Making Maize Markets Work for Zambian Small Farmers, Traders & Consumers

By:

FSRP/MATEP Research/Outreach Team

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ACF The Agricultural Consultative Forum

FSRP/MATEP

What are the Problems & Opportunities ?

- Productivity growth elsewhere, but grain yields in Zambia are not increasing
- High production costs
- High transport costs
- Unstable markets (weather, uncertainty of government actions, inadequate information)
- Weak credit systems with mkt uncertainty

= Maize farming is not generating & facilitating broad-based rural income growth

Why is Maize Production & Marketing Not Thriving? 3 Major Reasons

1. Policy (& implementation) unpredictability, leading to markets not being able to function effectively to stimulate production and marketing improvements

Sources of Policy Unpredictability

- Export bans, import quotas (Year to year & within year)
- Uncertainty over changes in import tariff rates
- When and where will FRA enter the market
  - current example: is FRA going to sell low this year?
- Prices at which FRA buys and sells unpredictable
- Farmer & trader inventory carrying risks are high
- All of these sources of unpredictability impede private traders' servicing small farmers' needs
- Impedes investment and competition in output & inputs markets

Sources of Policy Unpredictability- cont ….

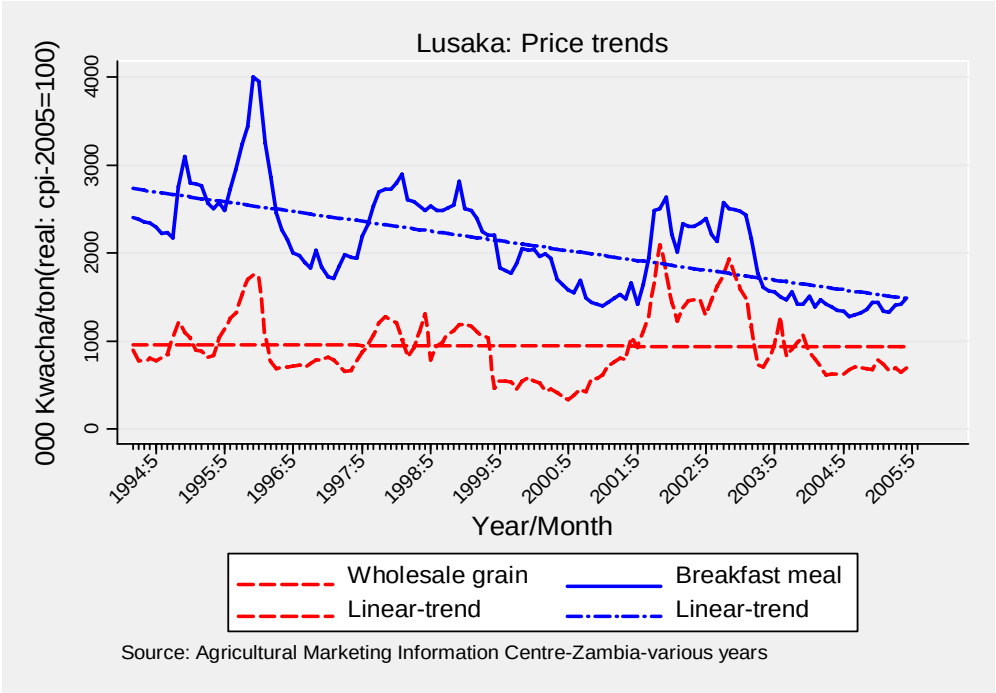
- When the risks of buying and storing maize become too great, then traders:
  - must limit their exposure to risks – adopt "wait-and-see approach"
  - find less risky investments
  - limit their investments that could otherwise benefit small farmers

  = Small farmers lose out

What is the Evidence that Increased Market Predictability Will Improve Food Security?

- ***Example of maize milling since liberalization***.
- Examples of growth rates in other crop markets in Zambia (with less direct govt. involvement)
- Examples from other African Countries where govt has less direct involvement in buying/selling in mkts (handout table)

Tangible Benefits of GOZ & Commercial Development in Milling Industry:



Source: Agricultural Marketing Information Centre-Zambia-various years

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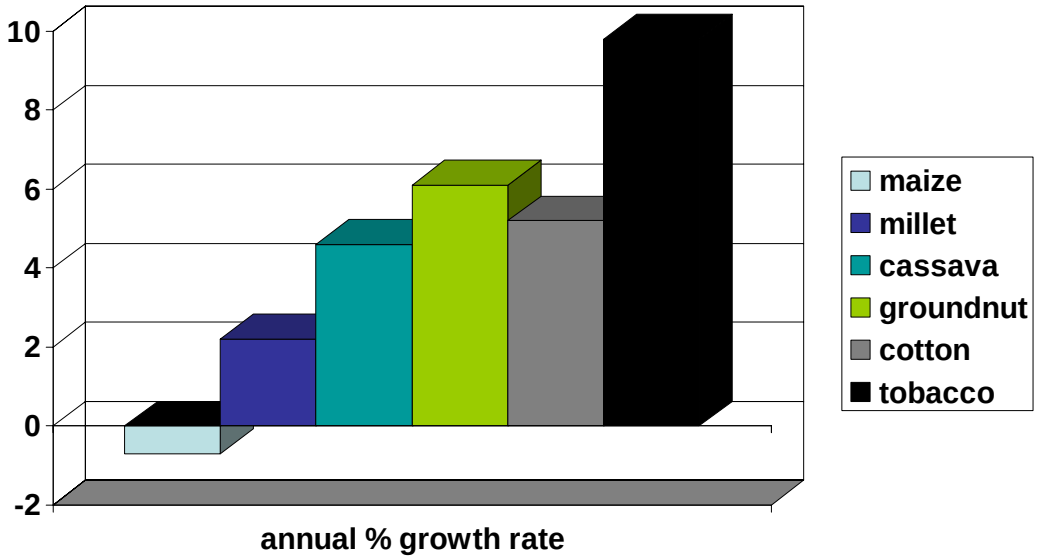
Zambia annual growth rates, 1992/3-2001/02



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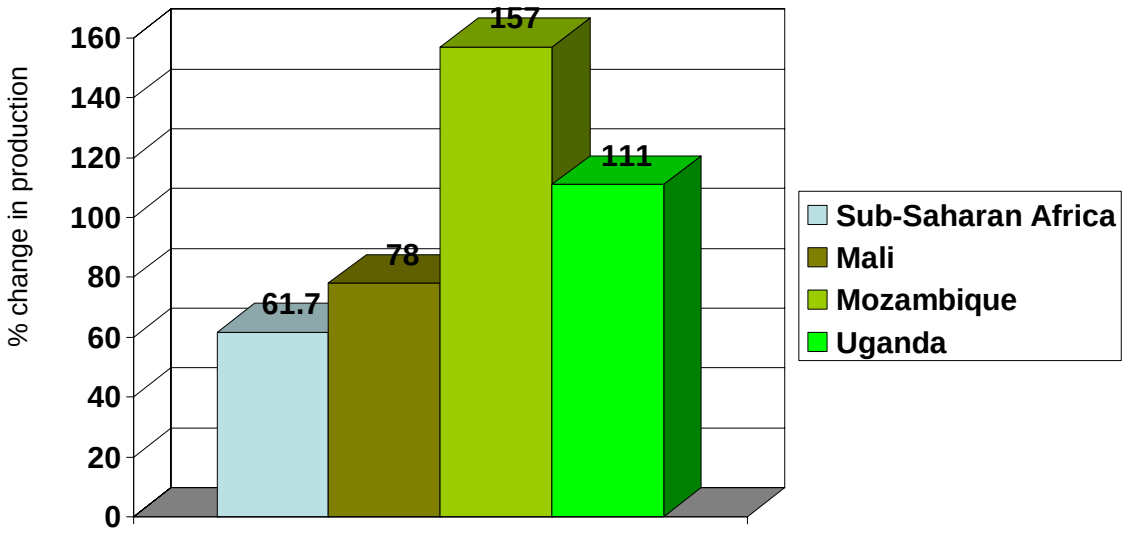
African Countries - % Growth in Cereal Production between 1985 and 2005



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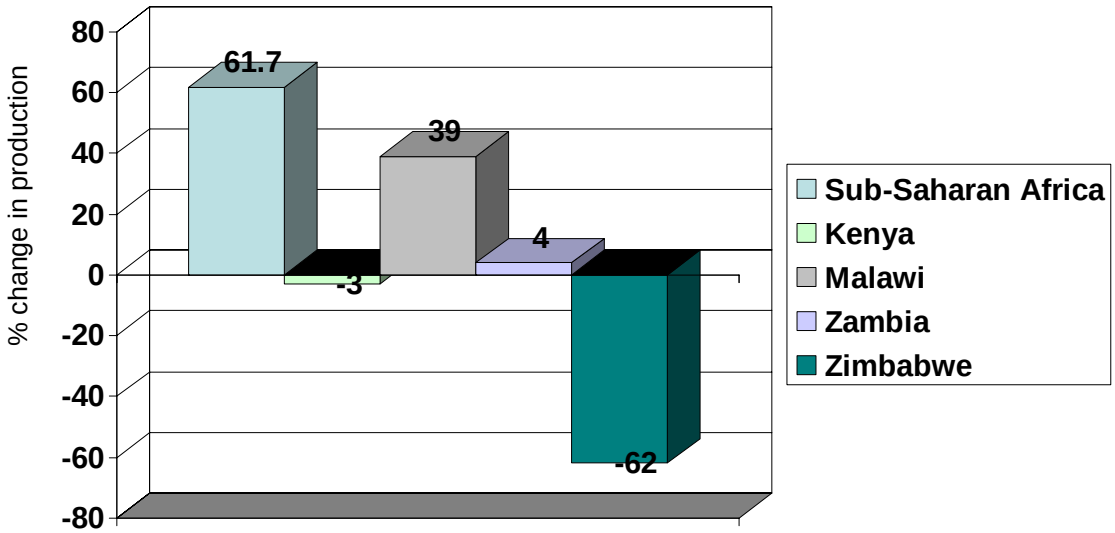

Why is Maize Production & Marketing Not Thriving?

2. Erosion of information base required for government & private sector investors to make informed decisions
   - CFS and PHS surveys no longer accurately measure agricultural production
   - Large scale maize production is especially unreliable
   - Small-scale production estimates do not take account of rural population growth
   - Over time, production levels are increasingly underestimated
   - Inadequate market information, analysis & outreach

Why is Maize Production & Marketing Not Thriving?

3. Arguments for improved policies often conflict with vested interest in maintaining status quo policies
   - Those who benefit when government approval is required for export and import permits?
   - Those who benefit when there are levies on maize traded across district boundaries?
   - Those who benefit when FRA is allowed to sell below its costs? Examples: 2001, 2003 (and 2006?)

Common Arguments & Challenges To Be Examined:

- Poor farmers need FRA to defend prices for them?
- Consumers need FRA to make sure enough grain is always available in the country?

Results & Challenges Arising From Concentration of Maize Sales Among Smallholder Farmers

- Only 30 % of the smallholder households in Zambia sell maize in a normal year
- And 2% of the smallholder households (24,256 farms) account for 50% of sales of maize
- Some 68 % are net buyers of maize

Characteristics of Smallholder Farmers By Maize Sales Groups, Zambia PHS / FSRP Supplemental Survey - 2002/03

Maize Sales Groups	N=	Crop area (ha)	Asset values (Kw 000)	Gr. Rev., maize sales (Kw 000)	Gr. Rev., crop sales (Kw 000)	Total hh income (Kw 000)
Top 50% of maize sales smallholders	24,255	5.1	6,809	3,622	4,323	15,727
Rest of smallholder maize sellers	330,104	2.0	1,348	271	548	3,102
Households not selling maize	890,682	1.3	1,080	0	283	1,956

Similar patterns were found in the panel base year: 1999/00 for the PHS/Supplemental

Fertilizer Use & Source Patterns By Maize Sales Groups, 2002/03

Maize Sales Groups	% receiving FSP fertilizer	% purchasing fertilizer from retailers	-- kgs per hh (users only) Received from FSP	private retailers
Top 50% of maize sales Smallholders	38%	54%	1,011	815
Rest of Smallholder maize sellers	21%	30%	248	225
Households not selling maize	9%	13%	173	157

Fertilizer Use and Source Patterns By Maize Sales Groups, 2002/03

Maize Sales Groups	% receiving FSP fertilizer	% purchasing fertilizer from retailers	-- kgs per hh (total sample) Received from FSP	private retailers
Top 50% of maize sales	38%	54%	384	439
Rest of maize sellers	21%	30%	51	67
Households not selling maize	9%	13%	20	16

Poverty ⇩ Effects of Raising Maize Prices Above Market Clearing Levels

- Higher maize prices hurt the majority of the population who are net maize buyers
- Net maize buyers tend to be relatively poor farmers
- Many of these smallholders need technology to produce on less area enough maize to eat & raise incomes from selling other crops and labor services
- Since smallholder sales are so concentrated, FRA price-raising policies have highly regressive effects on income distribution
- Distribution of input subsidies also get concentrated according to production

Where From Here?

- The research and analysis of ACF/MACO/FSRP/MATEP underscores the potential positive payoffs to seriously consider the following options:

Greater Commitment to Agriculture Means Investing In:

- Agricultural science/technology/extension.
- Rail-port-road infrastructure
- Farmer organizations
- Regional trade / predictable government actions in markets
- Accurate and timely information on production & prices
- Development of public sector awareness of markets' potential and local analysis capacity

Dilemma: Current commitment of resources is needed to bring long-term economic & political payoffs

Investing in Transportation Infrastructure

- High transport costs in region
  - $90–$145 / mt from Jo'burg → Lusaka
- Much of price instability problem is due to high transport costs
- Increasing fertilizer use on maize and other crops requires much lower transport costs

Dilemma: Current commitment of resources is needed to bring long-term economic & political payoffs

Promoting Regional Trade

- Simplify / harmonize trade regulations
- Professionalisation of customs services
  - Focus on promoting trade rather than generating revenue from traders
- Reconsider using export and import restrictions, denying of export/import permits
- Denying exports prevents commercial markets from being able to evacuate surpluses
- Taxing imports prevents commercial markets from being able to import in times of need

Dilemma: Current commitment of resources is needed to bring long-term economic & political payoffs

Caution Regarding Size and Role of Strategic Reserve

- All evidence indicates that relying on regional trade is much more cost effective than costly strategic stocks – cost to maintain grain quality and uncertainty on storage investments of large stocks overhanging mkt
- Size of strategic stock need not be more than 2 months, because this is time required for imports
- GOZ needs timely information to make strategic import/export decisions
- These issues already addressed in AMDP
- Waiting for implementation of AMDP

Caution on Maize Meal Fortification

- Possible adverse effects on costs and competition in commercial milling sector could put at risk the significant gains from prior liberalization & completion in milling
- Low income rural & urban consumers - options are important for access to grain, custom milling and good nutrition via wholegrain maize meal

Effective Policy Responses Require Accurate Crop Forecasts

- Incentives for CSO to develop accurate crop forecasts
- Resources & Oversight of CSO
- Strengthen the effective demand for use of CSO crop forecasts
  - DMU needs serious capacity building
  - ZNFU can become an important advocate for better CSO agricultural information

Long-Run Challenges

- In the long-run, small farmers' welfare can improve rapidly when there is GOZ policy environment that encourages broad-based commercial investment in the food system
- Among other things, this requires:
  - policy makers' trust in the role of markets and trade in improving the livelihoods of small farmers.
  - policy decisions and public sector will to provide missing public goods to facilitate production and marketing

Zikomo Kwambili,
Natotela sana,
L'i tumezi ahulu,
Twalumba kapati,
Thank you