The Model Matters
Searching for inclusive agricultural business models- A comparative between Plantation model (Zambeef) and Nucleus-estate Outgrowers Scheme model (Zambia Sugar/Ilovo) in Zambia

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Outline

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Introduction

Land and Agricultural Commercialisation in Africa Project

Large-scale agricultural land acquisitions for large-scale agricultural investments in Africa have raised concerns about exclusion, displacement and dispossession of smallholders. Policy attention has now shifted towards more inclusive agricultural models.

• This research project is investigating three different agricultural business models in Zambia, Ghana and Kenya:
  1. Corporate plantations or estates
  2. Clusters of large commercial farms
  3. Nucleus estate - outgrower schemes

• The research aims to contribute to on-going policy debates about land and agricultural commercialisation in Africa.
Introduction
Research Focus

•The research addresses the question:

*How does the restructuring of agro-food systems resulting from land and agricultural commercialisation affect agrarian economies and livelihoods in Africa?*

- Can new land and agricultural commercialisation initiatives be used as opportunities to promote growth and reduce poverty and inequality in developing countries? If so how?
- What are the better and worse models?
- Which sets of institutional arrangements between investors and local smallholders provide the best opportunities for benefit-sharing and for synergies between large and small farms?
Research Methodology & Methods

Research methodology

• The research design is mixed methods (i.e. combines both qualitative & quantitative research paradigms)

Research methods

- Document analysis
- Key informant interviews
- Focus groups
- Direct observation
- Life histories
- Structured survey questionnaire
Descriptions of Agricultural Business models

• Zambeef Plantation Model (Chiawa Estate)
  10,000 ha estate based in Kafue district, Lusaka province.
  Grows Soy bean, wheat & maize
  Only 2, 160 ha are double cropped each year

• Zambia Sugar-Magobbo Outgrower Model
  Nucleus estate: 17, 300 ha
  Sugar mill: capacity to produce 450, 000 tonnes/yr
  Outgrowers:
  433 ha pooled land near Zambia Sugar nucleus estate (block farming)
  94 registered smallholders
Summary Key Findings

I consider five variables that as significant in our assessment of impacts on livelihoods:

1. employment
2. Income
3. land rights
4. food security
5. gender
Summary Key Findings

Employment

Zambeef Plantation

Total 221 employees
- 16 females
- 205 males
- zero females at management levels
- mostly immigrants

Outgrower Scheme

Total employment (varies but somewhere around 150)
Of the 150 employees, 94 (one from each participating household) are employed from the local community

Nucleus estate employs on average: 4,000
- 1,700 permanent throughout the year
- 2,000+ seasonal & short term contract
## Employment in Agricultural Model

<table>
<thead>
<tr>
<th>Employment in the agricultural models ONLY</th>
<th>Plantation focal area</th>
<th>Outgrower focal area</th>
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</thead>
<tbody>
<tr>
<td>N</td>
<td></td>
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<tr>
<td>Percentage of permanent workforce in the agricultural models</td>
<td>5.24</td>
<td>4.94</td>
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<tr>
<td>Percentage of casual/temporary workforce in the agricultural models</td>
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<td>3.06</td>
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<tr>
<td>Total</td>
<td>8.48</td>
<td>8.54</td>
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</table>
Summary Key Findings

Incomes

Zambeef Plantation

*Wages:*
Company profess to paying more than minimum wage
Least paid (about 118 employees) = US$ 100/month
The rest average US$ 180/month

Outgrower scheme

*Wages:*
Average wage = US$ 120/month

*Dividends:*
94 *registered* smallholders = US$ 811/month each
Average wage for permanent (Table 1) & temporary/casual (Table 2) employees in the agricultural models by gender

<table>
<thead>
<tr>
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<th>Plantation</th>
<th></th>
<th>Outgrower</th>
<th></th>
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<td>Mean ($US)</td>
<td>Std. Dev.</td>
<td>N</td>
<td>Mean ($US)</td>
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<td>29.68917</td>
<td>31.34316</td>
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<td>93.45622</td>
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</tbody>
</table>
Summary Key Findings

Community Land Rights

Zambeef Plantation area

   Estate land acquired & converted from customary land to leasehold late 1980s
   First estate owner – Masstock Africa Ltd
   Second owner – Lendor Agriculture Holdings
   Third & current owner – ZAMBEEF plc
   Community land rights infringed
   Unresolved land conflict with community for years
Summary Key Findings
Community Land Rights

Outgrower Scheme

433 ha land belongs to community under sub-lease from State

HOWEVER:

    entire block (433 ha) being registered on block title
    individuals have surrendered individual ownership

risk of foreclosure if the project fails to pay commercial loans obtained on behalf of outgrowers
Summary Key Findings
Food Security

Zambeef Plantation area
No connection between plantation & local subsistence agriculture
maize grown by plantation taken for processing into stockfeeds = export
area is drought-prone & is in game management area (GMA)
local community vulnerable to food insecurity from drought & problem animals (elephants + hippos)

Zambia Sugar Outgrower area
Boast of increased incomes from dividends that can afford them buy staple food
BUT:
Food security will depend on the allocative pattern of the increased income
outgrowers also have alternative land where they grow their staple food
Summary Key Findings
Gender Equity

Zambeef Plantation area
- fewer women in employment
- women employed in least paying jobs (guard; fish pond; general worker etc.
- women do not benefit from any skills training

Zambia Sugar Outgrower area
- 15 women (16%) out of 94 officially registered smallholders own plots in the sugar block
- participation was based on existing land ownership at the time
- no efforts at remedying the pre-existing inequalities in land holding rights between men and women

HOWEVER:
- 28 women receive dividends in their own right straight from Zambia Sugar
Conclusion

Results still tentative
Quantitative data to be added soon to come to definitive conclusions

However:

Estate-outgrower scheme appears to have relatively better outcomes for smallholders compared to Plantation

Estate –outgrower model in sugar irrigation absorbs a very insignificant number of smallholders

Although incomes from DoP has increased, there is no transparency in the benefit sharing mechanism in place