Regional Trade in Food Staples: Using Trade Policy to Improve Farmer Incentives and Food Security

Jones Govereh
Michigan State University

Conference on Strengthen and Widening markets and Overcoming Supply Side Constraints for African Agriculture
June 3-5, 2007
Africa’s hunger hot spots are well known.
→ Africa’s unenviable reputation as:

• Chronically food insecure
• Dependent on massive inflows of food aid

Today, Africa spends $19 billion per year on food imports
Attracts the majority of worldwide emergency food aid.
Less well-known are Africa’s highly productive, regularly surplus food production zones.
These food security-enhancing hot spots (FSEHS) are of 2 types

• Areas of favorable rainfall or economical irrigation

• Multiple-staple zones
  – cassava & maize (N. Zambia)
  – banana, cassava & maize (Uganda)
  – irish potato, cassava & maize (Mozambique)
  – cassava, rice, maize (S. Tanzania)
Perennial food staples: cassava, banana

- Can be harvested any time of year
- Over multiple years
- Drought resistant
- Dual staple zones allow farmers in these flexible FSEHS to expand cassava/banana production for local consumption and export maize to deficit zones in times of stress
Linking surplus (FSEHS) zones with deficit zones

- Improves food security in deficit zones
- Reduces price volatility
- Improves producer incentives in surplus zones
- Accelerates agricultural growth
Despite regional trade agreements, many governments restrict cross-border trade in food staples

- Malawi and Zambia (strict controls)
- Kenya (progressively lifted restrictions)
- Mozambique, S.Africa and Mali (open border policy)
Trade restrictions

- Increase price volatility
- Raise transaction costs → lower farm prices and higher consumer prices
- Diminish farm prices and producer incentives
Trade restrictions

- Increase price volatility
- Raise transaction costs → lower farm prices and higher consumer prices
- Diminish farm prices and producer incentives
Price volatility

• Maize grain prices *more unstable* in countries that restrict grain trade than in countries with open borders

• Empirical finding on maize price instability
  • Highest in Malawi and Zambia
  • Moderate in Mozambique and Mali (maize)
  • Lowest in Mali (rice) and Kenya

Source: Chapoto and Jayne (2007)
Open borders limit price volatility

USD per ton

Year:
2001 2002 2003 2004 2005

Graph labels:
- Blue line: import price
- Red line: Lusaka wholesale price
Trade restrictions

- Increase price volatility
- **Raise transaction costs** $\rightarrow$ lower farm prices and higher consumer prices
- Diminish farm prices and producer incentives
Trade restrictions

- Increase price volatility
- Raise transaction costs $\rightarrow$ lower farm prices and higher consumer prices
- Diminish farm prices and producer incentives
## Trade policy impact on maize prices in Zambia

<table>
<thead>
<tr>
<th>Maize harvest</th>
<th>Closed border</th>
<th>Open border</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bumper harvest (30% above normal)</td>
<td>-50%</td>
<td>-26%</td>
</tr>
<tr>
<td>Drought (30% below normal)</td>
<td>+ 150%</td>
<td>+ 36%</td>
</tr>
</tbody>
</table>

Source: Dorosh, Dradri and Haggblade (2007)
Open borders open market potential

- Given small countries, surplus supply often needs to satisfy cross-border demand
- Requires cross-border trade to link surplus (S) with deficit (D) zones
Open borders

- Reduce price volatility
- Lower transaction costs → higher farm prices and lower consumer prices
- Improve farm prices and producer incentives
Public Expenditures for Min of Agriculture & Coops, 2006

- Personal Emoluments: 18%
- Fertilizer Support Program: 41%
- Strategic Food Reserves: 30%
- Agriculture Development Programs: 1%
- Recurrent Departmental Charges: 7%
- Grants and Other Payments: 1%
- Other Poverty Reduction Programs: 1%
- Other programs: 1%

Agriculture Development Programs: 1%

Other Poverty Reduction Programs: 1%

Strategic Food Reserves: 30%

Agriculture Development Programs: 1%

Recurrent Departmental Charges: 7%

Grants and Other Payments: 1%

Other programs: 1%

Personal Emoluments: 18%

Fertilizer Support Program: 41%
COMESA-MSU
Regional Trade in Food Staples (RTFS) Initiative Goals
(launched June 2007 with World Bank Trust Funds)

• Expand regional trade in food staples
• → moderate lean season hunger in deficit zones
• → accelerate agricultural production and income growth in FSEHS
Empirical agenda

• **Mapping market sheds** (production, prices, trade flows, consumption)

• **Measuring** (production, counter-cyclical cassava harvest, release of maize from FSEHS)

• **Modeling** (production, prices, trade flows, consumption under alternative policies)

• **Monitoring impact** (production, prices, trade flows, consumption)
Conclusion:

• Expanded regional trade in food staples is necessary to accelerate agricultural income growth and reduce poverty in Africa.

• COMESA-MSU-partners’ RTFS work provides analytical, predictive, empirical evidence to promote cross-border trade.

• Work began June 2007

• Partners: We look forward to working with all of you.