



Regional Trade in Food Staples: Stimulating Agricultural Growth and Improving Food Security in Eastern and Southern Africa

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Outline

- Importance of food staples
- Regional trade in food staples
- Secondary food staples
- Policy implications

Value of Agricultural Production in Sub-Saharan Africa, 2000

	Value (\$US billions)	Percent
Ag. Exports	\$17	24%
Domestic staples	\$50	73%
Other	\$2	3%
Total	\$68	100%

Source: Diao and Hazell (2004)

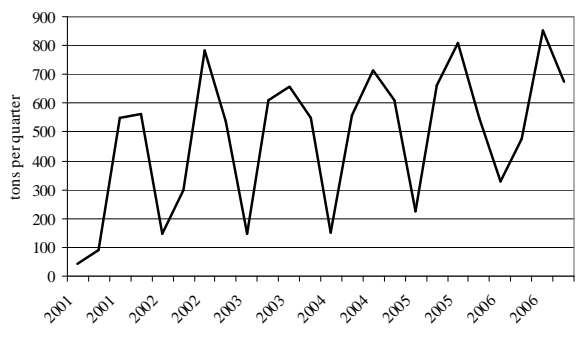
Growing markets for food staples

Urban population will double in
next 15 years

Urbanization → growing demand
for purchased and prepared
foods

Rural specialization → growing
rural food markets

Dried cassava exiting Zambia for the DRC



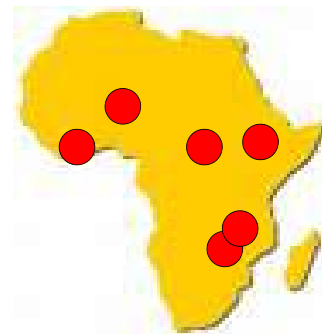
Food Staple Markets

- Big
 - Growing
 - Important to the rural and urban poor
-
- ➔ Agricultural growth
 - ➔ Poverty reduction
 - ➔ Improved food security

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- **Regional trade in food staples**
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Deficit markets



Surplus food production zones



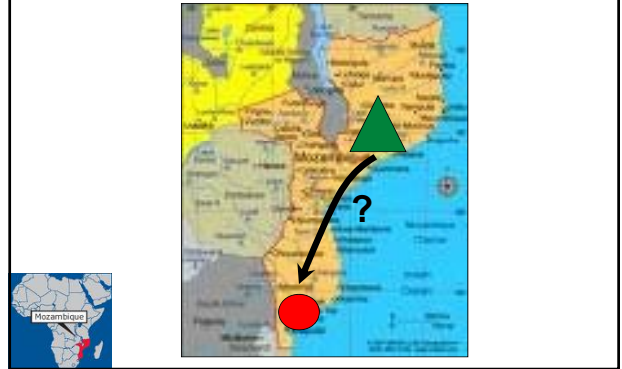
Mozambique



Mozambique



Mozambique



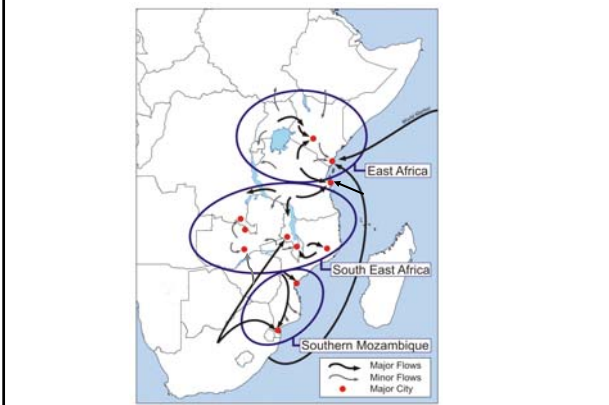
Mozambique



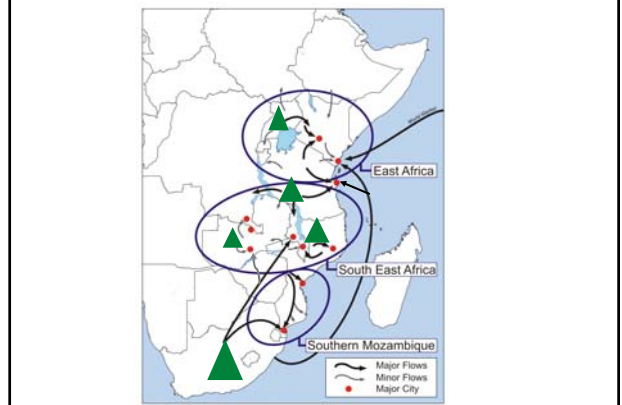
Surplus Zones and Deficit Markets in ESA

Surplus Zones	Deficit Markets They Serve
Northern Mozambique	Malawi
Southern Tanzania	Malawi, DRC
Eastern Uganda	Kenya
South Africa	Zimbabwe, S. Mozambique, Malawi

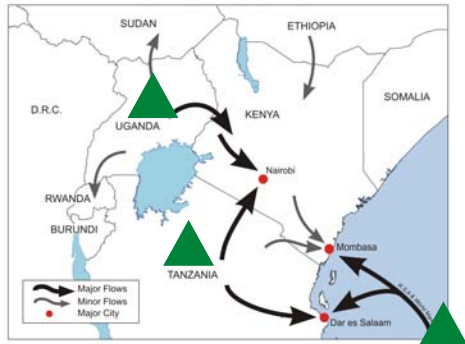
Maize Market Sheds in ESA



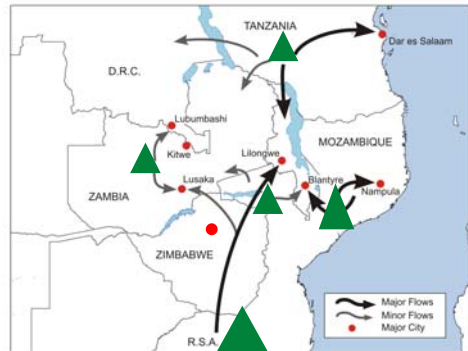
Maize Market Sheds in ESA



East Africa Maize Market Shed



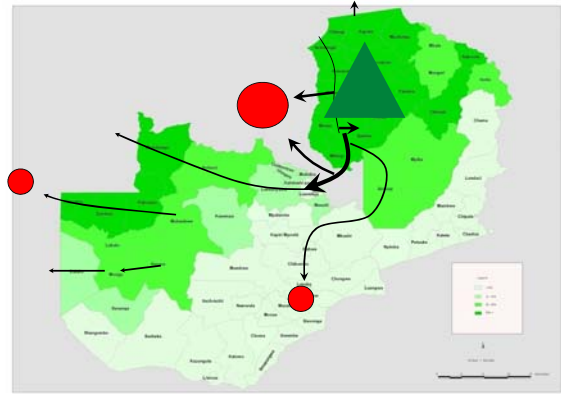
South East Africa Market Shed



Southern Mozambique Maize Market Shed



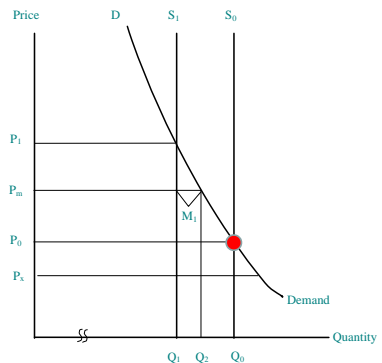
Dried Cassava Trade Flows



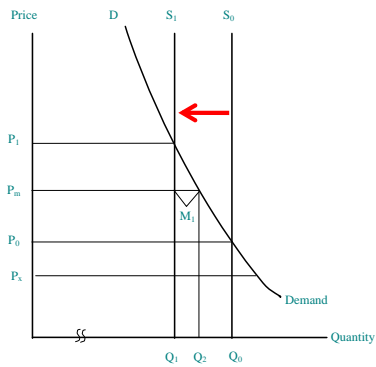
Cross border opportunities

- Africa's political boundaries cut across natural market sheds.
- COMESA and other RECs enable cost savings by facilitating low-cost cross-border flows.

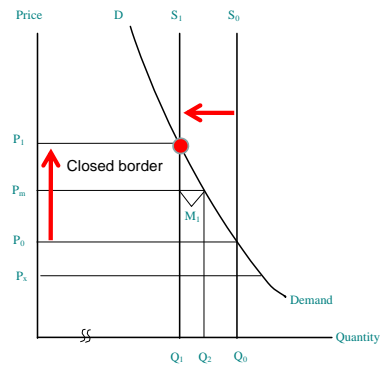
Trade moderates price volatility



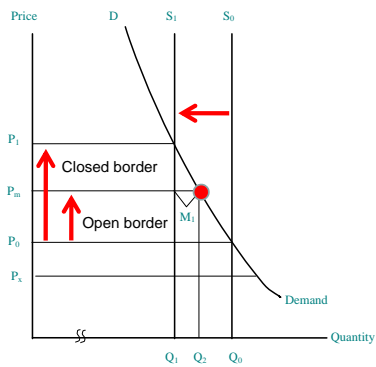
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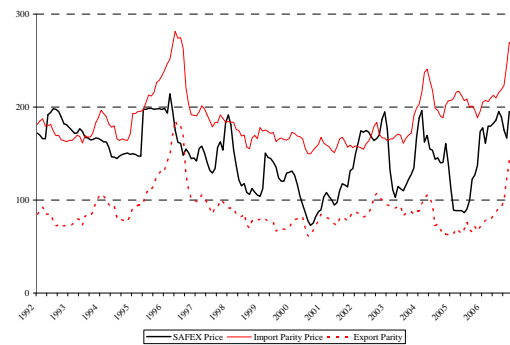
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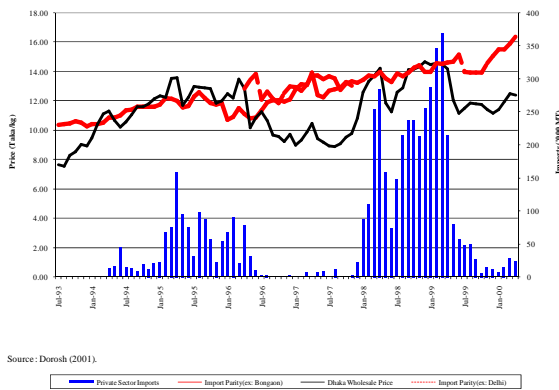
Trade moderates price volatility



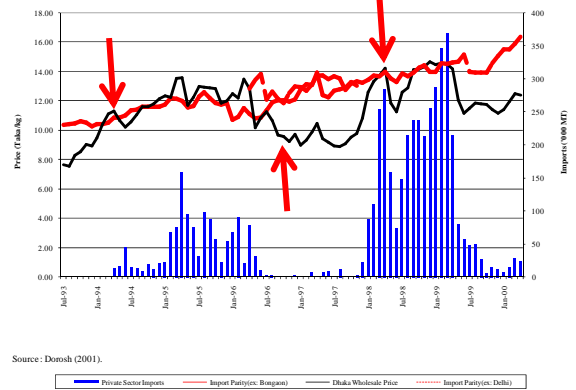
South Africa, domestic and border prices for white maize, 1992-2006



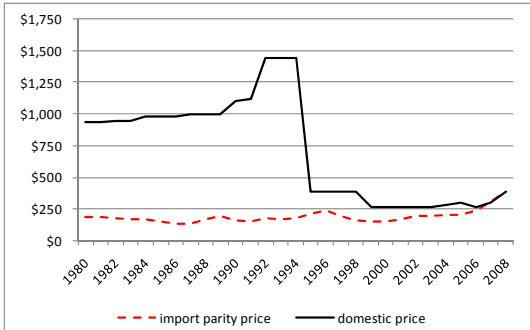
Rice Prices and Quantity of Private Rice Imports in Bangladesh, 1993-2000



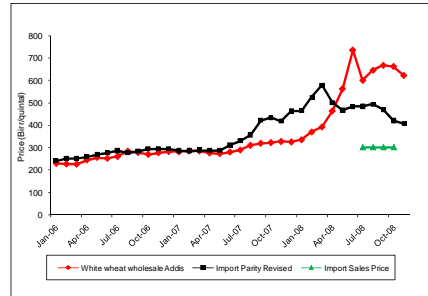
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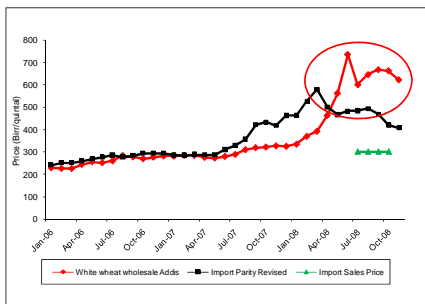
Saudi Arabia, domestic and border prices for wheat, 1980-2008



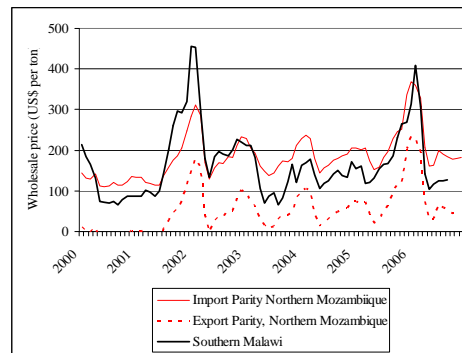
Ethiopia Wheat



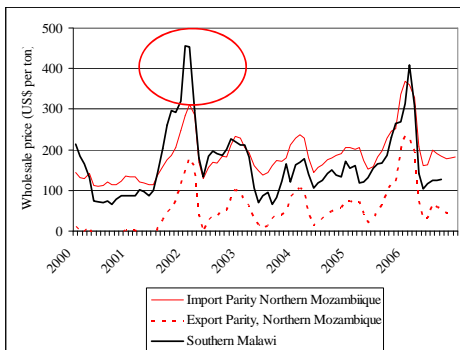
Ethiopia Wheat



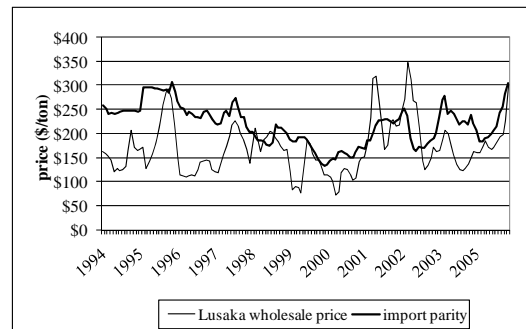
Malawi, domestic and border prices for white maize, 2000-2006



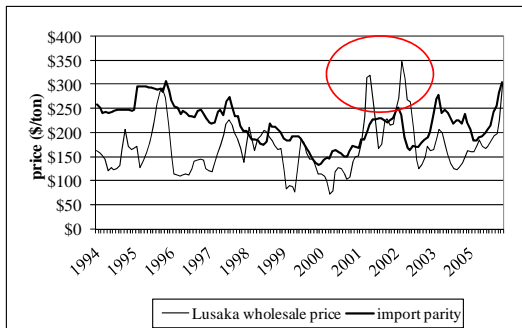
Malawi, domestic and border prices for white maize, 2000-2006



Lusaka, domestic and border prices for white maize, 1994-2006



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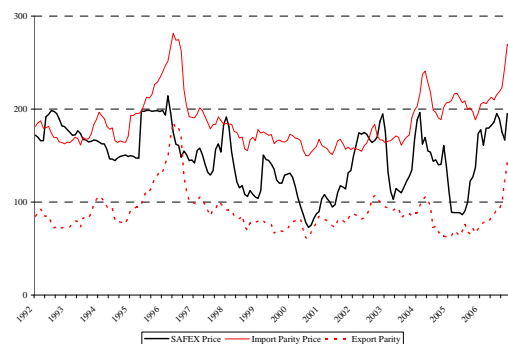
When does import parity fail to cap price rises?

- When import and export bans prevent trade
- Foreign exchange unavailable
- Government protects farmers
- Late decision making and import authorization
- Uncertainty over government action
- When traders fear subsidized government sales will

Import parity caps price rises

- When borders remain open
- Foreign exchange is available
- Under stable, predictable government policies

South Africa, domestic and border prices for white maize, 1992-2006



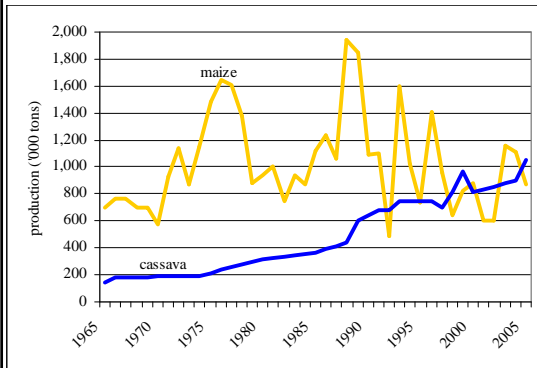
Regional trade in food staples

- **Deficit Zones** ●
- Reduces price volatility
- Improves food security
- **Surplus Zones** ▲
- Improves producer incentives
- Accelerates agricultural growth

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Cassava is drought-resistant

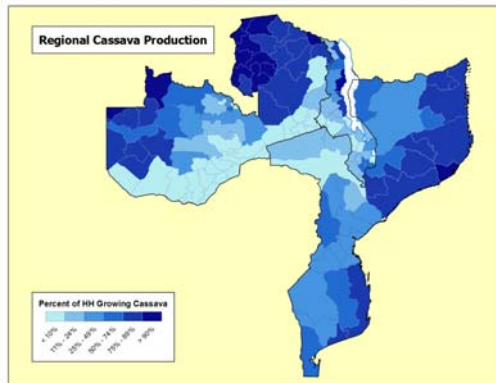


Perennial food staples: cassava, banana

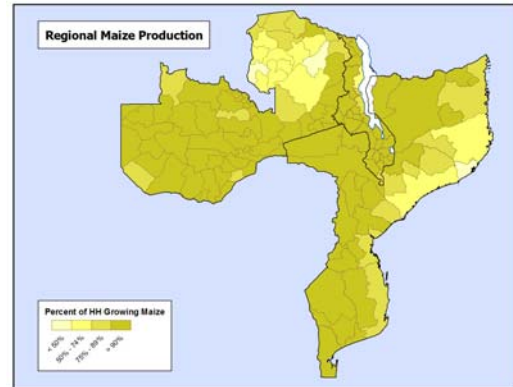
- Can be harvested any time of year
- Over multiple years
- Drought resistant
- → Dual staple zones allow farmers to expand cassava production for local consumption and export maize to deficit zones in times of stress



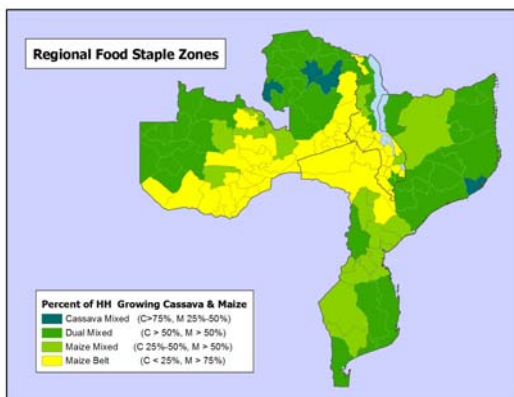
Cassava production



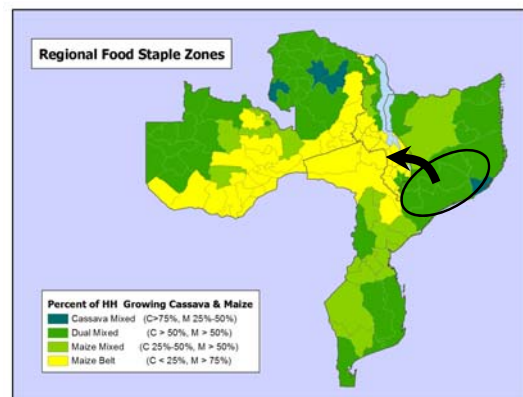
Maize production



Dual staple zones



Dual staple zones



Northern Zambia, a dual-staple zone

('000 tons of maize equivalents)	Dual staple zone	Maize belt	All Zambia
Cassava	270	12	282
Maize	376	525	901
Cassava plus maize	646	537	1,183

Maize and cassava sell side-by-side



Two food security shock absorbers

- Regional trade
- Substitution among food staples

Trade policy impact on maize prices in Zambia

Maize harvest	Maize price under alternate trade regimes (% change from normal)	
	Closed border	Open border
Bumper harvest (30% above normal)	-50%	-26%
Drought (30% below normal)		

Source: Dorosh, Dradri and Haggblade (2007)

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Bumper harvest (30% above normal)	-50%	-26%
Drought (30% below normal)	+ 163%	+ 36%

Source: Dorosh, Dradri and Haggblade (2007)

Open borders plus consumer substitution among food staples

30% fall in maize prodn	Closed border	Open border
Maize price	+163%	
Poor household consumption ('000 tons of maize-equivalents)		
Maize	-100	
Cassava	+43	
Total	-57	

Source: Dorosh, Dradri and Haggblade (2007)

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- a19** open border moderates price increases (by capping price increases at import parity) during a drought and also limits price fall during a bumper year (by allowing exports to cushion the price fall).
aecsetup, 05/11/2007

Open borders plus consumer substitution among food staples

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Maize price	+163%	+36%
Poor household consumption ('000 tons of maize-equivalents)		
Maize	-100	-43
Cassava	+43	+11
Total	-57	-33

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Policy Implications

- Open borders
- Secondary food staples
- Trust

Open borders

- Stabilize prices
- Moderate consumption pressure,
- improve investment incentives for farmers and traders in surplus zones

Trade bans

- Drive trade into informal channels
- Raise transaction costs
- Increase bands between import and export parity
- Discourage investment in staple food production and trade

Secondary staples

- Stabilize food availability during drought years
- Substitute for maize in livestock feeds, starch and sweeteners
- Require public investments in research

Trust

- Stable, predictable policies
- Open dialogue and communications
- Competitive markets (predictable policies, finance, good infrastructure)
- Good crop forecasting and market information systems