FACTS ABOUT AGRICULTURAL DIVERSIFICATION IN ZAMBIA

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Presentation Flow

1. Need for Agricultural Diversification
2. Concerns about Maize Centered
3. Opportunities for Alternative Value Chains
4. Way Forward
Need for Agricultural Diversification

- Policies are oriented towards achieving mainly maize self-sufficiency
  - 57% of 2016 agricultural budgetary allocation to maize subsidies
  - 89.4% farmers grow maize
  - Area under maize 54%
Proportion of cultivated area devoted to various crops by province

- **ALL OTHER CROPS**: 6.9
- **GARDENS**: 6.15
- **ORANGE SWEET POTATO**: 0.1
- **SWEET POTATOES**: 2
- **COWPEAS**: 0.3
- **MIXED BEANS**: 3.2
- **SEED COTTON**: 3.3
- **SOYA BEANS**: 1
- **CASSAVA**: 10.6
- **GROUNDNUTS**: 7.5
- **MILLET**: 2.1
- **RICE**: 1
- **SORGHUM**: 1
- **MAIZE**: 53.6

The graph shows the proportion of the cultivated area devoted to various crops by province, with maize accounting for the largest proportion at 53.6%.
Proportion of cultivated area devoted to various crops by Province (2015)

Source: CSO/MAL 2010
Upward trends in maize production

Source: MAL CFS various years
Concerns on Maize Centric Policies
Concerns on Maize Centric Policies

- Limit the potential to use agriculture as a poverty reduction tool
- Limit the scope and scale of agro-processing, trading and input supply
- Deplete soil nutrients through soil mining
- Elevate risks, at both household and economy-wide level, associated with:
  - Climate change – droughts
  - Price volatility
  - Market risks
- Reduces levels of household food security and dietary diversity
State Food Insecurity

Source: FAO et al. 2014
Global Hunger Index for Zambia

Source: IFPRI, 2014
Households Reporting inadequate Food Provisions

<table>
<thead>
<tr>
<th>Year</th>
<th>Households with adequate food provisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>46.7%</td>
</tr>
<tr>
<td>2015</td>
<td>46.0%</td>
</tr>
</tbody>
</table>
Months of Inadequate Food Provisions
Malnutrition Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Stunting (%)</th>
<th>Wasting (%)</th>
<th>Underweight (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>45</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>1996</td>
<td>40</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>2001-02</td>
<td>50</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>2007</td>
<td>48</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>2013-14</td>
<td>45</td>
<td>7</td>
<td>13</td>
</tr>
</tbody>
</table>

Indaba Agricultural Policy Research Institute
Opportunities for Alternative Agricultural Value Chains
Rainfall, Soil and Crop Suitability by agro-ecological Region

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

Region I:
- Rainfall Less than 800mm/annum
- Loamy to clay soils
- Cotton, sorghum millet, seseme, cashew nuts, livestock, fisheries

Region IIa:
- Rainfall range - 800 to 1,000mm/annum
- Inherent fertile plateau soils.
- Maize, cotton, tobacco, sunflower, soybeans, irrigated wheat, groundnuts, flowers, paprika, vegetables, cassava, millet, horticulture, livestock.

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

Source: Ministry of Fisheries and Livestock and Indaba Agricultural Policy Research Institute
Horticulture

- Gross margins of cabbage, tomato and onion are much higher than that of maize:
  - 219 times for cabbage,
  - 179 times for tomato
  - 138 times for onions
Important research findings on horticulture

- Proximity to good road infrastructure significantly increases smallholder farmers' participation in horticultural markets
- Price instability reduces the probability of participation in horticultural markets
- Chaotic market places disadvantage farmers and other market participants
What’s the way forward for horticulture
What is the Way Forward for Agriculture

- Develop horticultural wholesale markets under PPPs
- Legal and institutional framework to allow brokerage/agent as current system is chaotic and
Benefits

- There’s evidence that increasing production of high value crops cannot compromise food security.
- Income earned from high value crop sales is usually ploughed back for more production and even the production of maize for consumption and sale in case of surplus.
- Agricultural diversity promotes dietary diversity!
Way Forward for Improving Crop Diversification

- Improve extension advice and services
- Research and development
- E-voucher for FISP
- Help both the producers and the private sector to manage risk associated with prices, input supply systems, output markets and other environment factors
- Invest in the road, water, and electricity infrastructure to make markets work
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