look at the experience of other countries in the developing world. We focus in this brief review on South Africa and Latin American, because the expansion of supermarket chains in these areas began much earlier than it did in the rest of Africa. Such a review shows two things. First, supermarket shares of the food staple market rise much more rapidly than they do for fresh produce, typically exceeding the FFV share by a factor of three-to-five. Our results reflect this pattern, with supermarket chains holding a 21% share of staple purchases but less than a 5% share for FFV.

Second, in most of these developing countries, supermarket chains’ share of the FFV market ranges from about 5% (Nicaragua) to 21% (Mexico). Shares in South Africa are estimated at 15-20%. FFV shares of supermarket chains in Argentina and Brazil, both highly urbanized countries, exceed 30%. This means that in most countries of this region, and in South Africa, consumers spent 16-19 out of every 20 FFV “dollars” in traditional market outlets, not supermarket chains. Key drivers of supermarket chains’ expansion in South Africa and Latin America have been high urban populations, relatively high incomes, and (in Latin America) liberalization of foreign direct investment laws. While Kenya has greatly reformed its economy over the past decade, its per capita income is only 10% to 40% of those found in these other developing countries. Kenya’s urban population, at 33%, is below that of each of these countries, and far below the 81% and 89% found in Brazil and Argentina, respectively.

We conclude from this review of other countries’ experience that traditional market outlets in Kenya will maintain very large market shares in FFV for the foreseeable future.

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We expect that, in 10 years time, supermarket chains will have, at most, 10-20% of the urban FFV market in Kenya

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Another way of assessing the likely market share of supermarket chains in 10 years time is to make a simple calculation: if the chains’ share of the urban FFV market is currently 2% (one in 50), and if we assume that urban populations will grow by 4.5% per year over the next decade, then supermarket chains’ FFV sales (in real terms) would have to grow by about 33% per year, every year, during the next decade just to capture one out of every four shillings spent on FFV in urban areas by that time. Such sustained growth rates would be nearly double the rates achieved by supermarkets over the past five years, and would be unprecedented in developing country food systems. But even if such growth occurred in Kenya, traditional market outlets would continue to capture three out of every four shillings spent on FFV!

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IMPLICATIONS FOR POLICY MAKERS:
Supermarkets are here to stay in Kenya. They have raised their share of the overall market for staples, dairy, meat and eggs, and FFV from minuscule levels a decade ago to over 10% now, and are almost certain to continue growing and expanding their geographic reach. Yet most of this growth has been in food staples where, because these items have to be processed prior to consumption, supermarket procurement practices have less direct impact on farmers. It is in the fresh produce market that supermarket impacts could be strongest, but it is this sector that poses the most difficult challenges for these stores. Based on evidence from Kenya and on our review of experience in other countries, we expect that supermarket chains will have, at most, 10-20% of the...
the urban FFV market in Kenya in 10 years time. This means that eight or nine of every 10 shillings spent on fresh produce will be spent in traditional retail outlets served by established wholesale markets.

These markets and the traditional marketing system in general have suffered from under-investment for many years. One knowledgeable writer in *The Nation* in March of 2004 captured the situation when he stated that "all our major markets are characterized by chaos, cheating, thuggery, and dirt". The policy implication is clear: the performance of wholesale and retail markets in Kenya will have major impacts on the real incomes of farmers and on the quality, safety, and real cost of food to urban consumers for many years to come. If small farmers and urban consumers are to improve their standards of living, these markets must become more efficient and convenient, they must become cleaner, they must offer a broader and better quality of services to the farmers, traders, and consumers who use them, and they must be linked more effectively to improved rural assembly, packing, and shipping processes.

We emphasize four policy and investment conclusions. First, while programs that attempt to link small farmer organizations directly with supermarkets may be appropriate under specific circumstances, the dominant focus of government and donor agencies must be on dramatically improving the traditional marketing system. Second, urban wholesale market improvement should be the primary but not exclusive focus of any investment program. Improvements in three key areas should be given priority:

- Improved logistical efficiency, especially for traffic flow, loading, and unloading, will reduce costs and improve hygiene in the markets.
- Garbage collection, sewerage, and other hygiene improvements combined with logistical improvements will make these markets more attractive options for a broader range of retail outlets.
- More easily available information on prices and volume by grade of product will increase market transparency and further attract customers. This will also be a good starting point for practical upgrading of grades and standard for the traditional system. Additional investments such as cold storage and simple value-added services will be important once the basic logistical and hygiene improvements are consolidated.

Third, because many of these investments are costly, and because their success depends on private sector acceptance, active partnering between government, private sector and donors will be crucial to mobilize the needed financial resources and knowledge to make these improvements.

Finally, municipal authorities need to find an approach to dealing with kiosks that balances legitimate concerns about congestion in busy areas with these outlets’ demonstrated importance for consumers. We find that over one-third of all FFV purchases in Nairobi, and 15% of all basic food purchases, are made in kiosks, and that this share falls very little as incomes rise. These outlets clearly provide a valued service to a broad range of consumers, suggesting that destruction or forced movement of kiosks on little notice imposes real costs on many consumers. A more balanced approach is needed.