Africa’s Evolving Food Systems:
Drivers of change and the scope for influencing them

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Motivating fact: looming employment challenge in SSA

Age pyramid: rural SSA, 2015

62% < 25 years old
Major benefits to considering agricultural, poverty reduction, and employment objectives in a coordinated manner
Objectives

- To present ideas for consideration regarding how agricultural programs can promote:
  - Agricultural productivity
  - Employment
  - Poverty reduction

- anticipating the ‘mega-trends’
- considering how policy can ‘bend’ the trends
- recognizing that agriculture can’t do it all alone
Six major trends
Trend #1

Rising global food and energy prices
FAO’s Food Price Index: Real prices on downward trend but high level
Trend #2

Urbanization

• 7 of 10 fastest growing economics are in Africa

• rise of an African middle class, etc...
Share of SSA’s imported processed and high-value food products from outside Africa

Source: ITC Trade Map, 2014
Food Demand Outstripping Production in Africa

High-Value Commodity Production and Consumption Change (2011/13 to 2023)

Cereal Production and Consumption Change (2011/13 to 2023)
Production in Asia

High-Value Commodity Production and Consumption Change
(2011/13 to 2023)

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Production (MT)</th>
<th>Consumption (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pork</td>
<td>30</td>
<td>55</td>
</tr>
<tr>
<td>Poultry</td>
<td>55</td>
<td>80</td>
</tr>
<tr>
<td>Dairy</td>
<td>80</td>
<td>105</td>
</tr>
<tr>
<td>Sugar</td>
<td>105</td>
<td>130</td>
</tr>
<tr>
<td>Vegetable Oil</td>
<td>130</td>
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</tr>
</tbody>
</table>

Cereal Production and Consumption Change
(2011/13 to 2023)

<table>
<thead>
<tr>
<th>Cereal</th>
<th>Production (MT)</th>
<th>Consumption (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>250</td>
<td>300</td>
</tr>
<tr>
<td>Coarse Grains</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td>Wheat</td>
<td>350</td>
<td>400</td>
</tr>
<tr>
<td>Coarse Grains</td>
<td>400</td>
<td>450</td>
</tr>
<tr>
<td>Rice</td>
<td>450</td>
<td>500</td>
</tr>
</tbody>
</table>
Production in Latin America

**High-Value Commodity Production and Consumption Change (2011/13 to 2023)**

- **Sugar**
- **Vegetable Oil**
- **Beef**
- **Poultry**
- **Dairy**

**Cereal Production and Consumption Change (2011/13 to 2023)**

- **Coarse Grains**
- **Rice**
- **Wheat**
The Americas are increasingly the largest net exporters

Note: Agriculture and fish products included in the Outlook
Trend #3

The “Youth Bulge”
Age pyramids, Sub-Saharan Africa, 2015

Source: UN Pop Council, 2013

62% < 25 years old
Jobs by sector, Sub-Saharan Africa

Source: World Bank (Filmer and Fox), 2014
Jobs by sector, Sub-Saharan Africa

Source: World Bank (Filmer and Fox), 2014
Trend #4

Rising global interest in Africa’s arable land
Trend #4: Rising global interest in Africa’s arable land

• Anticipate:
  – Rising land prices
  – Greater use of land-saving farm technologies (e.g., fertilizer, high-yield seeds, irrigation)

• Meteoric rise of medium-scale farms
Nine countries contain 90% of Africa’s unutilized arable land

<table>
<thead>
<tr>
<th></th>
<th>Non-forested unutilized land¹ (million ha)</th>
<th>Proportion</th>
<th>Cumulative Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRC</td>
<td>84.8</td>
<td>46.5%</td>
<td>46.5%</td>
</tr>
<tr>
<td>Angola</td>
<td>18.9</td>
<td>10.4%</td>
<td>56.9%</td>
</tr>
<tr>
<td>Congo</td>
<td>12.9</td>
<td>7.1%</td>
<td>63.9%</td>
</tr>
<tr>
<td>Zambia</td>
<td>10.8</td>
<td>5.9%</td>
<td>69.9%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>10.5</td>
<td>5.7%</td>
<td>75.6%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>9.0</td>
<td>4.9%</td>
<td>80.5%</td>
</tr>
<tr>
<td>CAR</td>
<td>7.1</td>
<td>3.9%</td>
<td>84.4%</td>
</tr>
<tr>
<td>Gabon</td>
<td>6.5</td>
<td>3.6%</td>
<td>88.0%</td>
</tr>
<tr>
<td>Sudan</td>
<td>5.8</td>
<td>3.2%</td>
<td>91.2%</td>
</tr>
<tr>
<td>Rest of Africa (n=45)</td>
<td>8.8%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>
Trend #5

Land degradation in smallholder farming areas
Agricultural intensification in Kenya

Figure 4: Net crop income per hectare cultivated

![Graph showing net crop income per hectare cultivated with actual and simulated data points. The graph plots '000 KSh against persons/sq km, with actual data represented by a solid line and simulated data by a dashed line. The graph peaks around 750 persons/sq km with both actual and simulated data showing similar trends.]
Variation in farmers’ efficiency of fertilizer use on maize, Agro-ecological Zone IIa, Zambia

Note: Zone IIa is a relatively high-potential zone suitable for intensive maize production
Trend #6

Climate change
Major message:

- Don’t accept all these “megatrends” as inevitable
  
  - Some trends are highly uncertain, being dependent on the time path of other trends
  
  - Policy can influence the trajectories of some of them / others less so
Recognize that agriculture can’t achieve economic transformation on its own

• Non-farm sectors must also create employment
• What does this mean? Increase investment in:
  1. education (including African-based policy analysis units)
  2. Agricultural R&D, agricultural extension, programs to restore long-term soil fertility
  3. Physical infrastructure to reduce the costs of production in both industry and agriculture and promote employment
  4. industrial policy -- promote private investment and job growth in local non-farm sectors, which simultaneously stimulates investment in local agrifood systems
  5. urban planning (housing, sanitation, health facilities and green spaces) in anticipation of many more people living in urban areas in the decades to come
Take-away messages

• Anticipate the ‘mega-trends’
• Considering how policy can ‘bend’ the trends
• Recognize that agriculture can’t do it all alone

• Consider agricultural, poverty reduction, and employment objectives in a coordinated manner
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