



## Which Large-scale Agricultural Commercialisation Models Offer the Best Opportunities for Improved Local Livelihoods in Zambia?

Munguzwe Hichaambwa and Crispin Matenga

### Key Points

- 1) Rural communities are affected differently by different models of commercial agriculture in Zambia. Over 80% of smallholder farmers have access to land for farming, regardless of the agricultural model in effect, though how much they actually have at their disposal depends on local environmental, economic and socio-cultural conditions.
- 2) The Mkushi Farm Block employs the most people of all three examples of agricultural models studied. However, labour is mostly casual, unlike Zambeef, Chiawa Estate and Magobbo Out-grower Scheme which employ fewer people on a permanent basis. When it comes to accessing employment in the agricultural sector, women and youth are the most disadvantaged.
- 3) Irrespective of agricultural model, work on commercial farms improves the livelihood and food security of communities around Zambeef Chiawa Estate, Magobbo Out-grower Scheme and Mkushi Farm Block.
- 4) Of the three models, Mkushi Farm Block provides the most local economic linkages through input and output markets, which spills over into markets for off-farm goods and services.

**INTRODUCTION:** The Zambian agricultural sector, which is largely driven by rural peasant labour, needs a structural transformation if it is to grow the economy and reduce poverty on a broad national scale by 2060. This view is based on historical evidence of how the world's richest countries and the fastest growing Asian economies achieved the kind of economic growth they are experiencing today. The agricultural sector is characterised by a large number of poor smallholders contributing most of the agricultural output, with low yields, limited commercialisation and few signs of rapid productivity growth and, population-land ratios that are not declining. This will need to change for the Zambian agriculture in particular and African agriculture in general to yield optimum results.

Many development economists and donors see smallholder led agricultural growth as the most viable solution to the problem—as long as interventions in this regard are based on production technology and market development,

among other things. (World Bank, 2007). Others maintain that agricultural productivity can be better enhanced through large scale commercial farming. Woodhouse (2010). This is the logic behind the resurgence of plantations patterned along the lines of the colonial estates of yesteryear and the experiment of state farms from the post-colonial period. However, though large-scale land acquisitions to support plantation and state-farm, agriculture has been raising concerns about loss of land and livelihoods by rural communities (Hall *et al.*, 2015), they also suggest opportunities for expanding employment and economic growth (Deininger *et al.*, 2011). Contract farming or outgrower schemes have been seen as an inclusive business model and an ideal alternative to land acquisitions. Outgrower schemes are often presented as a route through which farmers can engage in agribusiness and commercial agriculture (Glover, 1984; Baumann, 2000).

However, not all land acquisitions 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 (Jayne *et al.*, 2014). In Zambia, this class of land acquisitions of between 5 and 100 hectares (ha) represents more land than either the entire small-scale farm sector or the large-scale domestic and foreign investors in the country (Sitko and Jayne, 2014) have. Although the main focus of this study was on a long-established, state-planned area of medium to large-scale farms in Mkushi, it also investigated the role of the commercial farming area and its effects on a local economy.

This policy brief summarises the findings of a study<sup>1</sup> that focused on a case study of each of three agricultural models in Zambia: 1) a large-scale plantation model (Zambeef Estate in Kafue district in Lusaka province; 2) a medium to large-scale commercial farming area model (Mkushi Farm Block in Mkushi district, Central province); an out-grower model (Zambia Sugar's Magobbo Out-grower Scheme in Mazabuka district in Southern Province. Under each of these models, a variety of institutional arrangements established partnerships between local landholders (contributing the land and often the labour), and largely external investors (contributing the capital, market linkages and technical expertise), under different types of land, production, and associated contracting arrangements.

The study addresses the following questions:

- 1) How do the different models of land and agricultural commercialisation affect agrarian economies and livelihoods in Zambia?
- 2) Does new land and agricultural commercialisation initiatives promote growth and reduce poverty and inequality, and if so, how?
- 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 used

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<sup>1</sup> The study was part of two other similar case studies conducted in Kenya and Ghana.

qualitative and quantitative approaches to assess data from 2013 to 2015. The qualitative approach relied on documentary review, in-depth key informant interviews, focus group discussions, life histories and mapping exercises. It included interviews with workers to gain detailed insights into employment and labour issues, farm managers, out-growers and surrounding communities. The quantitative method used a household survey administered among 324 randomly selected farm households in communities living up to five kilometres away from each model.

#### **KEY FINDINGS:**

**Proportion of smallholder farmers accessing land for cultivation is high:** Access to land is high across models, except around the outgrower model due to block farming. Over 80% of the sampled households reported having access to land in the communities surrounding Zambeef Chiawa Estate or Mkushi Farm Block regardless of whether the household had members employed by either type of agricultural enterprise. In the case of the Magobbo Out-grower Scheme, all the households involved in contracting with the nucleus estate indicated having access to land. Only 33% of the households with members employed by the scheme (but not involved in contracting) had access to land. The proportion was higher among the households who did not contract with the outgrower scheme and had no members employed either. (66%).

Average smallholder farm sizes owned were larger among communities around Mkushi Farm Block (5.6 ha on average; 5.6 ha and 5.8 ha among those providing and not providing labour to the model respectively), compared to Zambeef Chiawa Estate (2.0 ha on average; 1.5 ha and 2.5 ha among those providing, and not providing labour to the plantation model respectively), and Magobbo Out-grower Scheme (2.0 ha on average; 3.5 ha, 0.5 ha and 4.0 ha among those providing, not providing labour and under supply contract to the out-grower model respectively).

Active land markets were evident across all the three models. Increasing land concentration leading to declining access and land conflicts were reported across all the three models. The highest land conflicts were reported around the

out-grower model where land access is more constrained. Access to land among young people around the out-grower model is very low due to commercial pressures on land to grow sugarcane, though out-growers invest more of their high incomes in quality education for their children. Generally, young people do not see a future in farming, particularly around the out-grower and plantation models.

**Commercial model (Mkushi Farm Block) offers the most employment opportunities:** Mkushi Farm Block provides the most jobs of the models, although most workers are casual, insecure, and poorly paid. Zambef Chiawa Estate and Magobbo Out-grower Scheme provide less employment, although it gives workers more permanent tenure. Out of the 22% of the household members in the sampled communities surrounding Mkushi Farm Block who were employed by the model, only 6% were employed as permanent workers. Only 8% and 7% of the household members surrounding Magobbo Out-grower Scheme and Zambef Chiawa Estate were employed by the models, but 5% and 6% were employed as permanent workers respectively.

**Gender and generational differentials in employment opportunities evident across all the models:** Women occupied a higher proportion of the less skilled low-quality jobs across the three models. Across all the models, women were paid less than men for permanent jobs. Only Zambef Chiawa Estate had a relatively higher proportion of females from the surrounding communities employed workers on a permanent basis, as compared to males (47% versus 28%). Notably, 11% of the males in employment worked as casual workers, and no females were employed on this basis. . In the case of Magobbo Out-grower Scheme and Mkushi Farm Block, there was a higher proportion of males than females from the surrounding communities employed permanently (15% versus 13% and 24% versus 15% respectively), while the opposite was observed for temporary or casual employment (14% versus 25% and 51% versus 85% respectively).

As with gender, there were differences based on age with regard to employment opportunities across the three models are significant. At Zambef Chiawa Estate, more adults over 35

years were employed as compared to youths (age 18 to 35)<sup>2</sup>, on both a permanent (37% versus 27%) and casual (11% versus 6%) basis respectively. Additionally, younger people, especially men, sought better-paying jobs in the nearby safari lodges. In Mkushi Farm Block, more adults were employed on a permanent basis as compared to youths (30% versus 18%), whereas the researchers observed an opposite trend for casual employment, where more youths were employed than adults (67% versus 46%). However, given the prevailing poor wages, the benefits young people can derive from greater participation in casual work was limited. A greater proportion of youths was employed in the out-grower enterprise compared to adults both on a permanent (32% versus 13%) and a casual basis (20% versus 9%). This is because adults concentrated on farming their own land or were shareholders in the out-grower scheme.

**Employment in Zambef Chiawa Estate and Magobbo Out-grower Scheme and own farming activities in Mkushi Farm Block are key drivers for improved livelihoods and food security:** The combination of wage employment and own farming is an important basis for livelihoods across the three models. Wage employment in Zambef Chiawa Estate and Magobbo Out-grower Scheme is crucial for improving household food security, whereas own-farming households around Mkushi Farm Block were more food secure than households engaged in the model through employment. Households involved in Magobbo Out-grower Scheme improved their food security situation as a result of increased incomes from pooling their land for growing sugarcane.

**The commercial model (Mkushi Farm Block) provided the most local economic linkages:** Zambef Chiawa Estate is a textbook case of a relative 'enclave economy' poorly integrated into the local economy, whereas Mkushi Farm Block stimulates local input markets (local trade in farming inputs and equipment) and Magobbo Out-grower Scheme does not boost local markets as the block farming models mimics a plantation. All three models sell outputs both to the domestic and export markets.

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<sup>2</sup> According to the *Zambian National Youth policy (2006)* a youth is someone aged between 18 and 35 years.

## CONCLUSIONS/RECOMMENDATIONS:

The study found no evidence of reduced smallholder land access as a result of large scale commercial agriculture investment regardless of the model. Most local community access to land remained high though the amount of land owned was a function of existing local environmental, economic and socio-cultural conditions, quite often not associated with the large scale investment.

The findings in this study suggest that the commercial model provided the best opportunities for broad-based rural livelihood improvement. The model exists with smallholders of different scales providing mostly seasonal (casual) employment for those who need to supplement their farming incomes. As farming remains the main livelihood source of these communities, income from employment was quite often ploughed into farming activities. 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 benefit the plantation model offers to the local communities was direct employment. However, the main limitations was that the model provided only a few employment opportunities for the locals, and quite often, the labour force may be imported from areas other than the surrounding communities. Employment for those able to access it has positive impacts on farming activities and food security.

As for the out-grower model, the main benefit to local communities was the opportunity the contract to supply the crop of interest in the scheme. Like the plantation model, the key limitation was the small numbers of smallholder farmers who can be directly involved in the scheme, as well as the limited employment opportunities in terms of the number of people who can be directly by the scheme. Otherwise, smallholders contracted to supply the scheme increase their income and improve their food security.

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## ACKNOWLEDGEMENTS

The Indaba Agricultural Policy Research Institute (IAPRI) is a non-profit company limited by guarantee and collaboratively works with public and private stakeholders. IAPRI exists to carry out agricultural policy research and outreach, serving the agricultural sector in Zambia so as to contribute to sustainable pro-poor agricultural development. Furthermore, financial and substantive support of the Swedish International Development Agency (Sida) and the United States Agency for International Development (USAID) in Lusaka are greatly appreciated. Technical and capacity building support from Michigan State University and its researchers is also acknowledged.

This work is part of country case studies conducted in Kenya, Ghana and Zambia with financial support from the ESRC-DFID Joint Poverty Alleviation Programme, Grant ES/J01754X/1. The contributions of Vera Rocca and Cyriaque Hakizimana in the field work, and of Ruth Hall, Ian Scoones and Dzodzi Tsikata in the overall coordination of the study is greatly appreciated.

\*Munguzwe Hichaambwa is Business Development Manager and researcher, IAPRI; and Chrispin Matenga is a lecturer and researcher in the Department of Development Studies, School of Humanities and Social Sciences, University of Zambia.