

Labour Market Effects of Large-Scale Agricultural Investments – Conceptual Considerations and Estimated Employment Effects –

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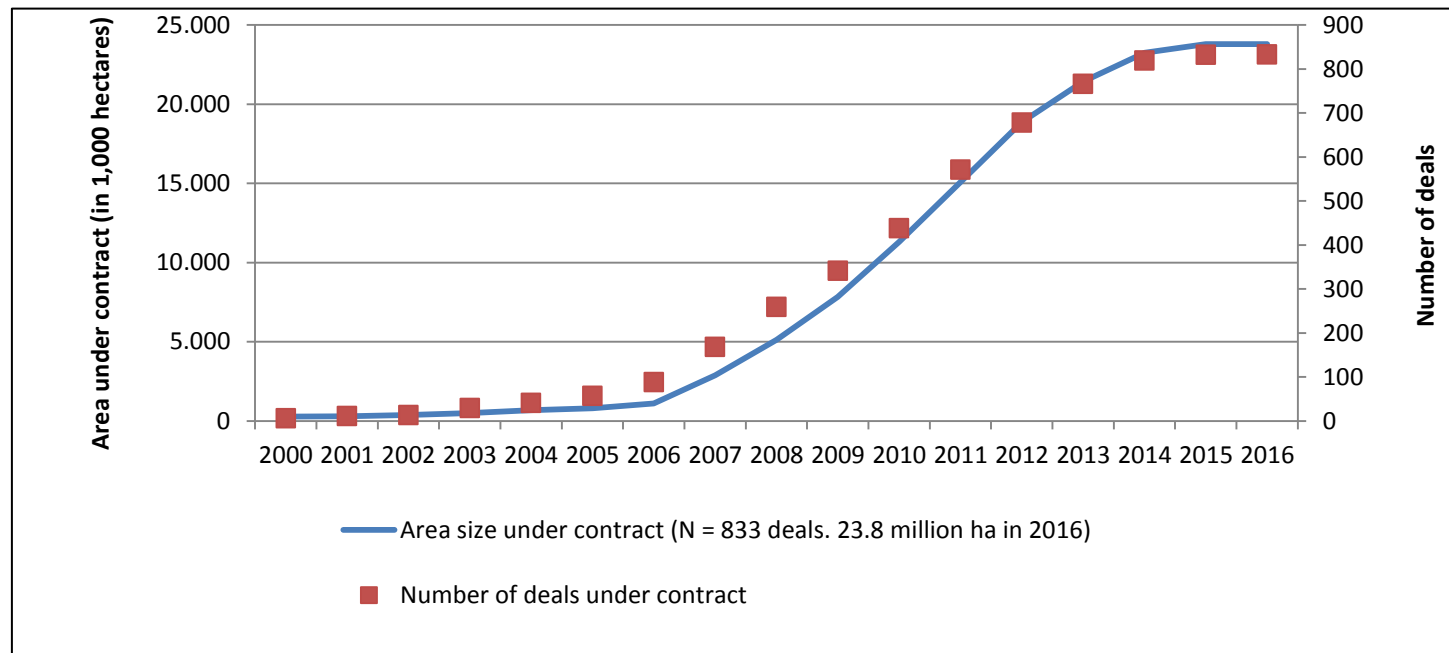
Martin Ostermeier & Kerstin Nolte

Member of the

Leibniz
Leibniz Association

Motivation

- Increasing demand for land in low- and middle income countries




Source: The Land Matrix Global Observatory (retrieved May 6th, 2016).

- Impact and implications for target countries heavily debated
- Employment creation a key factor amongst community benefits

Research questions

- What happens to the rural labour market if a commercial farm is set up?
- Does large-scale commercial farming lead to net employment creation?

Methodology

- Identify key determinants of the employment creation potential
- Develop different scenarios in a transition matrix
- Provide empirical estimates based on  **LAND MATRIX** data
 - Derive labour intensities of crops
 - Estimate potential net employment effect

Conceptual framework

First round effects

Three determinants for employment creation potential

- Former land use
 - Brownfield investment
 - Greenfield investment
 - *Higher crowding out*

- Crop planted
 - Annual crop
 - Perennial crop
 - *More labour intensive*

- Production model
 - Contract farming
 - *Preserving employment opportunities*

Conceptual framework

Second round effects

- Backward linkages
 - Established global players
 - Mostly in industrialised countries

- Forward linkages
 - High export rates of unprocessed goods
 - Mostly to industrialised countries

- Price effects, wage effects, ...

- ➔ Employment creation effect rather weak

- ➔ Hardly any empirical evidence

Conceptual framework

Former land use \ Final land use		Commercial farm			
		Perennial		Annual	
		no CF	CF	no CF	CF
Brownfield investment	Commercial agriculture	1a	1b	1c	1d
Greenfield investment	Smallholder agriculture	2a	2b	2c	2d
	Pastoralists	3a	3b	3c	3d
	Forestry	4a	4b	4c	4d
	Conservation	5a	5b	5c	5d

Results – Transition Matrix (% of size under contract)

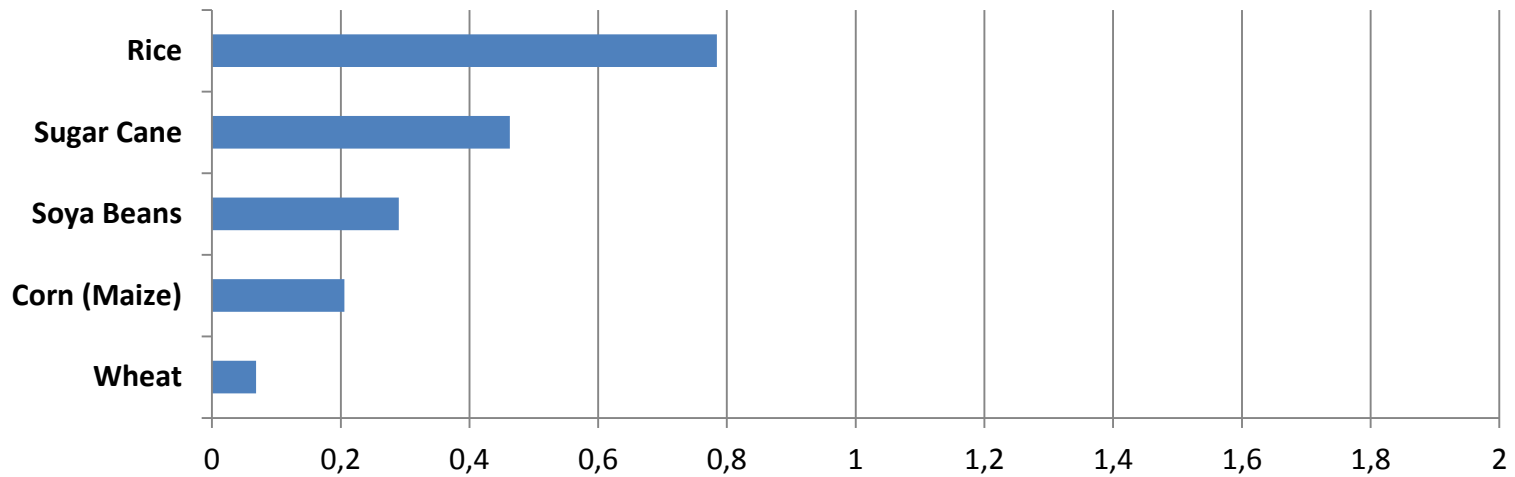
Former land use \ Final land use		Commercial farm				Total
		Perennial crops (46%)		Annual crops (54%)		
		no CF	CF	no CF	CF	
Brownfield investment	Commercial agriculture	1a	1b	1c	1d	40%
		9%	4%	20%	7%	
Greenfield investment	Smallholder agriculture	2a	2b	2c	2d	28%
	Pastoralists	3a	3b	3c	3d	6%
	Forestry	4a	4b	4c	4d	23%
	Conservation	5a	5b	5c	5d	4%
Total (%)		34%	20%	35%	10%	100% (n=958)

Results – Regional focus (% of size under contract)

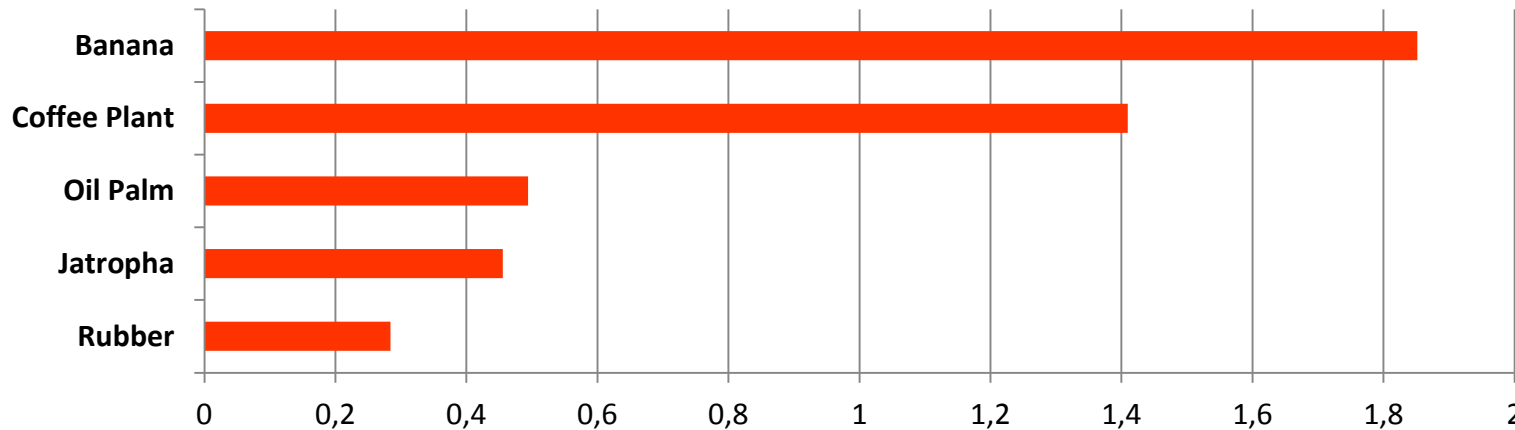
	Africa	Latin America	Asia	Eastern Europe	Oceania	
Former use	Commercial agriculture	20%	50%	37%	80%	11%
	Smallholder agriculture	29%	30%	42%	15%	59%
	Pastoralists	4%	12%	3%	4%	n/a
	Forestry	41%	8%	9%	n/a	30%
	Conservation	5%	1%	9%	n/a	n/a
Crop	Annual	31%	81%	16%	85%	17%
	Perennial	69%	19%	84%	15%	83%
Production model	CF	29%	22%	23%	2%	3%
	No CF	71%	78%	77%	98%	97%

Results – Estimated commercial labour intensities (TOP crops)

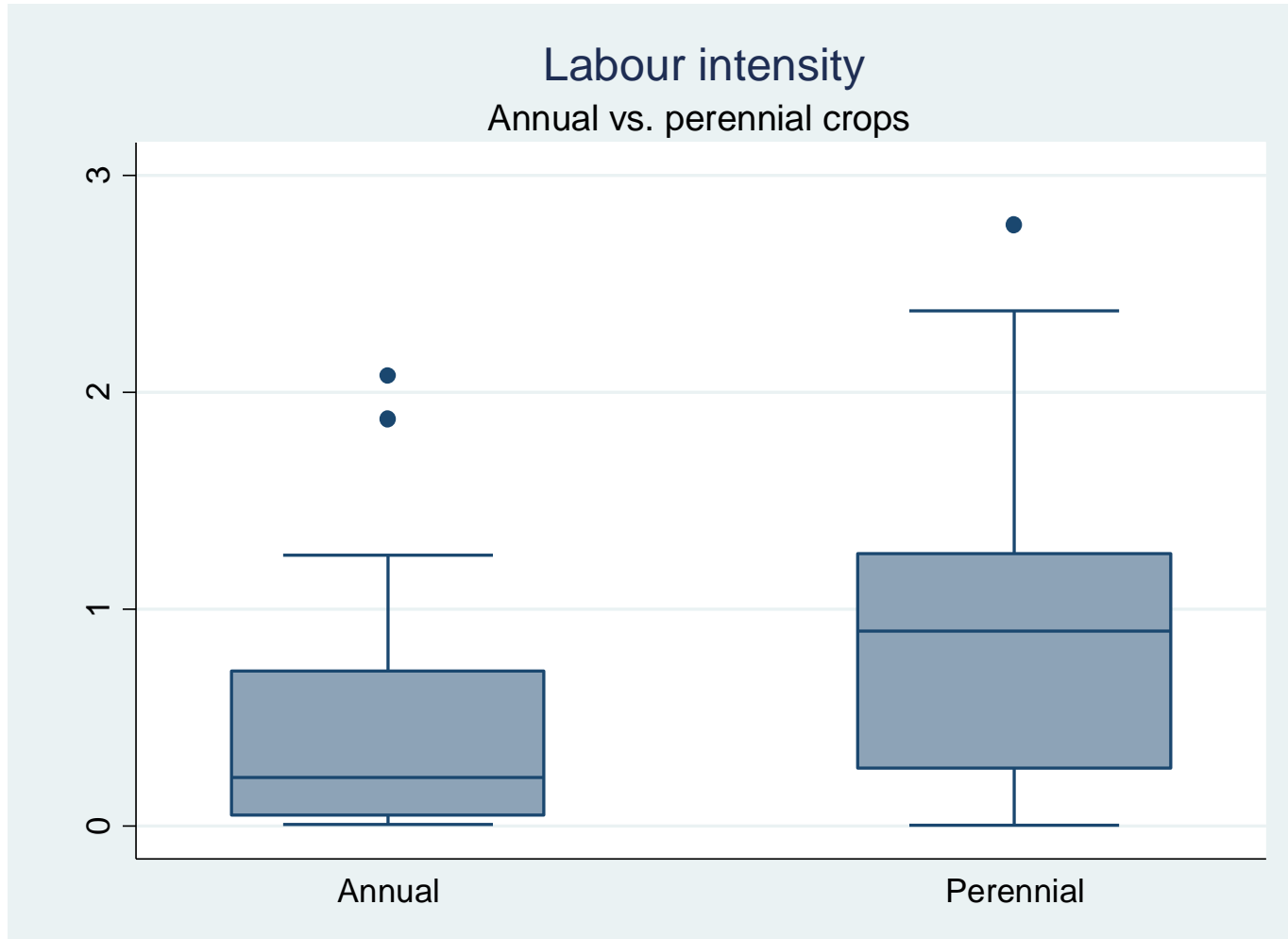
Annual



Perennial



Results - Estimated labour intensities (annual vs perennial)



Results – Estimated employment effect (preliminary)

Target Country	Smallholder employment	Commercial employment	Net employment effect
Ethiopia (LI_sh=5.2)	1,103,463	50,359	-90%
Kenya (LI_sh=2.5)	228,333	23,226	-63%
Malawi (LI_sh=3.1)	34,153	8,039	-15%
Nicaragua (LI_sh=0.4)	1,100	363	-67%

Source:

Commercial: The Land Matrix Global Observatory

Smallholder: FAO Data Portrait Smallholders

Next steps and open questions

- Improve quantification of net employment effect
 - Further differentiate in former use (e.g. crops planted, production model applied, etc.)
 - How to identify/treat labour-intensive annuals and capital-intensive perennials?
 - Better information on labour intensities of smallholder (e.g. by crop, region, etc.) and other former greenfields
 - Assess magnitude of individual determinant
- Elaborate/ quantify second round effects
- Extend regional analysis
- Assess quality of jobs created
 - E.g. compensation of income loss, type of employment, etc.

Concluding remarks

Most large-scale agricultural investments...

- Take place on greenfields
- Plant annual crops
- Do not apply contract farming schemes
- Have weak linkages to other sectors

Regional differences

- Africa, Asia and Oceania: mostly greenfield, perennial crops and no contract farming
- Latin America: half greenfield, mostly annual crops and no CF
- Eastern Europe: mostly greenfield, mostly annual crops and no CF

Contact

Martin Ostermeier / Dr. Kerstin Nolte

GIGA German Institute of Global and Area Studies

Neuer Jungfernstieg 21 / 20354 Hamburg

Tel. +49-(0)40-42825-768

Email: Ostermeier@giga-hamburg.de

Skype: Martin-Ostermeier

Homepage: <http://www.giga-hamburg.de>

