Unscrambling Africa: Regional requirements for achieving food security

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Unscrambling Africa

1. Origins of Africa’s political borders
2. Impact on agriculture
3. Cures
1. Origins of Africa’s political borders: Katanga

- Berlin Conference (1884-85)
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- Berlin Conference (1884-85)
- King Leopold: 2 emissaries (1889-90)
- King Misri: declines (1889-90)
- Cecil Rhodes: 1 emissary (1891)
- William Stairs: Leopold’s 3rd emissary (1891)
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- King of Italy: adjudicates (1914)
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- Anglo-Belgian border commission (1910-14)
- King of Italy: adjudicates (1914)
- Belgian Congo: merges Congo and Katanga (1919)
- DRC (1964)
Unscrambling Africa

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2. Impact on agriculture and food security
2. Impact on agriculture and food security

a) Restrict technology spillovers
b) Limit cross-border trade

a) Technology spillovers

- Worldwide
  → research spillovers account for majority of benefits
a) Technology spills over across AEZ's

Technology spillovers: West Africa rural population
Technology spillovers: West African AEZ’s

Millet belt
Maize belt
Cassava belt

Technology spillovers: West Africa’s maize belt
Ghana’s share of West Africa’s maize belt

FTF priority countries: rural population share in West Africa

<table>
<thead>
<tr>
<th>Belt</th>
<th>Ghana</th>
<th>Liberia</th>
<th>Mali</th>
<th>Senegal</th>
<th>Total FTF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millet belt</td>
<td>16%</td>
<td>12%</td>
<td></td>
<td></td>
<td>28%</td>
</tr>
<tr>
<td>Maize belt</td>
<td>5%</td>
<td>6%</td>
<td>2%</td>
<td></td>
<td>13%</td>
</tr>
<tr>
<td>Cassava belt</td>
<td>15%</td>
<td>2%</td>
<td></td>
<td></td>
<td>17%</td>
</tr>
</tbody>
</table>
a) Technology spillovers across AEZs

- AEZs cut across multiple countries
- Spillovers = up to 75% of total benefits
- Research networks permit economies of scale, specialist staffing and facilities
- Technology spillovers
  - magnify productivity gains
  - require research networks, common seed release and certification protocols

2. Impact on agriculture and food security

a) Restrict technology spillovers
b) Limit cross-border trade
Maize Market Sheds in ESA

Millet and sorghum market sheds in West Africa
b) Political borders restrict trade
b) Political borders restrict trade

1. Raise transaction costs
   → lower farm prices
   → higher consumer prices
2. Diminish incentives for private investment
   • farm productivity
   • storage, trade

Zambia-Katanga border
b) Political borders restrict trade

1. Raise transaction costs
   → lower farm prices
   → higher consumer prices
2. Diminish incentives for private investment
   • farm productivity
   • storage, trade
3. Prevent economies of scale, impose inefficiencies
   • input distribution
   • power generation
   • storage, processing, logistics and trade
# Africa’s small-country problem

<table>
<thead>
<tr>
<th>Percent of Africa's 54 countries</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Population</td>
<td></td>
</tr>
<tr>
<td>under 5 million</td>
<td>35%</td>
</tr>
<tr>
<td>under 10 million</td>
<td>48%</td>
</tr>
<tr>
<td>Landlocked</td>
<td>26%</td>
</tr>
<tr>
<td>Electricity generation less than 20 megawatts</td>
<td>39%</td>
</tr>
<tr>
<td>Fertilizer consumption under 25,000 tons</td>
<td>46%</td>
</tr>
<tr>
<td>Agricultural research systems under 5 FTEs*</td>
<td>40%</td>
</tr>
</tbody>
</table>

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**Mo Ibrahim, November 19, 2009**

“Who are we to think that we can have 53 tiny little countries and be ready to compete with China, India, Europe, the Americans? It is a fallacy… We need scale and we need that now.”
Unscrambling Africa

1. Origins of Africa’s political borders
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3. Cures

3. Cures

a) Regional R&D
   - Investments: regional R&D networks
   - Policies: seed registration and certification harmonization

b) Regional trade corridors
   - Investments: infrastructure (donors); processing, storage, logistics (private sector); farm productivity (farmers)
   - Policies: trade policy (African governments, RECs)
Conclusions

1. Africa’s political borders
   • arbitrary
   • externally imposed

2. Disconnected, individual, country-level efforts
   • costly
   • inefficient
   • dominate donor spending!

3. Cures for undoing the damage inflicted in Berlin
   • regional research programs
   • regional trade corridors

4. Donors need to reorient spending
   • to support regional programs
   • to help unscramble Africa
Conclusions

3. Cures for undoing the damage inflicted in Berlin
   • regional research programs
   • **regional trade corridors**

4. Donors need to reorient spending
   • to support regional programs
   • to help unscramble Africa

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Conclusions

• *The world we have created is a product of our thinking; it cannot be changed without changing our thinking.*
  
  Albert Einstein