A Global Land Rush?

Derek Byerlee
Crawford Fund
Annual Parliamentary Conference
Oct 9th, 2012
Closing the Global Land Frontier: A 21st Century Land Rush?

The Last Land Rush at the Closing of the US Frontier, Oklahoma, 1893
Outline for Today

- Outlook on demand and supply of cropland
- Large-scale investments in land
  - Is there a global land rush?
  - Types of investors
  - Opportunities and risks
- Australia—Should it be concerned?
- Policy and regulatory options
Land Continues to be an Important Source of Growth in Some Regions

Decomposition of Agricultural Growth, 1961-2009

Source: Fuglie, Pers comm
Estimates of Crop Land Demand

- **Current cropland use** 1,533 M ha
- **Future demand to 2030**
  - 120-240 M ha increase for crops, biofuels by 2030 (World Bank)
  - Need to also add losses (Lambin and Meyfroidt, 2011)
    - Urbanization—48 -100 M ha
    - Degradation—30 – 87 M ha
- **Substantial demand despite uncertainties**
  - Productivity, biofuels, trade
Still Suitable Land for Crop Expansion but Concentrated in a Few Countries

Based on land that is not forested or protected and pop dens < 25/km

Source: World Bank and IIASA
Land Costs Vary Widely Even for Similar Quality

ANNUAL RENT FOR 3 T/HA OILSEEDS, 2009

<table>
<thead>
<tr>
<th>Country</th>
<th>Rent ($US/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA (Iowa)</td>
<td>400</td>
</tr>
<tr>
<td>Argentina</td>
<td>200</td>
</tr>
<tr>
<td>Brazil (MG)</td>
<td>Non-market</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Non-market</td>
</tr>
<tr>
<td>Mozambique</td>
<td></td>
</tr>
</tbody>
</table>

COST OF LAND TO PRODUCE A TON OF WHEAT

Savills rates Australia as a top destination for potential returns from investing in farmland.

Source: Deininger and Byerlee, 2011

Source: Savills, 2012

Graph source: USDA, Eurostat and various data estimates
Higher Commodity Prices have Stimulated Foreign Direct Investment in Farming

Flow of FDI in Farming ($US Million)

All low and middle income countries

Source: UNCTAD, 2009
Estimates of Large-Scale Investments (Much Uncertainty!)

SS AFRICA—18 M HA SINCE 2005-11 (FLOW)

- Food 25%
- Biofuels 43%
- Integrated food/fuel 20%
- Wood & fibre 10%
- Other 2%

Source: Schoneveld, 2011

AUSTRALIA AND USA (STOCK—2011/12)

- USA—Foreign 10 M ha (2011)
  - Timber, pasture
- But
  - Domestic TIAA-CREF > $2 b
  - Nine states do not allow corporate ownership

- Australia—Foreign 44 M ha (ABS 2010)
  - My estimate ≈ 43 M ha is pastoral

But
- TIAA-CREF domestic investment > $2 b
- Nine states不允许 corporate ownership

Foreign investment in US: 10 M ha (2011)
- Timber, pasture

Source: Schoneveld, 2011
### Heterogeneous Investors in Heterogeneous Contexts

<table>
<thead>
<tr>
<th>Type of investor</th>
<th>Type of Land Market</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private land markets</td>
</tr>
<tr>
<td>State-owned</td>
<td></td>
</tr>
<tr>
<td>• Governments</td>
<td>-</td>
</tr>
<tr>
<td>• Sovereign wealth funds</td>
<td>x</td>
</tr>
<tr>
<td>• State-owned companies</td>
<td>x</td>
</tr>
<tr>
<td>Private</td>
<td></td>
</tr>
<tr>
<td>• Agribusiness</td>
<td>xxx</td>
</tr>
<tr>
<td>• Energy</td>
<td>xx</td>
</tr>
<tr>
<td>• Portfolio (managed)</td>
<td>xx</td>
</tr>
<tr>
<td>• Portfolio (rent out)</td>
<td>xxx</td>
</tr>
<tr>
<td>• Other (timber, speculative)</td>
<td>x</td>
</tr>
</tbody>
</table>
Emergence of Large Farming Companies (Mostly Home-Grown)

- **Latin America**
  - Mostly regional (El Tejar, Los Grobos, Adecoagro, Cresud, SLC, Brasilagro, Agricola, Cosar, Maggi)
    - Argentina: Top 30 companies total 2.4 M ha (mostly rented).

- **Russia, Ukraine, Kazakhstan**
  - “Superfarms”. Ukraine: Top 40 companies manage 4.5 M ha; Russia: Top 30 companies 6.7 M ha

- **SE Asia**
  - Palm oil: 8 of world’s 25 largest agric prod. companies

- **Africa**
  - Much FDI but very heterogeneous (med. size 40,000 ha)
Implications for Countries Receiving Large Private Investments

A MAJOR OPPORTUNITY

- Capital needs
- Transfer of technology and know-how
- Export development
- New industries—biofuels
- Employment generation
- Opening of remote regions

BUT ALSO RISKS

- Lack of land markets—rights of users
- Negative environmental impacts (forests)
- Enclaves with few local benefits
- Risks of highly unequal agrarian structure
OPPORTUNITY

- Value of SE Asian exports of PO > All agric exports Africa
  - Africa imports $3.5 Billion!

- Billions at stake
  - Big Asian companies investing in Africa (> $3 M ha)
  - 200-300 jobs/1000 ha
  - Much potential for smallholders

- Fair deals?

RISE OF OIL PALM IN SE ASIA

Expansion of Oil Palm

- Latin America
- SE Asia
- Africa
AGRI-HOLDINGS IN UKRAINE

- Legacy of collective farms
- Filling big gaps in:
  - Technology
  - Capital
  - Market logistics
- Lack land sales markets
  - Very low rental values
- Significant inflows of FDI
  - Agribusiness companies
  - Portfolio investors
- Jury is still out
  - E.g., Morgan Stanley

AVERAGE SIZE 60-80 K HA

![Graph showing total land area in agri-holdings and number of holdings from 2007 to 2011.](image)
Example of Risk: Major Driver of Deforestation
(Oil palm and plantation forests in Indonesia)

RIAU, INDONESIA, FOREST COVER, 1982

RIAU, 2007

Source: WWF (2008)
Background
- Huge potential: 34 M ha arable land; only 4 M. ha cropped
- 1998 law recognizes community rights

Policy to attract investors
- New applications for 13 M ha in 18 months
- Many grants not implemented
- 1.4 M ha overlapping rights

... then backtracking
- Identify available land first

Investments overlap community rights (in red)
Semi-mechanized farming schemes 1970s+
  - Investors from Gulf and state credit

Converted up to 11 M ha to large farms
  - some farms >200,000 ha

Problems well documented
  - Trampled on rights of local pastoralists, land conflicts
  - Created few jobs
  - Soil degradation

Extremely low yields
AUSTRALIA AS A BEACON OF FREE TRADE AND INV. DO WE NEED AN OZ BRAND ON THE LAND?

Not new
- Much FDI in pastoral areas
- Past investments in crops
  - Peak Downs in 1940s
  - Territory Rice, Tipperary, NADC—failures in 60s, 70s
  - But cotton in NSW a success

Strong institutions and regulations in place

Priorities
- Registry of transactions
- Avoid undermining “Oz brand” on free trade
## Policy Priorities Vary by Region

<table>
<thead>
<tr>
<th>State of markets</th>
<th>Example</th>
<th>Risks</th>
<th>Policy needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Land and other markets function well</td>
<td>Australia, Argentina, Sth Brazil</td>
<td>Few</td>
<td>Transparency--registry of foreign purchases</td>
</tr>
<tr>
<td>B Land and other markets still emerging</td>
<td>Ukraine, Cent Brazil</td>
<td>Some</td>
<td>Strengthen property rights and information. Level the playing field for family farms</td>
</tr>
<tr>
<td>C Lack formal land markets and rights</td>
<td>Africa, parts of SE Asia</td>
<td>Many</td>
<td>Formalize property rights, transparency. Capacity to negotiate and monitor investment Tilt the playing field toward smallholders</td>
</tr>
</tbody>
</table>
Guidelines for Investors

- Principles for Responsible Agricultural Investment (WB, FAO, IFAD)
- Voluntary Guidelines on Land and Natural Resources Tenure (FAO)
- Private Sector Roundtables for Certification
  - RTRS (Soy), RSPO (Palm Oil), BSI (Sugar) etc + EU Biofuel standards
Conclusion

- A land rush?
  - Yes—Sharp rise in investor interest (but area < than widely reported)

- Major drivers
  - Land scarcity with “available” low cost land in some countries
  - High commodity prices (for now)
  - Low returns to alternative investments (for now)

- What is to be done?
  - Everywhere--increase transparency and monitor.
  - Africa and SE Asia--strengthen property rights of existing users and work with investors to promote more inclusive outcomes.
  - In Australia--introduce a register, monitor, and continue to provide world leadership in free agricultural trade and investment