Food Policy Challenges in Eastern and Southern Africa in Light of the Current World Food Price Situation

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Trend in Maize Price, fob US Gulf

![Graph showing trend in maize price, fob US Gulf]
Trend in Maize Price, fob US Gulf

Are Rising Food Prices Good or Bad for Africa?

Result of debate and subsequent poll in The Economist:

- Upside offsets downside: 56%
- Downside prevails: 44%
Objectives of our presentation:

1. to present recent food, fertilizer price movements in domestic markets;
2. to predict changes in cropping patterns, national food production, distributional effects, and consumers’ access to food in light of these price movements; and
3. to consider policy response options by governments and donors

Why have world food prices risen so dramatically in 2007-2008?

• Initial explanations – structural shifts in world food supply and demand:
  – US bio-fuels policy
  – Rising incomes in large middle-income countries (e.g., China, India)
  – Climate change (e.g. recurrent drought in Australia)
• More recent explanations acknowledge these structural shifts but also include:
Trends in Food Prices in Eastern/Southern Africa

- Depends on price transmission
- There are at least 3 ways to assess price trends:
  1. in US dollars
  2. in nominal local currency units
  3. in inflation-adjusted local currency units
Wholesale maize, Nairobi, **Constant 2007 Ksh**

Retail maize, Lusaka, Zambia, **nominal USD per ton**
Retail maize, Lusaka, Zambia, nominal ZK per ton

Maize, Lusaka, Zambia, Constant 2007 ZK per ton
Retail maize, Lilongwe, Malawi, constant 2007 MK per kg

Maize price transmission estimates

<table>
<thead>
<tr>
<th>Monthly (1994-2008)</th>
<th>In USD</th>
<th>In real local currency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-drought</td>
<td>drought</td>
</tr>
<tr>
<td>US Gulf → South Africa</td>
<td>0.73</td>
<td>0.93</td>
</tr>
<tr>
<td>S. Africa → Lusaka</td>
<td>0.59</td>
<td>0.79</td>
</tr>
<tr>
<td>S. Africa → Lilongwe</td>
<td>0.62</td>
<td>0.02</td>
</tr>
<tr>
<td>S. Africa → Maputo</td>
<td>0.52</td>
<td></td>
</tr>
<tr>
<td>S. Africa → Nairobi</td>
<td>-0.04</td>
<td>-0.38</td>
</tr>
</tbody>
</table>
Upshot on food prices:

1. In local currency units, 2008 maize prices are very high, but comparable to levels seen before in past decade – Why?
   - HIPC, budget support, stable maro-economy (varies by country) → exchange rate appreciation against dollar → softening the food price rise
   - Official 2007 and 2008 crop estimates have been moderate to good (credible?)
   - Only partial price transmission of world prices to domestic markets in region

2. Hence, countries in the region will likely differ in terms of their exposure to rising global food prices

Upshot on food prices (cont.):

3. In current environment, food crises driven by reductions in purchasing power more so than production failure
   -- Implications for food balance sheet approach

4. World supply response? Up till recently, policy in US, India and other countries has sought to limit grain output → great potential for ramped-up world production in 2-3 years
Will smallholder farmers be able to take advantage of higher grain prices?

- Main determinants:
  - Access to land / farm structure
  - Productive assets
  - Input prices
  - Access to markets

- Emerging land pressures are generating fundamental challenges for broad-based rural income growth

Farm size distribution:
Small farm sector

Source: Jayne, Mather, Mghenyi, 2006
Smallholder Households’ Position in the Maize Market

Characteristics of smallholder farmers, Zambia 2003/04

<table>
<thead>
<tr>
<th>Category</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>31,328 (2%)</td>
<td>4.3</td>
<td>1,132</td>
<td>720</td>
<td>1163</td>
<td>2,932</td>
</tr>
<tr>
<td>Rest of maize sellers</td>
<td>328,561 (26%)</td>
<td>1.6</td>
<td>316</td>
<td>88</td>
<td>193</td>
<td>634</td>
</tr>
<tr>
<td>Households not selling maize</td>
<td>907,255 (72%)</td>
<td>0.9</td>
<td>231</td>
<td>0</td>
<td>97</td>
<td>415</td>
</tr>
</tbody>
</table>
Maize-fertilizer price ratios, Kenya
Upshot on smallholder behavior:

1. A small minority of relatively better-off farmers will be able to take advantage of higher food prices
2. Most smallholders, who are net buyers of food, and urban consumers, will be worse off
3. Rural and urban poverty rates likely to rise
4. Reduction in incentives to use fertilizer → yields down → increasingly likelihood of needing to import at high world prices
5. Shifts in cropping patterns toward staple food (including roots and tubers), away from export crops
Implications for food security policy?

The outcomes in E/S Africa will be influenced greatly by political response:

1. Future role of marketing boards and price stabilization
2. Input subsidy programs
3. Commitment to public goods investments
4. Commitment to open borders/regional trade
5. US/EU policy toward flexible food aid response (cash vs. food depending on situation)
6. US energy policy
7. US/EU agricultural and trade subsidy policies
Export bans and trade restrictions

• Generally doesn’t stop trade from occurring but raising smuggling costs, which depress prices for farmers and raise costs for consumers

• Fact: only 5% of all grain imported by Africa countries comes from other African countries – 95% of imports is grown by farmers on other continents
What about fertilizer?

- Major gains can be achieved by reducing the costs of delivering fertilizer to farmers and raising the efficiency of fertilizer use
  - Survey findings show wide variations in fertilizer use efficiency even within same village
- What about fertilizer subsidies?
  - Compelling on paper, but need to overcome political capture

<table>
<thead>
<tr>
<th>Zambia</th>
<th>Total Income</th>
<th>Assets</th>
<th>Landholding size</th>
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<td></td>
<td>‘000 kwacha per capita</td>
<td>ha per capita</td>
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**Households not acquiring fertilizer:**

- 266
- 173
- .15

Source: Govereh et al, 2006
### Zambia

<table>
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<tr>
<th>Fertilizer source:</th>
<th>Total Income</th>
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| Households not acquiring fertilizer: | 266 | 173 | .15 |
| Cash purchases from private retailers: | 774 | 342 | .20 |

Source: Govereh et al, 2006
IFPRI review of rate of return studies:

<table>
<thead>
<tr>
<th>Investments</th>
<th>Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidies</td>
<td>Negative – 12%</td>
</tr>
<tr>
<td>Investments</td>
<td>Returns</td>
</tr>
<tr>
<td>- research &amp; extension</td>
<td>35% to 70%</td>
</tr>
<tr>
<td>- roads</td>
<td>20% to 30%</td>
</tr>
<tr>
<td>- education</td>
<td>15% to 25%</td>
</tr>
<tr>
<td>- communications</td>
<td>10% to 15%</td>
</tr>
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<td>- irrigation</td>
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If we believe these findings, they have major implications for government and donor response.

Budget allocation to Agricultural Sector in Zambia: ZMK465 million in 2005

Source: Govereh et al, 2006
As massive as the poverty problems are now, they will be much greater unless budgets are re-allocated sooner or later to 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 “state failure” in Africa

Possible Response Options for Consideration:

<table>
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<th>Good harvest</th>
<th>Production shortfall</th>
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| Response options for governments          | • Income support (food for work, cash transfers) for vulnerable groups  
• Production contracts  
• build cash reserves for import in future  
• build buffer stocks? | | |
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• Production contracts  
• build cash reserves for import | • remove tariffs/taxes on food imports  
• seek imported food assistance / target vuln’ble  
• position early for food import; coordinate with private sector  
• ramp-up investment in crop science, infrastructure, irrigation, farmer knowledge |  |
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• ramp-up investment in crop science, infrastructure, irrigation, farmer knowledge |  |
| **Response options for donors**              | • Support local crop science  
• Resources for local food purchase or imports  
• Support improved crop production estimates and market information  
• Support overhaul of food balance sheet approach  
• Reconsider energy policy and impacts on food prices and climate effects |  |
Summing Up

1. Major distributional effects: relatively few will gain – many will lose
2. Poverty likely to rise
3. Greater urgency for good governance -- political responses will greatly influence outcomes
4. Heightened importance of inter-linked macroeconomic factors and energy-food linkages in determining future food security in Africa and many other parts of the world.

thank you
### I. Gradual transition to structural grain deficit

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>Ag. Growth rate (FAO)</th>
<th>AgGDP (WB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malawi</td>
<td>1990-2006</td>
<td>+3.26</td>
<td>+5.70</td>
</tr>
<tr>
<td>Mozambique</td>
<td>1990-2006</td>
<td>+4.76</td>
<td>+5.21</td>
</tr>
<tr>
<td>Kenya</td>
<td>1990-2006</td>
<td>+2.15</td>
<td>+2.69</td>
</tr>
<tr>
<td>Zambia</td>
<td>1990-2006</td>
<td>+1.41</td>
<td>+2.82</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>1990-2006</td>
<td>+2.98</td>
<td>+3.43</td>
</tr>
</tbody>
</table>

Source: FAOSTAT 2006
Southern Africa: Net Exports

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

Source: FAOSTAT 2006

Political economy of public resource allocation

Donor budget support

Government budget

- Long-term productive investments: R&D, infrastructure, education, etc.
- High social payoffs
- But payoffs come 5-20 later
- Critical for sustained poverty reduction

- Input subsidies,
- Marketing board price supports,
- Land bills
- Immediate political payoffs;
- Visible support to constituencies
- Contribution to sustained growth / poverty reduction is unclear