

## Drivers of Investment in Large-Scale Farming: Evidence and Implications

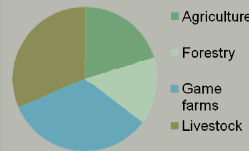
Derek Byerlee  
World Bank

## Large-Scale Land Acquisitions, 2004-08 One African Country

DISTRIBUTION OF APPLICATIONS

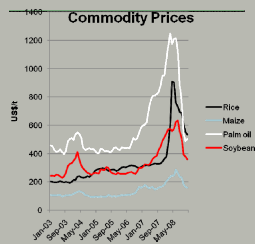
NUMBER FOR AGRICULTURE (AND AVERAGE HECTARES)

Total of 2.5 M Ha

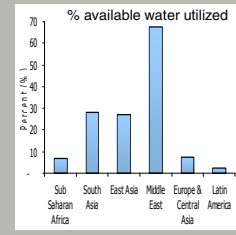
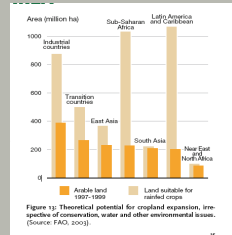


## What are Major Drivers: Demand Side

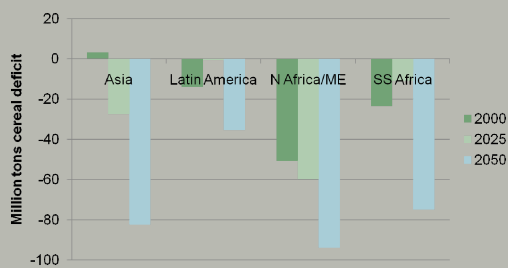
- Food security  
FDI by food importing countries with Yuans & Dinars to invest
- The scramble for biofuels  
Domestic and exports
- Domestic investors
- Expectations of payments for avoided deforestation?
- Speculation?



## Potential land and water available for expansion of farming

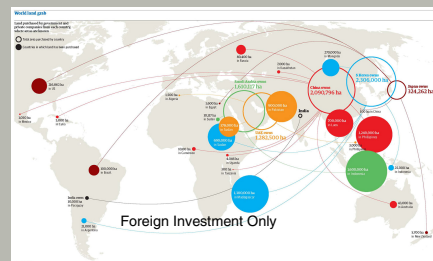


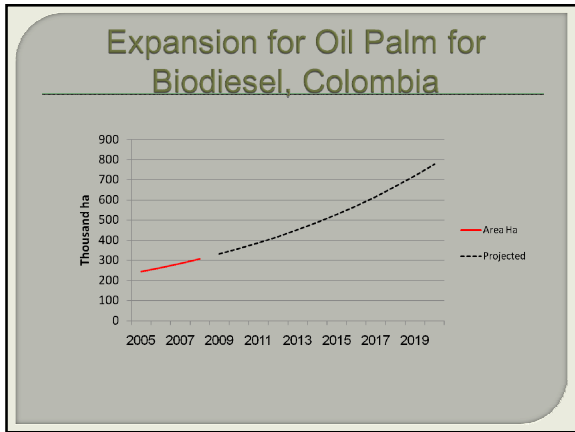
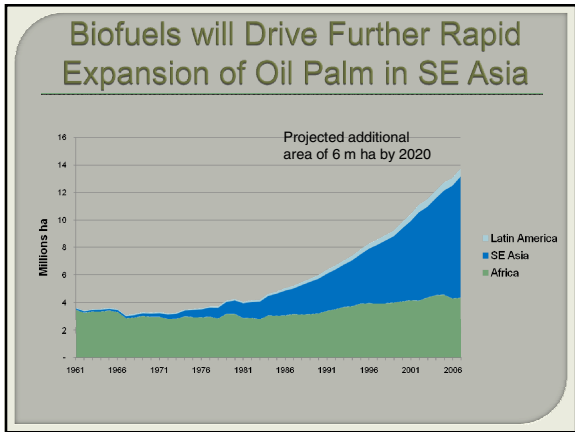
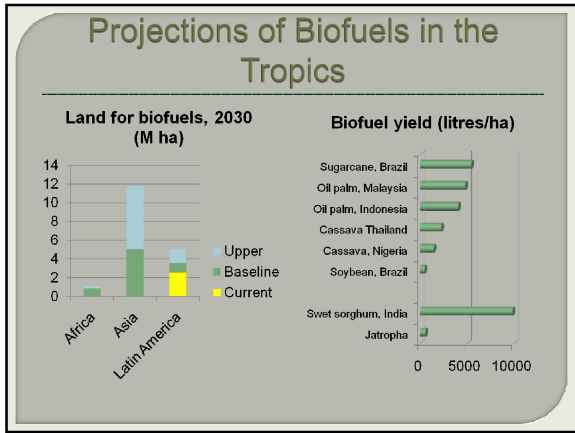
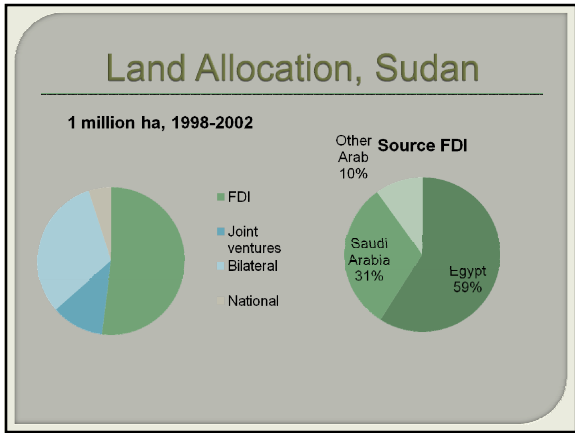
## Projected Cereal Imports IFPRI Baseline



2008 Export bans were a major concern

## GRAIN's Land Grab Map





### But Why Large Scale?

- ◉ Déjà vu--“plantation crops”—sugarcane, oil palm, jatropha?
  - Well established reasons to favor large scale (plus outgrowers)
- ◉ New technologies and management tools
  - ICT, precision agriculture, remote control (Agadi Farms)
- ◉ Global farming by Wall St
  - e.g., Altima -IFC venture
- ◉ From ‘small is beautiful’ to ‘bigger is better’ thinking
  - Some academics, governments

### So What if it is Large Scale?

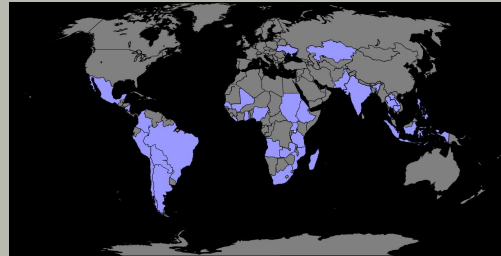
<p><u>A MAJOR OPPORTUNITY</u></p> <ul style="list-style-type: none"> <li>◉ Opening of land abundant and remote regions</li> <li>◉ Export development</li> <li>◉ New industries--biofuels</li> <li>◉ Employment generation</li> <li>◉ Technology transfer</li> </ul>	<p><u>WITH SIGNIFICANT RISKS</u></p> <ul style="list-style-type: none"> <li>◉ Lack of attention to existing land users</li> <li>◉ Undermining of governance</li> <li>◉ Short-term interests</li> <li>◉ Negative environmental externalities</li> </ul>
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## WB-IIED-FAO Study to Address Four Key Questions

1. What is really happening on the ground?
  - Quantification and characterization of investment projects.
2. Is the policy, legal and institutional environment adequate?
  - Diagnosis of gaps and capacities
3. Are these sound investments?
  - Financial and economic analysis of projects
4. What about social and environmental impacts?
  - Analysis of positive and negative impacts

## The Countries Selected (30)

(based on activity level, region, nature of land markets)



## Two Phases

- Phase I
  - National (or state)
  - Inventory of projects and policy review
  - Being piloted in eight countries
- Phase II
  - Field based for a subsample of projects and countries
  - Project specific financial, economic, social and environmental assessments

## 1. The Project Inventory

- A country-specific database:
  - Of investments and proposals involving land acquisition (> 500 - 5000 ha)
    - Ha, crops/enterprises, type of investor, outgrowers?
  - Status of investment
    - Pipeline, approved, under implementation
- Uses a variety of sources: investment promotion agency, ministries of land, NGOs and other key informants
- Geo-referenced to facilitate economic, social and environmental impact analyses

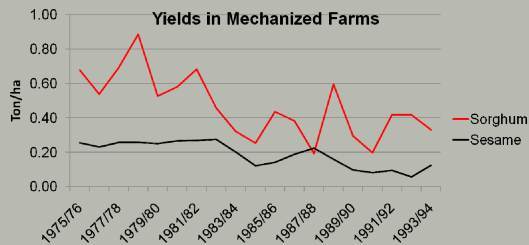
## 2. The Policy Review

- A diagnostic tool based on the land governance toolkit
  - To identify adequacy of policies, legal frameworks and institutional capacities
  - Based on 42 indicators to assess:
    - the processes through which land is made available
    - the processes through which investments are selected
    - the requirements to carry out and publicize social and environmental impact assessments
    - the institutional capacity to implement these policies

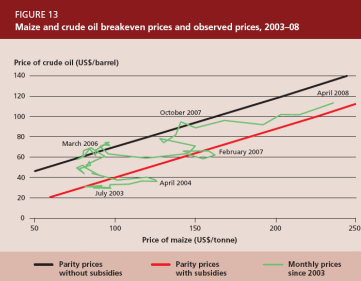
## 3. Financial and Economic Analysis

- If a financial analysis is available
  - "Tire check" the yield and other technical parameters
  - Realism of price assumptions (2008?)
- Economic analysis
  - Particular focus on opportunity cost of land in existing uses
    - Often use zero cost of land!
  - Take account of large incentive/subsidies provided by government
    - Biofuel mandates, infrastructure,

## Large-Scale Farming and Poor Yields in Sudan



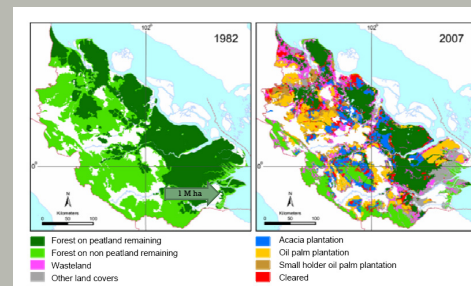
## The Tricky Economics of Biofuel



## 3. Environmental Assessment

- For a subset of investment proposals, the study will examine
  - Safeguards in place
  - What environmental considerations were taken into account
  - Features of the project design to mitigate environmental impacts
- Review of actual/potential indirect effects
  - Land expansion elsewhere due to prices, lack of regulations
- Use of geo-referenced data

## Impacts of Large-Scale Farming and Forest Plantations, Riau, Indonesia

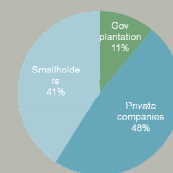


## 4. Social Impacts

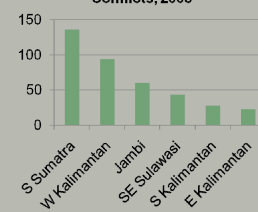
- Analysis of the macro context
  - Existing social, political and historic situation
  - Key land and natural resource tenure issues related to disadvantaged groups
- Analysis of specific investments
  - Process of consultation
  - Social impact assessment process
  - Compensation mechanisms and arrangements with local communities
  - Benefit sharing

## Oil Palm is a Source of Conflicts in Indonesia, 2008

Distribution of Plantation Area



Number of Oil Palm Related Conflicts, 2008



## Worst Case Scenarios!

- ◉ “Land tenure disputes have led to conflict, injury, intimidation, arrests, torture and even death”
  - CIFOR review, Indonesia, 2008
- ◉ “Various studies indicate that in many cases the expansion of palm cultivation has been conducted with serious human rights violations, including forced displacement, massacres, threats, land confiscation and murders”
  - Social impact analysis, Colombia, 2008

## The Product

- ◉ Empirical
  - Some in-depth country studies
  - Global data, trends and drivers
  - Overall assessment of benefits and risks
- ◉ Policy guidance
  - Good practice guidelines and examples
- ◉ Timetable
  - Phase I—March/April
  - Phase II—May-Aug
  - Synthesis—Sept–Dec

## Conclusions and Implications

- ◉ New wave of large scale land acquisitions with new drivers and actors
- ◉ Major new opportunity but significant risks for land governance
  - The ‘natural resources curse’?
- ◉ Additional research is needed
  - Better evidence of what is happening on the ground
  - Holistic view of costs and benefits
  - Understanding of the renewed interest in large-scale farming
- ◉ Priority to build land governance capacity to manage the risks
  - Adequate policies and regulations
  - Capacity to process, implement and monitor