Facts about Zambia Agriculture Sector

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Kansanshi Hotel, Solwezi
6th May 2016
Where is Zambia’s Agriculture?

Are we here?

Are we here?

Are we here?

Are we here?
## Agricultural Priorities

If government could increase its spending on rural development and poverty reduction programs, what are the top three priorities you would vote for?

<table>
<thead>
<tr>
<th>Input Subsidies</th>
<th>Education</th>
<th>Water and sanitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FISP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care</td>
<td>Buy more maize through FRA</td>
<td>Roads &amp; Brides</td>
</tr>
</tbody>
</table>
Agricultural Priorities

- If government could increase its spending on rural development and poverty reduction, what do you think are the top three most important priorities?

1. Health Care
2. Roads & Brides
3. Education
4. Water and sanitation
5. Input Subsidies FISP

Not in top ten

Buy more maize through FRA
Why this Presentation?

Highlight key facts about Zambia’s Agriculture
- Discuss key policy levers to achieve broad based pro-poor agricultural growth in Zambia

Dialogue with District and Provincial Staff
- Help trigger and implement agriculture policy changes that will change the structure of agriculture in order to achieve broad based poverty reduction.

Set the stage for the other presentations in this workshop
- Agricultural diversification
  - Crops
  - Fish & Livestock
- Importance of local and regional trade
“Evidence-based policy helps people make well-informed decisions about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation. (Davies, P.T., 1999)
The Challenge?
Voice of Smallholder farmers

Rural Livelihood Agricultural Survey 2015
Zambia Ag. Development Goal

Reduce poverty through broad-based income growth for those in the agricultural sector
Malabo Declaration, 26-27 June 2014

Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods

- To uphold Maputo declaration of allocating at least 10% of public expenditure to agriculture
- To sustain annual agricultural GDP growth of at least 6%
- To end hunger and cut poverty in half by 2025
- To accelerate agricultural growth by doubling current agricultural productivity levels by 2025
- To halve Post-Harvest Losses by the year 2025
- To triple agricultural intra-African trade by 2025
- To eliminate child under-nutrition by bringing down stunting to 10% and underweight to 5% by 2025
Where are we?
Zambia’s Economic Achievements

- Zambia
  - Classified as low-middle income by World Bank
  - GDP growing at 6% per annum
  - Agricultural growth rate at 7% - above 6% CAADP Goal
  - Rural poverty remains very high
Rural Poverty in Zambia

Source: GRZ’s Central Statistical Office and RALS 2012 and 2015

HOW CAN WE HELP THE FARMERS?
2015 Poverty Rates

Source: LCMS 2015
Persistently low maize yields

Sources: MAL/CSO Crop Forecast Surveys, 2006/07 - 2013/14

Can Zambia achieve this target under the current agricultural policies?
Under exploited potential

- Zambia is in a unique position
  - Abundance of fertile land
  - Water
  - Generally, favorable climate for agricultural production
  - Growing population, rapid urbanization and rising incomes creating more opportunities for smallholder farmers
  - Can easily become a ‘Breadbasket’ for the region

Are Zambia’s agricultural policies amenable to these opportunities?
Zambia’s Agricultural Budget
Budgetary Allocations to Agriculture

<table>
<thead>
<tr>
<th>Year</th>
<th>Allocation to Agriculture (K' million)</th>
<th>% of Agriculture to National budget (right Y-scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1,000</td>
<td>5.8%</td>
</tr>
<tr>
<td>2014</td>
<td>2,000</td>
<td>7.2%</td>
</tr>
<tr>
<td>2015</td>
<td>3,000</td>
<td>9.3%</td>
</tr>
<tr>
<td>2016</td>
<td>2,000</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

Includes allocations via other Ministries
2015 Zambia Agriculture Budget Allocation

- FRA and FISP taking too much
- Staff receive salaries but delayed release of operational funds

<table>
<thead>
<tr>
<th>Program</th>
<th>% of others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Emoluments</td>
<td>62</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>21</td>
</tr>
<tr>
<td>Grants &amp; other payments</td>
<td>13</td>
</tr>
<tr>
<td>All others</td>
<td>4</td>
</tr>
</tbody>
</table>

Program % of PRPs

- FISP 56%
- FRA 42%
- All others 2%
- Total PRP 100%

Poverty Reduction Programmes (PRPs) 58%
Agricultural Development Programs 16%
Others 17%
Recurrent Departmental Charges 9%
## Budget Allocations Versus Releases

<table>
<thead>
<tr>
<th>Main Budget Lines</th>
<th>2015 Allocations (K’ million)</th>
<th>Released by Sept 2015 (K’ million)</th>
<th>% Released</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Emoluments</td>
<td>449</td>
<td>270</td>
<td>60%</td>
</tr>
<tr>
<td>Recurrent Departmental Charges</td>
<td>365</td>
<td>128</td>
<td>35%</td>
</tr>
<tr>
<td>Grants and Other Payments</td>
<td>91</td>
<td>68</td>
<td>75%</td>
</tr>
<tr>
<td>Poverty Reduction Programs o/w FRA</td>
<td>2,377</td>
<td>2,902</td>
<td>122%</td>
</tr>
<tr>
<td></td>
<td>993</td>
<td>1,135</td>
<td>114%</td>
</tr>
<tr>
<td></td>
<td>1,338</td>
<td>1,510</td>
<td>113%</td>
</tr>
<tr>
<td>Poverty Reduction Programs o/w FISP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>148</td>
<td>67</td>
<td>45%</td>
</tr>
<tr>
<td>Agricultural show</td>
<td>11</td>
<td>10</td>
<td>91%</td>
</tr>
<tr>
<td>Agricultural Development Programs</td>
<td>646</td>
<td>136</td>
<td>21%</td>
</tr>
<tr>
<td>Total</td>
<td>4,108</td>
<td>3,588</td>
<td>87%</td>
</tr>
</tbody>
</table>
Allocations to Poverty Reduction Programmes

- **FISP**: 56%
- **FRA**: 42%
- **All Other**: 2%

Allocation to PRPs K1,793m

- **Quality of expenditure?**
- Too little to key drivers of agricultural growth
  - agricultural R&D
  - extension services
  - livestock production and disease control
  - rural infrastructure i.e. feeder roads
  - Irrigation

2016 Budget allocation
<table>
<thead>
<tr>
<th>Investment Category</th>
<th>China</th>
<th>India</th>
<th>Thailand</th>
<th>Vietnam</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural R&amp;D</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Roads</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Education (Agricultural Extension Services)</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Political economy of public resource allocation

Government budget

### Long-term productive investments:
- R&D, infrastructure, education, etc.
- High social payoffs
- But payoffs come 5-20 years later
- Critical for sustained poverty reduction

### Input subsidy programs
- Marketing board price supports

### Presumably have Immediate political payoffs;
- Visible support to constituencies
- Contribution to sustained growth / poverty reduction is unclear
Why Frequent Negative Returns for Subsidies Programs?

- Subsidized inputs crowd out the private sector deliveries & discourage investments in new private input dealer networks
- Misallocation and inefficiencies – leading to unsustainable fertilizer use
- Diversion and rent seeking raises incomes of some but does little to raise crop productivity
- Late delivery of inputs does not improve productivity
Progressive Policies

- Open borders
- E-voucher Piloting
- Agricultural Diversification
  - Fisheries and Livestock
  - Irrigation
- Private sector led investments

More support for progressive policies!!!
Under appreciated facts about Zambia’s agriculture
Under Appreciated Fact # 1

Government expenditure on FISP is benefiting mostly the larger and relatively already well off HHs with very little impact on yields and poverty reduction.
## Land size, poverty and FISP in Zambia

<table>
<thead>
<tr>
<th>Total area cultivated</th>
<th>Number of farms</th>
<th>% of farms</th>
<th>Poverty Rate (%)</th>
<th>% of farmers receiving FISP fertilizer</th>
<th>kg of FISP fertilizer received per farm household</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-0.99 ha</td>
<td>515,415</td>
<td>34.1</td>
<td>83</td>
<td>18</td>
<td>28.7</td>
</tr>
<tr>
<td>1-1.99 ha</td>
<td>503,656</td>
<td>33.3</td>
<td>80</td>
<td>39</td>
<td>83.24</td>
</tr>
<tr>
<td>2-4.99 ha</td>
<td>408,169</td>
<td>27.0</td>
<td>68</td>
<td>50</td>
<td>143.3</td>
</tr>
<tr>
<td>5-9.99 ha</td>
<td>70,822</td>
<td>4.7</td>
<td>35</td>
<td>61</td>
<td>229.17</td>
</tr>
<tr>
<td>10-20 ha</td>
<td>14,316</td>
<td>0.9</td>
<td>25</td>
<td>50</td>
<td>227.54</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,512,378</strong></td>
<td><strong>100.0</strong></td>
<td><strong>75</strong></td>
<td><strong>36</strong></td>
<td><strong>89.07</strong></td>
</tr>
</tbody>
</table>

Source: RALS 2015
Many smallholder households are land constrained

- More than 25% have less than 1 ha of land
- 58% indicate there is no unallocated land in village
Land cultivated categories

Source: RALS 2015
Percent of smallholder that say “There is NO land available”

Northwestern = 31.9%
National = 56.7%

Source: RALS 2015
Why are Zambia Farmers land constrained?


Settlements concentrated on areas with infrastructure

Hence, the land constraints in a land-abundant country is not a paradox

Considerable land is covered by water, national parks, GMA

Price supports on maize help very few farmers, and actually hurt many rural and urban households.
Many maize net buyers

- Nearly 39% of rural farm HHs are net buyers of maize
- Net Buyers Negatively affected by high FRA maize prices

Source: RALS 2012
Northwestern has about 25% of the households who are net buyers

Source: RALS 2015
Highly concentrated patterns of maize surplus production

<table>
<thead>
<tr>
<th></th>
<th>Households</th>
<th>Land cultivated</th>
<th>Maize Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
<td>Hectare</td>
</tr>
<tr>
<td>Maize sellers</td>
<td>690,885</td>
<td>52.5</td>
<td>2.56</td>
</tr>
<tr>
<td>Top 50% of maize sales</td>
<td>59,961</td>
<td>4.6</td>
<td>6.87</td>
</tr>
<tr>
<td>Rest of all other maize sales</td>
<td>630.924</td>
<td>47.9</td>
<td>2.15</td>
</tr>
<tr>
<td>Non maize sellers</td>
<td>625,562</td>
<td>47.5</td>
<td>1.38</td>
</tr>
</tbody>
</table>

Source: RALS 2015
Import and export bans do not help to keep grain prices within reasonable bounds for consumers and producers?
Import and export bans

When grain prices spike above import parity, consumers are being unnecessarily taxed by an inefficient market

Import ban/restriction

When grain prices fall below export parity, producers are denied income opportunities from crop sales

[Export Ban]
The majority of farmers selling maize to a private trader do it in their village even in the most remote and isolated areas.

- Long distances traveled by about 10% of the smallholder population to sell maize is generally not indicative of severe market access problems.
- Reasonable degree of competition among village level grain assembly traders exists.
## Distance to nearest largest maize sale transaction to private assembly traders

<table>
<thead>
<tr>
<th>Percentile of farm household distribution</th>
<th>Distance to nearest Boma (km)</th>
<th>Distance to nearest private assembly traders (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>41.6</td>
<td>5.4</td>
</tr>
<tr>
<td>25&lt;sup&gt;th&lt;/sup&gt;</td>
<td>16.0</td>
<td>0.0</td>
</tr>
<tr>
<td>50&lt;sup&gt;th&lt;/sup&gt;</td>
<td>35.0</td>
<td>0.0</td>
</tr>
<tr>
<td>75&lt;sup&gt;th&lt;/sup&gt;</td>
<td>58.0</td>
<td>1.0</td>
</tr>
<tr>
<td>90&lt;sup&gt;th&lt;/sup&gt;</td>
<td>88.0</td>
<td>12.8</td>
</tr>
</tbody>
</table>

Sources: RALS 2015
“How many private traders come into this village to buy maize from farmers?”

Sources: Zambia: MACO/CSO Crop Forecast Surveys 2011

3 to 15 traders

Among Sellers

Among Non-sellers
Market intermediation by traders bridge the geographic distances between farmers and urban markets weakening the link between geographic location and market access.

So called “Briefcase Traders” play a key role in providing a market for farmers in remote and isolated areas.
How do we transform agricultural sector?
Concluding remarks

Zambia has:

• potential to have broad-based economic growth;
• potential to address the stubbornly high rural poverty rates and high malnutrition;
• potential to be the ‘breadbasket for the region’;
BUT......

- We should not expect different results from the same policies
- Policies should evolve and take advantage of the many agricultural opportunities arising from the rising food demand, rising urban incomes and the changing consumption patterns.
If governments intervenes too heavily, then markets will not develop

- We aught to have a system where private sector takes the lead in linking producers and consumers to the market not the other way around.
- Governments’ role should be limited to providing clear policies and regulations to enhance value chain activities.
Thank You

Zambia’s Agriculture