

Evidence from three models of land and agricultural commercialisation: Impacts on local livelihoods in Zambia

Key Messages

- By examining three different models of commercial agriculture – a plantation, a commercial farming area and an outgrower scheme – we observed different impacts on rural communities.
- Smallholder access to land in the communities surrounding the models remains high, except around the outgrower scheme, where those employed in the outgrower farm block and those not involved with the scheme at all have far less access than their counterparts who are shareholders in the scheme.
- The medium- to large-scale commercial farming area model provides the most employment opportunities, though most of it is casual, while the plantation and outgrower scheme provide less employment, more of which is permanent.
- There are gender and generational differences in access to employment in all three models with women and youth being disadvantaged.

Though employing fewer women than men, a greater proportion of women in the sample around the plantation model were employed on a permanent basis compared to the other two models.

- Direct employment in the models is a key driver of improved livelihoods and food security in the plantation and outgrower models, while around the commercial farms smallholders' own farming is the main way in which people secure their livelihoods.
- The commercial model provides the most beneficial local economic linkages through input and output markets which spill over into markets for off-farm goods and services. Local economic linkages provided by the outgrower and plantation models are limited.

Introduction

Zambia needs to undergo structural transformation triggered by increased agricultural and rural labour productivity if it is to achieve improved growth and broad-based poverty reduction. The current experience,

however, is far from the radical change needed in order to achieve this. Zambia's agricultural sector is characterised by a large number of poor smallholders contributing most of agricultural output, with low yields, limited commercialisation and few signs of rapid productivity growth.

The approach favoured by most donors is to stimulate growth in smallholder agriculture by a variety of interventions ranging from production technology to market development.¹ Some, however, contend that agricultural productivity can better be enhanced through large-scale commercial farming.² Such views have underpinned a resurgence of **plantations** mimicking or reviving the colonial estates and state farms from the early post-colonial era. Large-scale land acquisitions have raised concerns about loss of land and livelihoods by rural communities³ but also could present opportunities for expanding employment and economic growth.⁴

Contract farming or **outgrower schemes** have been promoted as an 'inclusive business model' and an alternative to land acquisitions. Outgrower schemes are often presented as a route through which farmers can engage with agribusiness and commercial agriculture while avoiding dispossession and displacement.⁵

But not all land acquisitions in Zambia are large-scale and based on the expansion of estate farming. Much land consolidation is occurring through investment in medium-scale farms through local level accumulation or investment by urban elites.⁶ In Zambia, this class of land acquisitions – between 5ha and 100ha – represents more land than either the entire

small-scale farm sector or the large-scale domestic and foreign investors in the country.⁷ Our study has investigated the role of a **commercial farming area**, and its effects on a local economy, by focusing on the long-established state-planned area of medium- and large-scale privately-owned farms at Mkushi.

This policy brief summarises the findings of a research project that focused on three agricultural models in Zambia by comparing three case studies (see Figure 1):

- Zambeef, (large-scale plantation model) in Kafue district in Lusaka province;
- Mkushi farm block (medium- to large-scale commercial farming model) in Mkushi district, Central province; and
- Zambia Sugar's Magobbo smallholder scheme (outgrower model) in Mazabuka district in Southern province.

This was part of the Land and Agricultural Commercialisation in Africa research project conducted in Ghana, Kenya and Zambia by the Future Agricultures Consortium and implemented by the Institute for Poverty, Land and Agrarian Studies (PLAAS) together with partner institutions.

Under each of the three commercial farming models, a variety of institutional arrangements establish partnerships between local people (contributing the land and often the labour) and largely external investors (contributing the capital, market linkages and technical expertise),

Figure 1: Location of the three case study sites in Zambia



under different types of land, production and associated contracting arrangements.

The study addressed the following questions:

- 1 How do these different models of land and agricultural commercialisation affect agrarian economies and livelihoods in Zambia?
- 2 Do new land and agricultural commercialisation initiatives promote growth and reduce poverty and inequality
- 3 What are the better and worse models with regards to land, labour, local livelihoods and local economic linkages?

- 4 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?

Data and methods

The study employed both qualitative and quantitative approaches between 2013 and 2015. The qualitative approach relied on documentary review, in-depth key informant interviews, focus group discussions, life histories and mapping exercises. Key informant interviews included some with workers employed in the models to gain detailed insights into employment and labour issues and some with farm managers, outgrowers and surrounding communities.

The quantitative method used a household survey administered among 324 randomly selected farm households in communities living up to 5km away from each model.

Key findings

Smallholder access to land remains high – except around the outgrower scheme.

Access to land remains high, except around the outgrower model where often young people, newly establishing homes and combining farming with employment, had access to land areas averaging just 0.5ha. This was due to a failure of intergenerational transfer of land to young households resulting from the ‘block farming’ design. Land access is better around the plantations and the commercial farms than around the outgrower scheme. Over 80 percent of the sampled households reported having access to land in the communities surrounding the plantation and commercial models – and many households had their own land *and* household members employed at these commercial farms or the plantation. All of the households involved in the outgrower scheme had access to land, while only 33 percent of those employed in the model did, and 66 percent of those who were neither involved in contracting nor wage work at the scheme.

Commercial farming areas are more compatible with smallholder farming.

Smallholder farm sizes were larger among communities surrounding the commercial farms at Mkushi (5.6ha on average) compared to the plantation (2ha on average) and the outgrower model (3.5ha on average). Those employed typically had smaller plots than those not employed, except for those around the

plantation model, and were transitioning away from their own production.



Customary land bought by an investor in Chiawa area near the Zambezi Chiawa estate

Growing land markets and land concentration exclude young people.

Active land markets were evident across all three cases, showing a process of land commodification even in areas where customary land tenure prevails. There is increasing land concentration leading to declining access and land conflicts across all three cases. The worst land conflicts were reported around the outgrower scheme where land access is most restricted. Young people have very limited access to land around the outgrower model due to commercial pressures on land to grow sugarcane, with landholders (often older men) ceding their land to the block farming scheme rather than passing it on to the next generation. We found that young people did not see a viable future for themselves in farming; this was not because they did not want to farm but rather because around the outgrower and plantation models they could not see how they could access land of their own amid the rising scarcity. There were better opportunities for young people to access land around the commercial farms at Mkushi.



Sugarcane block farm at Magobbo outgrowers scheme

Commercial model offers the most employment opportunities.

The commercial farms at Mkushi provide more employment, though most of the jobs are casual, insecure and poorly paid. The plantation and outgrower models provide comparatively less employment, but mostly on a permanent basis. The employment potential of Zambeef's plantation model is significantly limited because the farm uses precision farming techniques that displace labour. The few jobs created by the plantation are mainly permanent and require highly skilled labour which is often sourced from outside the local communities (migrant labour). Women and youth across the three models participate in low paying jobs.



Precision farming at Zambeef Chiawa estate

All models have gender differentials in employment.

Women occupy a higher proportion of the less-skilled and low-quality jobs across the three cases. Women were consistently paid less than men for permanent jobs. Only the plantation model employs more women on a permanent basis from the surrounding communities (Table 1). The outgrower and commercial models provide more permanent employment to men than women, while the opposite is true in the case of temporary or casual employment, where women outnumber men.

There are different impacts on young people and generational dynamics.

Generational differentials with regard to employment opportunities across the three models are significant. The plantation employs more adults over 35 years than youth,⁸ on both a permanent and casual basis. Younger people, especially young men, seek better-paying jobs in the nearby safari lodges. In the commercial model, too, more adults are employed on a permanent basis than youths, while the trend is opposite for casual employment, where young people predominate. Given the poor wages prevailing here, the benefits young people can derive from casual work is limited. More youths than adults are employed in the outgrower enterprise both on a permanent and a casual basis, as adults concentrate on their own farming, or are shareholders in the outgrower scheme. Access to employment on the outgrower block is facilitated by the scheme management, with each shareholding household being guaranteed one job opportunity; beyond this, most young people are excluded from outgrowing arrangements, which are contingent on ownership of land.

Table 1: Gender differentials in employment by model and sex (percent)

	Plantation		Outgrower		Commercial	
	Male	Female	Male	Female	Male	Female
Permanent in model	28.3	46.7	27.1	12.5	24.3	15.4
Permanent surrounding model	39.6	33.3	45.7	31.3	8.1	0.0
Casual in model	11.3	0.0	14.3	25.0	51.4	84.6
Casual surrounding model	20.8	20.0	12.9	31.3	16.2	0.0
Total count	53	15	70	16	74	26

Source: LACA Zambia Quantitative Survey and authors' computations

Employment is the key source of livelihoods around the plantation and outgrower scheme.

A combination of wage employment and own farming is an important basis for livelihoods across the three models. Yet we find different livelihood strategies and possibilities for people living around these three different kinds of commercial agriculture. Wage employment in the plantation and the outgrower scheme are crucial for the food security and livelihoods of people living in the areas immediately surrounding these models. Incomes from shareholdings around the outgrower area were the primary source of livelihood and food security.

Own farming activities are the key source of livelihoods around the commercial farms.

In contrast to the semi-proletarianisation evident in the areas around the plantation and the outgrower scheme, the commercial farms at Mkushi have created market conditions that are conducive to smallholder agriculture in the area. Here, we found that those households in the vicinity of the farm block that farmed for themselves, even on a modest scale, were better

off in terms of food security than those who had jobs on the commercial farms.



Maize shelling at one of the large-scale commercial farms in the Mkushi farm block

The commercial model provides the most local economic linkages.

The plantation model is a textbook case of a relative 'enclave economy' poorly integrated in the local economy and has weak localised economic linkages. The outgrower model does not boost local markets either, as the block farming model mimics a plantation. The commercial model, on the other hand, stimulates local trade in farming inputs and equipment.

All the three models sell outputs to both the domestic and export markets.

Conclusions

These findings suggest that the commercial farming area model provides the best opportunities for broad-based rural livelihood improvement. The model co-exists with smallholders of different scales providing mostly seasonal, casual employment for those who need to supplement their farming incomes. Local economic linkages (including knowledge transfer) are created through input and output markets which spill over into markets for off-farm goods and services. Own farming remains the key driver to improved livelihoods in general and food security in particular.

The best the plantation model offers to the local communities is direct employment, but this is limited as mechanised farming means that there are few jobs. For various reasons, also, migrant workers are recruited from elsewhere, leading to economic 'leakages' from the local economy via remittances. Employment, for those able to access it, impacts positively on farming activities and food security.

The best the outgrower model offers the local community is the cash dividends received by participating smallholders who have ceded household land to the block farming scheme. The key limitation is the limited number of smallholder farmers who can be involved in the scheme and the very small numbers who are directly employed. While smallholders participating in the scheme have experienced improved livelihoods and increased income and food security, those in the surrounding community have not, and struggle to gain access to land in a context of rising land scarcity.

Recommendations

The key recommendations are:

1. Reform and strengthen local land rights, particularly in the customary areas around plantation and commercial farming area models, given the growing land markets and land concentration due to increasing commercialisation.
2. The plantation model at Zambeef Chiawa should embrace smallholder production in some form of outgrower production by supporting smallholder irrigation farming given the abundance of water in the plantation area (from Kafue and Zambezi rivers) and the droughts characteristic of that area.
3. Outgrowing on the block farming model should be based on equitable land redistribution among households in the surrounding communities to limit social differentiation within and between households, limit conflict and maximise broad-based benefits and development.
4. In planning for all kinds of agricultural commercialisation around local communities, there is a need to pay particular attention to gender and generational implications for all to participate in benefits arising from commercialisation, and to address the growing landlessness of young people, particularly as a result of the block farming outgrower model.
5. Priority should be given to promoting medium-scale commercial farming alongside smallholder commercialisation

to take advantage of synergies and the dynamic impact of the former on the rural non-farm economy.

End Notes

- 1 World Bank (2007) *World Development Report 2008: Agriculture for Development*, Washington, DC, USA: The World Bank
- 2 Woodhouse, P. (2010) 'Beyond Industrial Agriculture? Some Questions about Farm Size, Productivity and Sustainability', *Journal of Agrarian Change*, 10(3):437-453
- 3 Hall, R., Scoones, I. and Tsikata, D. (eds) (2015) *Africa's Land Rush: Rural Livelihoods and Agrarian Change*, Woodbridge, UK: James Currey
- 4 Deininger, K. and Byerlee, D. (2011) *Rising Global Interest in Farmland: Can it Yield Sustainable and Equitable Benefits?* Technical paper, Washington, DC, USA: The World Bank
- 5 Glover, J.D. (1984) 'Contract Farming and Smallholder Outgrower Schemes in Less-developed Countries', *World Development*, 12(11/12):1143-1157; Baumann, P. (2000) *Equity and Efficiency in Contract Farming Schemes: The Experience of Agricultural Tree Crops*. Working Paper 139, London, UK: Overseas Development Institute
- 6 Jayne, T.S., Chapoto, A., Sitko, N., Muyanga, M., Nkonde, C. and Chamberlin, J. (2014) *Is the Scramble for Land in Africa Foreclosing a Smallholder Agricultural Expansion Strategy?*, presented at the Land and Poverty Conference, March 26, Washington, DC, USA: The World Bank
- 7 Sitko, N.J. and Jayne, T. S. (2014) 'Structural Transformation or Elite Capture? The Growth of "Emergent" Farmers in Zambia', *Food Policy*, 48:194-202
- 8 According to the *Zambian National Youth Policy* (2006), a youth is someone aged between 18 and 35 years.

Acknowledgements:

This policy brief was written by **Chrispin Radoka Matenga** of the Department of Development Studies, School of Humanities and Social Sciences, University of Zambia and **Munguzwe Hichaambwa** of the Indaba Agriculture and Policy Research Institute (IAPRI) for the **Future Agricultures Consortium**. The research was funded by the ESRC-DFID Joint Poverty Alleviation Programme, Grant ES/J01754X/1. The authors would like to thank **Ruth Hall** and **Cyriaque Hakizimana** of the Institute for Poverty, Land and Agrarian Studies (PLAAS) at the University of the Western Cape for their comments on the earlier drafts of this brief. The series editors are Ruth Hall and Paul Cox. Further information about this series of Policy Briefs is available at: www.future-agricultures.org

The Future Agricultures Consortium aims to encourage critical debate and policy dialogue on the future of agriculture in Africa. The Consortium is a partnership between research-based organisations across Africa and in the UK. Future Agricultures Consortium Secretariat at the University of Sussex, Brighton BN1 9RE UK T +44 (0) 1273 915670 E info@future-agricultures.org

Readers are encouraged to quote or reproduce material from Future Agricultures Briefings in their own publications. In return, the Future Agricultures Consortium requests due acknowledgement and a copy of the publication.



FAC appreciates the support of the UK Economic and Social Research Council and UK Aid from the UK Government

Funded By



The views expressed do not necessarily reflect the UK Government's official policies.