Mega-trends and the Future of African Economies

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African Studies Center, Michigan State University
April 16, 2015
Objectives

• To anticipate the ‘mega-trends’
• To consider how policy can ‘bend’ the trends

• Recognizing
  – variation across countries
  – the trends we highlight are not the only ones
  – policy-dependent outcomes
Figure 1: Classification of Megatrends According to Predictability and Potential influence via Policy
Six major trends
Trend #1

The “Youth Bulge”
Looming employment challenge in SSA

Age pyramid: rural SSA, 2015

- 62% < 25 years old

Male
Female
Source: UN 2013
Trend #2

Growth in wage jobs < number of people entering labor force

→ most Africans will remain primarily engaged in farming at least over next 15-20 years
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
Employment trends: Ethiopia

Source: Groningen Growth and Development Centre, 2014
Employment trends: Tanzania

Source: GGDC, 2014
Employment trends: Senegal

Source: GGDC, 2014
Employment trends: China

Source: GGDC, 2014
Employment trends: Ghana

Source: GGDC, 2014
Trend #3

Food consumption outstripping production
Food Demand Outstripping Production in Africa

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

- Beef
- Poultry
- Dairy
- Vegetable Oil
- Sugar

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

- Coarse Grains
- Rice
- Wheat
Production in Asia

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

Production (MT) vs Consumption (MT)

- Pork
- Poultry
- Dairy
- Vegetable Oil
- Sugar

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

Production (MT) vs Consumption (MT)

- Rice
- Coarse Grains
- Wheat
Production in Latin America

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

Cereal Production and Consumption Change (2011/13 to 2023)
The Americas are increasingly the world’s food basket

Note: Agriculture and fish products included in the Outlook
Trend #4

Major scramble for Africa’s arable land
Nine countries contain 90% of Africa’s unutilized arable land

<table>
<thead>
<tr>
<th>Country</th>
<th>Non-forested unutilized land (^1) (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>
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</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>
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<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>
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<td>Gabon</td>
<td>6.5</td>
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<td>88.0%</td>
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<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></td>
<td>8.8%</td>
<td>100.0%</td>
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• Meteoric rise of medium-scale farms
Table 2: Changes in farm structure among small- and medium-scale farmers in Zambia (2009 - 2012)

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<tr>
<th>Landholding size Category</th>
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<tr>
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<td>53.3%**</td>
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<td>Total</td>
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Participation in output markets

Largest smallholder farms (9%) consistently doing better

Source: MACO CFS 2000/1 to 2010/11 and authors’ computations
GINI coefficients in farm landholding

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<th>Movement in Gini coefficient:</th>
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<td>Ghana (cult. area)</td>
<td>1992 → 2013</td>
<td>0.54 → 0.70</td>
</tr>
<tr>
<td>Kenya (cult. area)</td>
<td>1994 → 2006</td>
<td>0.51 → 0.55</td>
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<tr>
<td>Zambia (landholding)</td>
<td>2001 → 2012</td>
<td>0.42 → 0.49</td>
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Source: Jayne et al. 2014 (JIA)
Anticipate

– Rising land prices

– Rise of land markets

– Increased concentration of farmland

– Demise of customary tenure systems

– Increasing land scarcity for rural-born Africans
Major Question:

Is rapid land acquisition by medium/large farms foreclosing smallholder-based agricultural development?
Trend #5

Land degradation in smallholder farming areas
• Soil and land degradation a huge concern

  ➢ Major conclusion of Montpellier Panel report

  ➢ Extent of already damaged land:
    ➢ 65% of arable land
    ➢ 30% of grazing land
    ➢ 20% of forests

  ➢ Burden disproportionately carried by smallholders
The importance of SOM

Everyone agrees that inorganic fertilizer use must go up – why isn’t it happening?

- Low crop response rate to N
- Deficiencies in SOC and micronutrients / acidification
- Reduced fallows / increased fertilizer use
- Population growth
- Land pressures / incentives to intensify
Everyone agrees that inorganic fertilizer use must go up – why isn’t it happening?

Low crop response rate: to N

Deficiencies in SOC and micronutrients / acidification

Reduced fallows / increased fertilizer use

Population growth

Depressed profitability of fertilizer use

Land pressures / incentives to intensify
Trend #6

Climate change
Six ‘megatrends’: Recap

1. Youth bulge

2. Number of young people entering labor force outstripping growth in wage jobs → rising importance of ‘viable’ agriculture

3. Food consumption outstripping production

4. Rising land scarcity

5. Land degradation

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
Figure 1: Classification of Megatrends According to Predictability and Potential influence via Policy

- **Likelihood of arising**
  - High
  - Moderate
  - Low

- **Potential for influence via policy**
  - Low
  - Moderate
  - High

- **High**
  - Youth bulge / labor force expansion
  - Climate change
  - Land degradation
  - Increased demand for land in Africa

- **Moderate**
  - Rapid/broad-based income growth
  - Rising world food prices

- **Low**
Figure 2: Scenario matrix for African Food System

- **Scenario 1:** Latifundia
- **Scenario 2:** Africa Rises
- **Scenario 3:** Slow & steady wins the race
- **Scenario 4:** Dark Continent

Axes:
- Broad-based urban income growth
- Skewed urban income growth
- Rise in global food prices
- Constant or declining global food prices
Main conclusions:

1. Need to consider how land policies are affecting the potential for inclusive development and poverty reduction in future

2. Re-double investments in sustainable forms of agricultural productivity growth
   - to re-capture the burgeoning urban markets for local farmers
   - To generate growth multipliers /employment in non-farm economy

3. Are rural youth fleeing out of agriculture? Aspirations vs. feasible options

4. Role of policy
   - to influence feasible options
   - to “enable” the future
   - based on public discussion of what a good society looks like
Stylized fact:

A stylized fact is often a broad generalization that summarizes some complicated statistical relationship, which although essentially true, may have inaccuracies in the detail.
