Old and New Insights to Inform African Governments’ Agricultural Investment Programs

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Main Arguments

1. Poverty and needs are enormous
2. Indeed, substantial $$$ is being spent on poverty alleviation
3. Tragedy is that the $$$ is not being well utilized
4. A growth agenda is required to reverse the increasing slide toward poverty and failed states
5. Achieving a “growth oriented” public budget allocation will require new relationship between donors and governments
The Arguments “Unpacked”

1. Poverty is enormous
   - SSA poverty rates rising, 45% in 2000
   - There are enormous needs
2. Donors give considerable budget support to African governments

- WB and bilateral donors provide “untied” budget support to treasuries:
  - Zambia: ~ 40% of annual budget
  - Malawi: ~ 48%
  - Mozambique: ~ 70%
  - Niger: ~ 85%

Much research evidence devoted to understanding returns to investment

- Long-term productivity growth is critical for poverty reduction
  1. R & D: (Alston, Grilliches, Mellor)
  2. Education: turns information into knowledge (Johnston)
  3. Extension systems: farm management (Evenson)
  4. Infrastructure: road, rail, port, communications (Antle)
  5. Irrigation (Johnston, Gulati)
Appropriate roles for government:

- Often hear “tell us not what governments shouldn’t be doing, tell them what they should be doing”
  1. Agricultural R & D systems
  2. Extension systems
  3. Rural infrastructure
  4. Irrigation
  5. Market information systems, accurate crop forecasting

What does most of the research evidence indicate (cont.)?

- Markets don’t work well without public good investments in
  - infrastructure,
  - market information,
  - accurate crop forecasts,
  - predictable policy environment
3. African govts devote small portion of budget to productivity growth

- < 10% of budgets to agriculture
- Of amount devoted to agriculture
  - Zambia:
    - 70% → fertilizer subsidies and maize marketing board operations
    - 20% → salaries
    - 4% → sustained productive investments (R&D, extension, irrigation, etc).
- Similar patterns in most of E. and S. Africa

Budget provision and funding for Ministry of Agriculture, 2005 Zambia (ZMK’ billion)

<table>
<thead>
<tr>
<th>MACO</th>
<th>Provision</th>
<th>Funding</th>
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</thead>
<tbody>
<tr>
<td>Personal Emoluments</td>
<td>75</td>
<td>74</td>
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<tr>
<td>Recurrent Departmental Charges</td>
<td>44</td>
<td>39</td>
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<td>Grants and Other Payments</td>
<td>4</td>
<td>4</td>
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<tr>
<td><strong>Poverty Reduction Programs/ HIPC</strong></td>
<td><strong>221</strong></td>
<td><strong>222</strong></td>
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<tr>
<td>Fertilizer Support Program</td>
<td>140</td>
<td>142</td>
</tr>
<tr>
<td>Strategic Food Reserves</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>Other PRP Programs</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>344</strong></td>
<td><strong>339</strong></td>
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Summary of research evidence about fertilizer subsidies in Africa:

- can help to raise production, but little sustained benefit after subsidies are withdrawn
  - Examples of snuffed-out maize revolutions (Zimbabwe, Zambia, Kenya, Malawi)
- Benefits tend to be disproportionately captured by better-off farmers, unless near universal coverage
- questionable effect on total input use
- Crowds out private sector
- Private sector supply chains gear up for subsidy programs, not long-term commercial development
- *Costly - foregone payoffs from alternative public investments*

Marketing Boards’ share of estimated maize surplus:

- **NCPB (Kenya):**
  - 40% (1990-2003)
- **ADMARC (Malawi):**
  - 15% (1995–2003) - not including sales from imported stocks
- **FRA (Zambia):**
  - 34% (1997-2003) - mostly from sales of imported stocks
Characteristics of smallholder farmers, Zambia 1999/00

<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>14,261</td>
<td>9.0</td>
<td>1,160</td>
<td>690</td>
<td>729</td>
<td>2,534</td>
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<tr>
<td>Remaining maize sellers</td>
<td>272,805</td>
<td>3.9</td>
<td>233</td>
<td>74</td>
<td>97</td>
<td>607</td>
</tr>
<tr>
<td>Households not selling maize</td>
<td>839,855</td>
<td>2.8</td>
<td>163</td>
<td>0</td>
<td>26</td>
<td>362</td>
</tr>
</tbody>
</table>

- Spending 70% of agricultural budget on input/output subsidies is most likely a mis-use of budget resources with questionable long-term payoffs
- What’s driving this mis-allocation of resources?
“Social Trap”

- (def): short-run incentives cause people to act in ways that produce undesirable outcomes in long-run (e.g., tragedy of commons)
- Do social traps explain:
  - the major allocation of donor resources through budget support to highly visible interventions?
  - the “staying power” of marketing boards, fertilizer subsidies, and food distribution programs?
  - the underprovision of productive investments that are required to sustainably reduce poverty (R&D, education, extension, infrastructure)?
How to escape from this dilemma:

- Markets don’t work particularly well, which provides rationale for government intervention
- But without a greater % of scarce govt + donor funds focused on productive investments
  - we will be saying this 50 years from now
  - making the same rationale for state interventions to redress immediate crises
  - but crises will be more frequent and severe

Implications - Vision

- Consider reducing donor assistance from untied budget support to “matching support” for specific types of productive public investments:
  - Ag. crop science
  - Extension
  - Infrastructure: roads, rail, port
  - Basic education
  - Irrigation
Implications (cont.)

- As massive as the poverty problems are now, they will be much greater unless budgets are re-allocated sooner or later:
  - Population growth w/o productivity growth $\rightarrow$ civil strife
  - Not a viable option to have more and more “failed states” in Africa
  - Donors will need to exert more influence over the way their support will be used