Overview of Zambia’s Agriculture Sector

by
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Protea Safari Lodge, Chisamabwa
June 26, 2017
About Zambia

- Zambia is a landlocked country, covering an area of 752,620 square kilometres (sq km)
- Population 15.5 million of which 58.2% live in the rural areas with agriculture as their mainstay for survival (LCMS 2015).
- Stubbornly high levels of rural poverty
- Maize is the single most important crop
  - 90% production by smallholders
  - Provides about 60% of the country’s caloric requirements (LCMS, 2015; Mason and Myers, 2011).
- Maize centric polices
- Zambia is land linked
Rainfall, Soil and Crop Suitability by agro-ecological Region

Region I:
- Rainfall range - 800 to 1,000 mm/annum
- Loamy to clay soils
- Cotton, sorghum, millet, sesame, cashew nuts, livestock, fisheries

Region IIa:
- Rainfall range 800 – 1,000 mm/annum
- Loamy to sandy soils
- Cassava, sorghum, millet, sesame, cashew nuts, livestock, fisheries

Region III:
- More than 1,000 mm of rainfall/ annum
- Very deep soils, sandy clay loam.
- Cassava, millet, sorghum, beans, groundnuts, rice, coffee, tea, pineapples, fish farming, livestock.

Region I:
- Rainfall Less than 800 mm/annum
- Inherent fertile plateau soils.
- Maize, cotton, tobacco, sunflower, soybeans, irrigated wheat, groundnuts, flowers, paprika, vegetables, cassava, millet, horticulture, livestock.
Zambia has potential for diversity

For most recent livelihood zone report see
Key facts about Zambia’s Agriculture
Large scale Farmers

Medium-scale [20-100ha]

Smallholder Category C [5-20 ha]

Smallholder Category B [2-5 ha]

Smallholder Category A [0-2 ha]

<3000 (#s of Emergent Farmers need to be established)

6.9%

20.7%

72.4%

1.52 million household

Approx. 9.6 million people

Source: RALS 2015
The majority of Africa’s smallholders remain poor
75%+ in Zambia

- Land constrained
- Low productivity
- High post harvest losses
- Limited input and output markets
- Unpredictable weather
- Liquidity constraints and limited access to credit
- High transport costs
- Unpredictable agricultural policies etc.
MAIZE-LED AGRICULTURAL ECONOMY

Food Staple Zones
- Cassava belt: cassava > 75% area
- Dual staple: cassava & maize 25-75%
- Maize belt: maize > 75% area

Surplus Maize – Central and South
Surplus Cassava – North
TOO MAIZE CENTRIC

Source: RALS 2015
LIVESTOCK SECTOR

Livestock contributes

- 3.2% to national GDP and over 30% to agric. GDP
- 6% to smallholder households’ income
  - Can be as high as 30% (among livestock market participants)
- constitutes 20% of household assets

Yet livestock budget share of the Poverty Reduction Program is remains very small
Livestock revolution taking place

- Population growth, urbanization, increasing incomes
- Increase demand for livestock/livestock products

Evidence - as people emerge from poverty, consumption patterns changes

- Consume more high protein foods - derived from livestock

Projections of Zambia’s total meat/milk demand from 2012 to 2027 show that

- (120 to 600) thousand tonnes of meat
- (260 -1200) million litres of milk
Meeting this rapidly increasing demand for animal-source foods presents a “big opportunity for smallholders to earn a better living”

Building Resilience through Diversification
Source: Ministry of Fisheries and Livestock
FISHERIES SECTOR

Fisheries

Capture Fisheries

Wild fish in natural water bodies

Aquaculture Fisheries

Fish farming
Employment – Directly & indirectly

More than 300,000 people earn their income directly as fishers or fish farmers or indirectly along the value chain (Musumali et al., 2009)

Contribution to GDP

0.4% - Agriculture, Forestry and Fishing GDP in 2010 (CSO, 2014)

Zambia’s fish imports have increased from 25% to 35% over the years (DOF, 2016).

Food and nutrition security

53.4% of animal protein (FAO, 2012)
Trend of Fish Production from Capture and Aquaculture Fisheries (2006-2013)

Capture Fisheries

Aquaculture Fisheries
High Demand- Supply gap

- Annual aquaculture production: 20,000mt
- Annual capture fisheries production: 75,000mt
- Total Annual consumption: 130,000mt
- Deficit: 35,000mt

Favorable environmental factors - High temperature

A lot of water

- 12 million ha of water and 8 million of wet lands

Huge Export Market
Two major basins

- **Zambezi Basins**
  - Kafue, Kariba, Lukanga, Zambezi (Upper, Middle and Lower), Itezhi-tezhi, Luangwa and Lusiwashi.

- **Congo Basins**
  - Bangweulu, Mweru-Luapula, Mweru Wantipa, Chambeshi and Tanganyil
Some under-appreciated facts about Zambia’s agriculture
Many smallholder households are land constrained
- More than 32% cultivate have less than 1.0 ha of land
- 66.5% cultivate less than 2.0 ha of land

Rural Agricultural Livelihoods Survey, 2015
### FACT #2

More than 45% of rural farmers do not sell maize

<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>
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<tr>
<td>Non maize sellers</td>
<td>625,562</td>
<td>47.5</td>
<td>1.38</td>
</tr>
</tbody>
</table>

More than 45% of rural farmers do not sell maize.
Nearly 30% of rural smallholder farmers are net buyers of maize

***Negatively affected by high FRA maize prices***

Source: RALS 2015
**FACT # 4**

- **Highly concentrated patterns of maize surplus generation**
  - 2-7% of smallholder farm households account for 50% of marketed maize
Most smallholder farmers do not participate in the livestock market

<table>
<thead>
<tr>
<th></th>
<th>Cattle</th>
<th>Goats</th>
<th>Pigs</th>
<th>Village chickens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of HHs selling</td>
<td>16.9%</td>
<td>33.2%</td>
<td>32.1%</td>
<td>36.1%</td>
</tr>
<tr>
<td>Average number owned</td>
<td>8</td>
<td>7</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Average number sold</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Average price (ZMK)</td>
<td>2,095</td>
<td>170</td>
<td>276</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: RALS 2015
Where is the money going?
BUDGETARY ALLOCATIONS TO AGRICULTURE

Allocations (million Kwacha)

% of Agriculture to National budget


- 2012: 6.1
- 2013: 5.8
- 2014: 7.2
- 2015: 9.3
- 2016: 6.5
- 2017: 9.4

Includes allocations via other Ministries

Sum of MoA and MFL (Kwacha)
2016 BUDGETARY ALLOCATIONS IN AGRIC SECTOR

Program

<table>
<thead>
<tr>
<th>Program</th>
<th>Total (Kwacha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (Kwacha)</td>
<td>708,533,323</td>
</tr>
<tr>
<td>Of Which (%)</td>
<td></td>
</tr>
<tr>
<td>PEs</td>
<td>31.7</td>
</tr>
<tr>
<td>PRPs</td>
<td>4.1</td>
</tr>
<tr>
<td>RDCs</td>
<td>14.9</td>
</tr>
<tr>
<td>ADPs</td>
<td>43.8</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>3.7</td>
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<tr>
<td>Agric Show</td>
<td>0.7</td>
</tr>
<tr>
<td>Grants &amp; other payments</td>
<td>0.8</td>
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</table>

Program

<table>
<thead>
<tr>
<th>Program</th>
<th>Total (Kwacha)</th>
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</thead>
<tbody>
<tr>
<td>Total (Kwacha)</td>
<td>2,382,266,379</td>
</tr>
<tr>
<td>Of Which (%)</td>
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<tr>
<td>PEs</td>
<td>10</td>
</tr>
<tr>
<td>PRPs</td>
<td>74</td>
</tr>
<tr>
<td>o/w FISP</td>
<td>42.1</td>
</tr>
<tr>
<td>FRA</td>
<td>31.5</td>
</tr>
<tr>
<td>RDCs</td>
<td>5.3</td>
</tr>
<tr>
<td>ADPs</td>
<td>5.4</td>
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<tr>
<td>Capital Expenditure</td>
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<tr>
<td>Agric Show</td>
<td>0.3</td>
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<tr>
<td>Grants &amp; other payments</td>
<td>3.6</td>
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</tbody>
</table>

MoA, [PERCENTAGE ]
## 2017 BUDGETARY ALLOCATIONS IN AGRIC SECTOR

### Program % of MFL

<table>
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<tbody>
<tr>
<td>Total (Kwacha)</td>
<td>642,686,689</td>
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<td>Of Which (%)</td>
<td></td>
</tr>
<tr>
<td>PEs</td>
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### Program % of MoA

<table>
<thead>
<tr>
<th>Program</th>
<th>% of MoA</th>
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</thead>
<tbody>
<tr>
<td>Total (Kwacha)</td>
<td>5,435,167,917</td>
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<tr>
<td>Of Which (%)</td>
<td></td>
</tr>
<tr>
<td>PEs</td>
<td></td>
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<tr>
<td>PRPs</td>
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<tr>
<td>o/w FISP</td>
<td>53.4</td>
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<td>17.3</td>
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Zambia Agriculture Budget allocation

- 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
Farmers lobby for higher producer prices

A never ending struggle for the Policy Makers!!!

Lower consumer prices, usually culminating into unsustainable consumer subsidies
OVERBURDENED & UNBALANCED

Government Treasury
Tomorrow Belongs to People Who Prepare for it Today -- African Proverb
THANK YOU