The Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions

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Outline

1. Document how rapidly farm structure is changing
2. Characteristics of MS farmers
3. Causes
4. Consequences
5. Implications
Changes in farm structure in Tanzania (2008-2012), LSMS/National Panel Surveys

<table>
<thead>
<tr>
<th>Farm size</th>
<th>Number of farms (% of total)</th>
<th>% growth in number of farms between initial and latest year</th>
<th>% of total operated land on farms between 0-100 ha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2012</td>
<td>2008</td>
</tr>
<tr>
<td>0 – 5 ha</td>
<td>5,454,961 (92.8)</td>
<td>6,151,035 (91.4)</td>
<td>12.8</td>
</tr>
<tr>
<td>5 – 10 ha</td>
<td>300,511 (5.1)</td>
<td>406,947 (6.0)</td>
<td>35.4</td>
</tr>
<tr>
<td>10 – 20 ha</td>
<td>77,668 (1.3)</td>
<td>109,960 (1.6)</td>
<td>41.6</td>
</tr>
<tr>
<td>20 – 100 ha</td>
<td>45,700 (0.7)</td>
<td>64,588 (0.9)</td>
<td>41.3</td>
</tr>
<tr>
<td>Total</td>
<td>5,878,840 (100%)</td>
<td>6,732,530 (100%)</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Changes in farm structure in Tanzania (2008-2012), LSMS/National Panel Surveys

- 6.1%
+ 6.1%
Changes in farm structure in Ghana (1992-2013)

<table>
<thead>
<tr>
<th>Ghana</th>
<th>Number of farms</th>
<th>% growth in number of farms</th>
<th>% of total cultivated area</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 ha</td>
<td>1,458,540</td>
<td>1,582,034</td>
<td>8.5</td>
</tr>
<tr>
<td>2-5 ha</td>
<td>578,890</td>
<td>998,651</td>
<td>72.5</td>
</tr>
<tr>
<td>5-10 ha</td>
<td>116,800</td>
<td>320,411</td>
<td>174.3</td>
</tr>
<tr>
<td>10-20 ha</td>
<td>38,690</td>
<td>117,722</td>
<td>204.3</td>
</tr>
<tr>
<td>20-100 ha</td>
<td>18,980</td>
<td>37,421</td>
<td>97.2</td>
</tr>
<tr>
<td>&gt;100 ha</td>
<td>--</td>
<td>1,740</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>2,211,900</td>
<td>3,057,978</td>
<td>38.3</td>
</tr>
</tbody>
</table>

Source: Ghana GLSS Surveys, 1992, 2013, Jayne et al., 2016, using data from Ghana GLSS Surveys I and IV.
# Changes in farm structure in Zambia (2001-2012)

<table>
<thead>
<tr>
<th>Farm size category</th>
<th>Number of farms</th>
<th>% growth in number of farms</th>
<th>% of total cultivated area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2001</td>
<td>2012</td>
<td>2001</td>
</tr>
<tr>
<td>0 – 2 ha</td>
<td>638,118</td>
<td>748,771</td>
<td>17.3</td>
</tr>
<tr>
<td>2 – 5 ha</td>
<td>159,039</td>
<td>418,544</td>
<td>163.2</td>
</tr>
<tr>
<td>5 – 10 ha</td>
<td>20,832</td>
<td>165,129</td>
<td>692.6</td>
</tr>
<tr>
<td>10 – 20 ha</td>
<td>2,352</td>
<td>53,454</td>
<td>2272.7</td>
</tr>
<tr>
<td>20 – 100 ha</td>
<td>--</td>
<td>13,839</td>
<td>na</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>820,341</strong></td>
<td><strong>1,399,737</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Zambia MAL Crop Forecast Surveys, 2001 and 2012
Changes in farm size distributions:

Summary

1. Number of small farms growing slowly
2. Share of area under small farms declining
3. Number of medium-scale farms growing rapidly
4. Share of area under medium-scale growing, and currently over 40% of farm holdings (> 25% of cultivated area)
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Rise of the medium-scale farmers

Three sub-categories of medium scale farmers (Kenya, Zambia, Ghana)

Successful smallholder farmers via farm expansion
Rise of the medium-scale farmers

Three sub-categories of medium scale farmers: Kenya, Zambia, Ghana

- "Elite rural based": 35%
- Successful smallholder farmers via farm expansion: 5%
Rise of the medium-scale farmers

Three sub-categories of medium scale farmers: Kenya, Zambia, Ghana

- "Elite urban based": 60%
- "Elite rural based": 35%
- Successful smallholder farmers via farm expansion: 5%
% of National Landholdings held by Urban Households

Source: Demographic and Health Surveys, various years between 2004-2014.
### Type 1: Urban-based investor farmer

<table>
<thead>
<tr>
<th></th>
<th>Mode of entry to medium-scale farming status: acquire farm using non-farm income</th>
<th>Zambia (n=164)</th>
<th>Kenya (n=180)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of cases</td>
<td></td>
<td>58</td>
<td>60</td>
</tr>
<tr>
<td>% men</td>
<td></td>
<td>91.4</td>
<td>80</td>
</tr>
<tr>
<td>Year of birth</td>
<td></td>
<td>1960</td>
<td>1947</td>
</tr>
<tr>
<td>Years of education of head</td>
<td></td>
<td>11</td>
<td>12.7</td>
</tr>
<tr>
<td>Have held a job other than farmer (%)</td>
<td></td>
<td>100</td>
<td>83.3</td>
</tr>
<tr>
<td>Formerly /currently employed by the public sector (%)</td>
<td></td>
<td>59.6</td>
<td>56.7</td>
</tr>
<tr>
<td>Current landholding size (ha)</td>
<td></td>
<td>74.9</td>
<td>50.1</td>
</tr>
<tr>
<td>% of land currently under cultivation</td>
<td></td>
<td>24.7</td>
<td>46.6</td>
</tr>
<tr>
<td>Decade when land was acquired</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1969 or earlier</td>
<td></td>
<td>1.1</td>
<td>6</td>
</tr>
<tr>
<td>1970-79</td>
<td></td>
<td>5.1</td>
<td>18</td>
</tr>
<tr>
<td>1980-89</td>
<td></td>
<td>7.4</td>
<td>20</td>
</tr>
<tr>
<td>1990-99</td>
<td></td>
<td>23.8</td>
<td>32</td>
</tr>
<tr>
<td>2000 or later</td>
<td></td>
<td>63.4</td>
<td>25</td>
</tr>
</tbody>
</table>

Source: MSU, UP, and ReNAPRI Retrospective Life History Surveys, 2015
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Causes of changing farm size distributions

1. Rise in world food prices – heightened investor interest in farmland

2. Urban farmer capture of land policy / farm lobbies

3. Scramble for land due to rapid population growth
   - Fragmentation/subdivision in areas of favorable mkt access
   - Land inheritance declining
   - Rising challenges of youth access to land → migration
Sub-Saharan Africa: only region of world where rural population continues to rise past 2050

Source: UN 2013
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Consequences of changing farm size distributions (+++)

1. Rising use of mechanization

2. More capital using/labor-saving forms of agricultural production

3. Vent-for-surplus
   - Raise agricultural output and create growth multipliers to agro-food industries
   - Medium-scale farm contributing a large share of marketed surplus
   - Selling to large grain traders, higher prices, reduced transaction costs

4. Productivity differences between small and medium-scale farms – limited evidence
   - But reasons to believe that capitalized and educated MS farms will be more productive
Consequences of changing farm size distributions (---)

5. Enclosure
   - Elite use control of state processes to appropriate public lands for private benefit
   - Growing land scarcity driven by middle/high income urban people seeking to acquire land

6. Rising inequality of farmland distribution
   - Have medium & large farms expanded onto new land or displaced farms on existing land?
   - Rising land prices → straining youth access to land

7. Is mechanization displacing agricultural employment?
Nominal value of tractor imports to Sub-Saharan Africa (excluding South Africa), 2001-2015

Source: vanderWesthuisen, forthcoming
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Implications for policy

1. Agricultural productivity growth will be the cornerstone of any inclusive and comprehensive youth livelihoods strategy: Influences-
   - Pace of labor force exit out of farming
   - Labor productivity in broader economy

2. Agricultural sector policies must anticipate and respond to:
   - Rising land prices, decline of inheritance, market as increasingly important mode of acquiring land
   - Resources needed for youth to succeed in farming (access to land, finance, etc.)
   - Distinguish between “trying to keep youth in agriculture” vs. “giving youth viable choices”
Thank You

Tomorrow belongs to people who prepare for it today

--African Proverb--