Grain Marketing Policy at the Crossroads: Challenges for Eastern and Southern Africa

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What is the problem?

- Stagnant agricultural productivity growth
- More frequent food crises
- Price instability

...Food markets not catalyzing rural growth
Current thinking on “strategy”

- Vocal advocates for a “big push” strategy
  - e.g., Sachs, Sanchez,…maybe Gates?
- Strong consensus about need for greater investment in public goods (infrastructure, crop science) and certain policy reforms
- Major debate about what constitutes the right “enabling environment”
  - Food price support/stabilization
  - Input subsidies

9 Major Issues

1. Importance of historical and political factors
2. How public expenditure patterns have exacerbated the policy dilemmas of underdeveloped food markets
3. Importance of implementation details: market liberalization in some cases is a misnomer
4. Making the demand for food more elastic
5. Implications of E/S Africa region’s transition toward structural grain deficit
6. Impact of bio-fuels and other world market changes
7. Supply response: why only a small % of farmers will benefit, at least in short run
8. Who is meeting rapidly growing urban demand for food?
9. Rise of cassava → impact on price/supply stability
I. Gradual transition to structural grain deficit

Eastern Africa: Net Exports

Year

Net exports
Linear trend: -9.80

Source: FAOSTAT 2006

Southern Africa: Net Exports

Year

Net exports
Trend: 1960-1981 = -85.5
Trend: 1982-2005 = 94.6

Source: FAOSTAT 2006
II. Supply response

- Structural food deficits → raising price surface toward import parity
- Higher world food prices appear likely
- Impact on consumers
- Will small farmers be able to respond to these price incentives?

- Emerging land pressures are generating fundamental challenges for broad-based income growth from staple grain sales
Characteristics of smallholder farmers, Zambia 2002/03

<table>
<thead>
<tr>
<th></th>
<th>N=</th>
<th>Farm size (ha)</th>
<th>Asset values (US$)</th>
<th>Gr. Rev., maize sales (US$)</th>
<th>Gr. Rev., crop sales (US$)</th>
<th>Total hh income (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 50% of maize sales</td>
<td>23,680</td>
<td>6.0</td>
<td>1,558</td>
<td>690</td>
<td>823</td>
<td>2,282</td>
</tr>
<tr>
<td>Rest of maize sellers</td>
<td>234,988</td>
<td>3.9</td>
<td>541</td>
<td>74</td>
<td>135</td>
<td>514</td>
</tr>
<tr>
<td>Households not selling maize</td>
<td>762,566</td>
<td>2.8</td>
<td>373</td>
<td>0</td>
<td>36</td>
<td>291</td>
</tr>
</tbody>
</table>

Source: Jayne, Mather, Mghenyi, 2006
III. Are imported wheat and rice crowding out domestically-produced grain?

- 3.6% annual growth in cereal imports
- Of total grain imports by African countries, only 5% is produced by African farmers
- Growth in urban demand is being met mainly by imported rice and wheat

Nairobi Staple Food Expenditure Patterns

Figure 7: Expenditure on Primary Staples (KSh per a.e/month)

Source: Muyanga et al., 2005
More than 50% of Africa’s population will be urban by 2015.
- 2000: 10 farm households feed 7 non-farm households
- 2020: 10 farm households feed 16 non-farm households

Upshot: demand for food will be rising rapidly
- Are policies on imported rice, wheat crowding out demand for locally produced staples?

IV. Under-investment in public goods

1. Stock of physical infrastructure progressively being run-down
2. High transaction costs / risk are endogenous
3. Market development requires reducing the costs of both marketing and farm production
   - Road, rail, port infrastructure
   - R&D, extension
   - Market institutions, grades & standards, etc.
4. ....Tired old messages
Budget allocation to Agricultural Sector in Zambia: ZMK465 million in 2005

Source: Govereh et al, 2006

### Zambia

<table>
<thead>
<tr>
<th>Fertilizer source:</th>
<th>Total Income</th>
<th>Assets</th>
<th>Landholding size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘000 kwacha per capita</td>
<td>ha per capita</td>
<td></td>
</tr>
<tr>
<td>Households not acquiring fertilizer:</td>
<td>266</td>
<td>173</td>
<td>.15</td>
</tr>
<tr>
<td>Cash purchases from private retailers:</td>
<td>774</td>
<td>342</td>
<td>.20</td>
</tr>
<tr>
<td>Government Fertilizer Support Program (50% subsidy)</td>
<td>804</td>
<td>425</td>
<td>.23</td>
</tr>
</tbody>
</table>

Source: Govereh et al, 2006
Political economy of public resource allocation

- Donor budget support
  - Government budget
    - Long-term productive investments: R&D, extension, irrigation, etc.
    - High social payoffs
      - But payoffs come 5-20 later
      - Critical for sustained poverty reduction
    - Fertilizer subsidies, marketing board price supports, land bills, food aid
      - Immediate political payoffs;
      - Visible support to constituencies
      - Contribution to sustained growth / poverty reduction is unclear

IV. Tendencies for Overgeneralization about Policy Impacts

1. An important role of research is to identify what works, what doesn’t, and why
2. This requires distinguishing between policy pronouncements and implementation
   - Market reform not “monolithic” in either design or implementation (e.g., Moz, South Africa, Kenya)
3. Implementation of reforms – highly heterogeneous
4. Need to resist overgeneralizations
5. Failure to adequately account for differences in implementation results in mis-identification of policy impacts
1. In much of E/S Africa, “market liberalization” is an inaccurate characterization of the environment
   - marketing boards continue to pay major role in food and input markets
   - 25-70% of marketed maize in Zambia, Kenya, Malawi, Zimbabwe

Food Reserve Agency Maize Purchases and Estimated Sales from Smallholder Sector, Zambia

Source: Jayne, Mather, Mghenyi, 2006
Sources of Policy Unpredictability

- Export bans, import quotas (year to year & within year)
- Uncertainty over changes in import tariff rates
- When and where will marketing boards enter the market
  - current example: Zambia 2006
- Prices at which the MBs buy and sell unpredictable
- All of these sources of unpredictability impede private traders’ servicing small farmers’ needs
Cereal Production Index, Sub-Saharan Africa and selected countries

Source: FAOStat
VI. Making the demand for grain more elastic

• How to ensure that prices don’t plunge when supply expands
• The elasticity of demand is a function of government policy and public investment patterns
Slope of demand curve influenced by:

- transport infrastructure
- incentives for investment in storage
- finance available to traders (e.g., warehouse receipt systems)
- trade / policy barriers (e.g., export bans, import tariffs)

MOST OF THESE FACTORS ARE INFLUENCED BY GOVERNMENT BEHAVIOR
Therefore….a major priority for food value chain development

• Public investments to make demand more elastic will enable markets to better absorb supply expansion w/o depressing prices
Where from here?

- Given plausible assumptions about technology development, farm sizes are too small for grain-based productivity growth to lift most rural households out of poverty.
- Hence, diversification into higher-return activities will be crucial.
- This transition is already occurring.

Role of maize in small farm incomes is declining (share of gross sales revenue)

<table>
<thead>
<tr>
<th></th>
<th>Maize</th>
<th>Other grains/beans/oilseeds</th>
<th>Non-food cash crops</th>
<th>Fruits - veges</th>
<th>Animal products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>13.3</td>
<td>7.9</td>
<td>34.0</td>
<td>14.7</td>
<td>26.7</td>
</tr>
<tr>
<td>Malawi</td>
<td>32.3</td>
<td>11.8</td>
<td>44.9</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Mozam</td>
<td>13.8</td>
<td>9.3</td>
<td>16.9</td>
<td>30.4</td>
<td>23.4</td>
</tr>
<tr>
<td>Zambia</td>
<td>28.2</td>
<td>7.7</td>
<td>16.7</td>
<td>27.5</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Source: Jayne, Mather, Mgheinyi, 2006
Most rural farm households are buyers of maize (or net buyers)
2% of households account for 50% of marketed grain surplus
Crop price supports:
• highly concentrated benefits
• anti-poor
• Most likely impede small farm diversification into higher-valued activities

Should we be expecting that there is a staple food marketing/trade strategy that can catalyze growth.....

......without also making progress on:

- Public investment in physical infrastructure?
- Technology – crop science?
- Soil fertility?
- Improved farmer management practices?
- HIV/AIDS?
As massive as the poverty problems are now, they will be much greater unless budgets are re-allocated sooner or later to public investments that will make the economy productive in the long-term:

- Population growth w/o productivity growth → civil strife
- Not a viable option to have more and more “failed states” in Africa

Policy response (cont.)

- Lobby forcefully for more level playing field in international trade
  - OECD support for Africa: $50 bill./yr
  - OECD ag. subsidies: $350 bill./yr
  - Reassess stance toward imported “food for development” aid vs. local procurement in non-crisis years (SOFA2006)
thank you
Supermarkets or traditional markets?

- The performance of “traditional” food systems will remain a much more important determinant of farmer welfare and consumer food security than “supermarkets”
- Hence, focus investment priorities on improving the performance of traditional food marketing systems
  - linking traditional with new agribusiness systems

Retail sources of consumer staple food expenditures, Nairobi

Figure 17: Alternative Retail Channels and Levels of Use
Even with 20% annual growth of supermarkets, in relatively progressive Kenya, in 10 years, the supermarket share will be:

12.4% market share in 2016.

Tangible benefits of commercial development in milling industry:

Source: Agricultural Marketing Information Centre-Zambia-various years