Review of the effects of FRA on Zambia’s maize market: High prices despite bumper harvests

Auckland Kuteya and Nicholas Sitko

Presented to Parliamentarians during Dialogue on Pertinent Issues in Agricultural Sector Workshop, Kariba Inn, Siavonga
March 8th, 2014
Background

- Since 2009/2010 production season, maize harvests have been above 2.5 million metric tons each year.

- Projected maize surplus between 2010 & 2012 was 4.4 million MT of which FRA purchased 83%.

- Despite maize surpluses, there were widespread maize meal shortages & skyrocketing m/meal prices.

- In response to price spikes, Gov increased maize subsidies to large-scale maize mills in 2012.
The main question

How could Zambia face maize shortages and high prices despite three consecutive bumper harvests, large subsidies to mills, and significant maize held by the FRA?
What is FRA’s role in crop marketing?

- As its initial mandate, FRA was established to maintain national strategic food reserves.

- After amendment of Food Reserve Act in 2005, FRA has become a major player in the maize market.
Government spending through FRA from 2003 to 2013

Source: MoFNP and MAL
This spending does not address key issues

- R&D
- Extension
- Irrigation
- Soil fertility management
- Livestock development
- Strategic infrastructure development
As a result crop yields are low in Zambia
Effects of the FRA on maize market
#1: FRA purchased nearly all surplus maize between 2010 & 2012

Source: CFS/PHS various years and SS2004/2008

Indaba Agricultural Policy Research Institute
Because FRA bought more maize than what they could handle, there were greater levels of FRA maize spoilage estimated at 32% (2013 ministerial statement by MAL Minister). This loss translates to K2.5 billion - loss equals 60% Euro bond. Private sector loss is only about 5%
#3: Retail maize markets became thinly traded as many traders were forced out of business
#4: Informal sector squeezed out of market

FRA’s procuring nearly all surplus maize and sell it at subsidized rates to a few selected commercial mills squeezed out informal milling sector
#5: Selected subsidies to large millers provided un-leveled playing field

- Not all large millers received heavily subsidized grain
- Others lost market share and exited the market
- Concentration of the milling sector
Undermined competition as such mealie meal prices did not come down

Source: CSO and AMIC 2011 – 2012
Reduced maize meal available on the market

- Rationing of FRA maize sold at subsidized prices to commercial mills led to:
  - less maize meal available on the market than would have been the case if all mills were operating at full capacity
Because FRA purchased majority of the maize, commercial mills’ access to maize directly from the market became limited and this resulted into:

- increased risk of bottlenecks in maize supply chain
Because large millers started waiting for cheap FRA maize, it led to loss of forward contracts with commercial farmers.

Source: CFS various years
Putting it all together

- Less competition within large-scale milling sector which resulted into concentration of the sector
- Shortage of maize and mealie meal on the market
- Informal traders and retailers squeezed out of the market
- Overall surplus diminished by spoilage/wastage
- Commercial farmers’ maize production declined
- Major cost to national treasury & big opportunity cost to investments in R&D, extension, irrigation & infrastructure
Effects of FRA’s activities made Zambia’s maize marketing system vulnerable to regional supply and demand shocks.

Sources: Maize-RSA Annual Exports – 2003/04-2012/13 (SAGIS)
Policy options on way forward

- Increase investments in infrastructure, irrigation, R&D, and extension services by scaling back FRA spending
- Encourage commercial maize production by promoting futures contracts with commercial farmers
- Encourage maize wholesaling firms to develop contracts with smallholder farmers
- Enhance regional trade in staple food commodities to provide opportunities to increase producer prices
- Increased demand for Zambia’s maize in the region should be viewed as an opportunity to farmers
Thank You
# Total estimated loss to national treasury through FRA maize marketing from 2010 - 2012

<table>
<thead>
<tr>
<th>Estimated costs per 50kg bag</th>
<th>ZMW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price</td>
<td>65</td>
</tr>
<tr>
<td>Transport cost</td>
<td>15</td>
</tr>
<tr>
<td>Storage/handling costs</td>
<td>10</td>
</tr>
<tr>
<td>Financing @ 20%</td>
<td>13</td>
</tr>
<tr>
<td>Cost of storage losses @ 32%</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total cost</strong></td>
<td><strong>124/bag</strong></td>
</tr>
</tbody>
</table>
## Total estimated loss to national treasury through FRA maize marketing from 2010 - 2012

<table>
<thead>
<tr>
<th>Estimated FRA sales</th>
<th>ZMW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales price range/50kg bag (KR20 – 60)</td>
<td>40</td>
</tr>
<tr>
<td>Average loss/50kg bag [total costs – sales price]</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>(1,680/MT)</td>
</tr>
</tbody>
</table>

- Total purchases of maize grain 3.7 million MT
- Grain storage losses (32%) gives us 1.2 million MT
- Total grain sold (3.7mmt – 1.2mmt) **2.5** million MT
Total estimated loss to national treasury through FRA maize purchases from 2010 - 2012

- Total estimated operating **LOSS:**
  
  total grain sold x average loss/MT = (2.5 x 1,680)

  → 4.2 billion kwacha rebased

- Loss more than Euro bond