Research Article

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Zambian farm blocks: A vehicle for increased private sector investments

<https://doi.org/10.1515/opag-2020-0079>

received July 28, 2020; accepted October 2, 2020

Abstract: The Zambian government has introduced the farm block development programme (FBDP) to facilitate agricultural land and rural development and encourage private sector investment. This study assessed whether the FBDP achieves these goals. Key obstacles and possible opportunities were also identified and, where appropriate, specific corrective actions were recommended. Qualitative data were collected through semi-structured interviews conducted in Lusaka with various stakeholders of the FBDP. The FBDP is designed to facilitate agricultural land development and encourage private sector investment. However, the programme falls far short in terms of implementation, amidst policy uncertainty and lack of support. This is evident by the insecurity of land tenure which negatively affects small- and medium-scale producers' access to financing, lack of infrastructure development of these farm blocks, and constraints in the agricultural sector such as low labour productivity and poor access to service expertise. It is recommended that innovative policy interventions should be created to support agricultural development. This can be achieved by following a multistakeholder approach through involving private, public and non-profit sectors such as non-governmental organisations (NGOs) and donors.

Keywords: Zambia, agricultural development, rural development, land policy, poverty reduction

1 Introduction

The agricultural sector in Zambia is the backbone of the rural economy and forms an integral part of the country's poverty reduction strategies for rural households (Govere et al. 2006; Chapoto et al. 2018). Eighty percent of Zambia's population is dependent on agriculture to provide the main support for its rural economy (Sebatta et al. 2014). Despite the sector's perceived development contribution, and its ability to record surplus food production, in 2018 Zambia was ranked the fifth-hungriest country according to the Global Hunger Index's criteria of undernourishment, child wasting, child stunting and child mortality (GHI 2018). Various authors argued in favour of increased private sector investment as a key requirement for sustainable agricultural development, which should be driven and facilitated by focused public policy (Nikiéma 2014; OECD 2014; Sambo et al. 2015; Chapoto et al. 2018). Oberholster and Adendorff (2018) further argued that one of the government's key responsibilities is to drive development-oriented policy interventions. The Zambian government has adopted various policy measures and marketing strategies to attract both local and foreign investors to the country. One such initiative is the Zambian farm block development programme (FBDP) (Chitonge 2016). The dual goals of the FBDP are to facilitate agricultural land development and encourage private sector investment.

There is strong evidence in support of the need for large-scale private sector investments, not only in Zambia but in Africa as a whole, and the consequential beneficial impact on the livelihoods of rural communities (Hallam 2009; Arslan et al. 2011; Mujenja and Wonani 2012; Chu 2013; König et al. 2013; FAO 2017). Aragie and Balié (2019) linked agricultural productivity with rural livelihoods. Yet, the establishment of a climate that is conducive to investment is a prerequisite for increased agricultural productivity (FAO 2012; König et al. 2013).

Several studies have been conducted on private investment and its social impact in Zambia (Arslan et al. 2011; Mujenja and Wonani 2012; German and Parker 2015; Sambo et al. 2015; Matenga and Hichaambwa 2017;

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Manda *et al.* 2019). Despite various local studies (Chu 2013; Liu *et al.* 2013; German and Parker 2015), there is a lack of evidence whether, in the case of Zambia, the FBDP is an appropriate vehicle for attracting increased private sector investment to the agricultural sector to fulfill its intended developmental role.

Against this background, the study aimed to assess whether the FBDP has achieved these goals set by the government. Key obstacles and possible opportunities were also identified, and, where deficiencies in practice were reported, specific corrective actions were recommended.

It is hoped that the findings and recommendations will contribute towards improved decision-making by policymakers, investors and academics, and ultimately support sustainable agricultural development in Zambia.

2 Farm block development programme in Zambia

The 1995 Land Act enabled the government to set aside land for the FBDP (Sitko and Jayne 2014). This Act vests

all land in the President including the right to alienate land to non-Zambians under certain conditions. These conditions are (1) non-Zambians with the status of permanent resident and (2) non-Zambians defined as investors according to the Investment Act of 1993 (Chileshe 2005). Subsequently the government, by way of a presidential directive in 2002, approved a programme in terms of which a total gross area of 895,000 ha was earmarked for agricultural investment in 11 farm blocks (Figure 1) (Ministry of Finance and National Planning 2005; Shawa 2014; German and Parker 2015; African Development Bank Group 2018). This directive determined that every province should have at least one farm block (Ministry of Finance and National Planning 2005).

The FBDP, which forms part of the broader National Agricultural Policy, was launched by the Ministry of Agriculture and Cooperatives (MACO), which subsequently changed its name to the Ministry of Agriculture and Livestock (MAL) (Schüpbach 2014). One of the critical matters in the establishment of farm blocks was obtaining use of customary land adjacent to where the farm block was to be situated. The government entered into negotiations with traditional authorities – comprising 4 paramount chiefs, 8 senior chiefs and 240 chiefs overseeing

Figure 1: Location of farm blocks (both established and proposed) in relation to the nine provinces of Zambia. Source: Zambian Department of Agriculture on 24 May 2017.

73 tribes living on customary land (Moll 1996; Chileshe 2005) – to cede large tracts of such land to the state. This allowed the government to set up infrastructure services and tender the land within the farm block and provide investors with the opportunity to obtain title to the land on long-term leaseholds (Nolte 2014; Sitko and Jayne 2014).

In principle, a farm block would house five different scales of agricultural production (Table 1) (Ministry of Finance and National Planning 2005; Mujenja and Wonani 2012; Sitko and Jayne 2014). A process involving the application to a technical committee of the FBDP, interviews and approval of the successful applicants by the Commissioner of Lands through the Council of Ministers has been adopted to allocate farms to investors (Ministry of Agriculture n.d.). Table 1 stipulates the responsibilities and perceived benefits for both the government and the five different farming enterprises.

The initial intention was to develop three farm blocks at a time (Ministry of Agriculture n.d.). However, development began on only two of the 11 designated units, namely the Nansanga and Luena farm blocks (Figure 1)

(Shawa 2014; Mfula 2015; Ministry of Agriculture n.d.). An environmental impact assessment was completed during February 2006 on the development of the Nansanga farm block (Ministry of Agriculture and Cooperatives 2006). In 2011, research conducted on land deals in Zambia by the Oakland Institute – an independent research organisation – established that the government funded and installed key infrastructure, such as roads and dams, at the Nansanga farm block (Horne and Mittal 2011). In 2014, a presentation given by Julius Shawa, the Permanent Secretary at MAL, reported that 80% of the ‘backbone’ infrastructure was complete (Shawa 2014). Shawa further confirmed that infrastructure development at Luena farm block had begun with road and dam construction (Shawa 2014).

The most recent information on the stage of development of farm blocks is not publicly available. This is similar to agricultural investment information as confirmed by both Manda et al. (2019) and Horne and Mittal (2011: 20) – the latter stated that ‘limited media reports about individual land deals’ are available.

Table 1: Farm block design with government and private sector responsibilities

Stakeholders (quantity and size)	Responsibilities	Perceived benefits
Government		
MAL	Provide infrastructure including feeder roads, electricity, water for irrigation, communication facilities, schools, health clinics and other public services Land size sufficient for economies of scale	Facilitate establishment of a more industrialised agricultural sector with the ability to boost economic growth Increased agricultural production and downstream value-adding benefits
Farming enterprises		
Core (large-scale corporate investor): 1 × 10,000 ha	Lead investor Construction of processing plant Uses and develops the property for farming or agricultural purposes by producing sufficient crops for food and export Set up outgrower scheme by providing crop-price guarantees and agricultural inputs Set up outgrower scheme	Potential to facilitate the development of related downstream industries such as biodiesel and ethanol Provide secure local agricultural produce
Commercial (1 to 3 × 1,000–5,000 ha)		
Medium scale (100–1,000 ha)	Growing crops for core investor as part of outgrower scheme	Aggregation of smaller volumes and market access
Emergent (50–100 ha)		Opportunities for secondary businesses
Small-scale (25–50 ha)		Establishment of new markets Facilitating integration into the supply chains led by commercial farm operations Creating employment, input support, and infrastructure and/or grants for community projects

Sources: (German and Schoneveld 2012; Matenga 2017; Ministry of Finance and National Planning 2005; Mujenja and Wonani 2012; Nolte 2014; Sambo et al. 2015; Schüpbach 2014; Shawa 2014; Sitko and Jayne 2014; The Government of the Republic of Zambia 2015; ZDA 2011).

Table 2: Stakeholder groups included in the semi-structured interviews

No.	Stakeholder	Field of investigation
1	Ministry of Agriculture and Livestock (senior representative)	Policy implementation and coordination (farm blocks)
2	Zambia National Farmers Union (ZNFU) (board member)	Small- and large-scale agricultural producers and agribusinesses
3	Tobacco Association of Zambia (TAZ) (representative)	Organised agriculture
4	Zambian primary producer	Large-scale commercial agriculture
5	Zambian primary producer	Large-scale commercial agriculture
6	Agricultural processing company (managing director)	Downstream agricultural industries
7	Commercial bank (representative)	Agricultural financing and investor support
8	Academic researcher (policy specialist)	Agricultural policy
9	Zambia Development Agency (ZDA) (representative)	Promotion of the FBDP

3 Methods

Lusaka was identified as the area of study and as such a field trip was undertaken to this location in May 2017. Sustainable agricultural development requires a multi-stakeholder approach to policy formulation and implementation (Oberholster and Adendorff 2018), and therefore various stakeholders across the agricultural value chain were selected as the study population. A combination of purposive and snowball sampling approaches was applied (Creswell 2009; Palinkas et al. 2015). Before the field trip, the researchers had purposively identified and set-up interviews with stakeholders in Lusaka but struggled to obtain representatives from the complete value chain. During the field trip, additional participants were suggested by the initial interviewees. These participants were identified using the snowball sampling method. Face-to-face semi-structured interviews were selected as the data collection technique as a series of broad themes were covered to address the research problem (Qu and Dumay 2011). The nine sources or stakeholder groups that were interviewed are presented in Table 2, together with the key fields of investigation. The last entry in the table, the Zambia Development Agency (ZDA), was specifically set up in 2006 – by an Act of Parliament – to coordinate a ‘private sector-led economic development strategy’ (ZDA 2019). The agency was handed a mandate that includes trade development and investment promotion (ZDA 2019). Although small-scale farmers did not participate in the interviews, a board member of the ZNFU, representing both small- and large-scale farmers, was interviewed.

These interviews lasted from half-an-hour to one-and-a-half hours. Field notes were taken by the researchers and compared. Data categories were established, using both the field notes and literature, and used to perform coding and classification of the textual data through content analysis (Pope et al. 2000; Kothari 2004). The results based on these categories are presented below.

4 Results

Eight key themes were identified from the interviews conducted with stakeholder groups (Table 2). A summary of the key findings is presented in Table 3 including the key obstacles faced, the available opportunities and recommended corrective actions to be taken.

4.1 Application and approval process

There is a lack of awareness of the FBDP both by the private and public sectors. The private sector interviewees were not aware of the FBDP. The reasons for this ignorance were not clear. Similarly, although this programme has been in existence since 2002, it appears as if the FBDP is being promoted as a new initiative by the government. During the 2018 budget address, the Zambian minister of finance, Felix Mutati, referred to ‘the introduction and development of a farm block model of which three will come on board in 2018’ (Ministry of Finance 2017).

The interviews with the government revealed that although the MAL advertised the FBDP, there was limited interest from potential local core investors. The interest from international investors was significantly lower than initially anticipated by the government. The periodic changes in political leadership – and resultant policy changes – lead to potentially interested parties being hesitant to invest. In contrast to the core investors, the government officials indicated that the small- and medium-scale producers showed a great deal of interest in the Nansanga farm block. It was found that the application process for core investors is extremely cumbersome as an application has to be approved by several government structures. The interviewees pointed out that the approval process is prolonged and exacerbated by inefficiencies and they recognised the need for the process being improved. Another reason for the minimal

Table 3: Summary of the key findings

Theme	Key obstacles	Opportunities	Corrective actions recommended
Application and approval	Limited awareness Limited interest by core investors Several government structures involved (inefficient bureaucracy)	Open up new forms of commercialisation for small-scale producers	Streamline the process Provide incentives for investors Assistance programme for new investors
Land tenure	Secured access to land	Legal recognition to land rights (land certificates) acknowledged by consensus at the local level	Develop a land-information system and mechanism for managing land transactions at the communal level
Infrastructure	Budget constraints (government)	Public–private partnerships	Focus on network, social and ICT infrastructure Tax incentives for private infrastructure development
Location of farm blocks	Remote rural locations	Rural development	
Sector constraints	Low labour productivity Poor access to service expertise	Improve labour skills Expansion of footprint of service providers	Enforcement of skills development levies Promoting the existing tax incentives for foreign suppliers
Outgrower schemes	Lack of collateral to obtain finance	Access to finance by small- and medium-scale producers	Redesign outgrower schemes
Markets	Poor development of export markets State interference	Trade liberalisation Regional market integration	Remove barriers to trade (tariff and non-tariff)
Policy uncertainty	Political regime change No input from industry	Agricultural and broader economic reform	Higher levels of institutional innovations (policy) Involve private, public and non-profit sectors to innovate agriculture

interest in the farm blocks was due to the lack of advisory services available to investors. As such, investors have to pay external consultants to deliver these services at an additional cost.

4.2 Land tenure

The issuance of land title significantly reduces the risk to a potential investor through land tenure security. There are two land tenure systems in Zambia: statutory land tenure, which is land held in private hands, and customary land tenure, which is land held by chiefs. The government has entered into arrangements in respect of customary land to ensure that land in farm blocks of sufficient size (up to 10,000 ha in case of a core venture) is made available for a renewable lease period of 25 years. In part, title deeds to customary land within these farm blocks have already been acquired from traditional leaders.

4.3 Infrastructure

As a result of budget limitations, state investment in infrastructure development in the farm blocks has been much slower than initially planned. The criteria for the state approving investment in a farm block were amended in 2015. It appears that the development of infrastructure at own expense by the investor is now perceived to be a precondition imposed by the government in some instances when an investment licence is granted to core investors, which significantly increases the amount and risk of the initial investment required. Farm block infrastructure development starts with land clearing, which has not been done for most of the blocks. The cost of clearing land – removing trees and bush (Sitko 2010) – is significant, and this additional expense has to be borne by the core investor. Moreover, due to their remote locations, many farm blocks lack easy accessibility due to poor roads. Heavy agricultural machineries such as tractors and harvesters have to be transported to wherever needed. The access to irrigation is another major obstacle.

4.4 Location of farm blocks

All the farm blocks are located in rural areas to achieve the upliftment and involvement of rural people in the agricultural sector. The location of the farm blocks is, however, a critical consideration from a commercial perspective. Great distances between major economic centres and these blocks result in heavy costs, especially when acquiring farming inputs of, for example, seed, fertilizers or feed. These additional expenses also mean that it is generally difficult to achieve economies of scale in Zambia due to the relatively thinly dispersed population. This concern is exacerbated in the case of the farm blocks given their wide distribution across the country and because many of them are located far from each other and in rural areas. Additionally, the farm blocks have poor access to markets for agricultural produce. The transport infrastructure available in the areas where the farm blocks are located is not effectively connected to markets, so that transport costs to export goods can be unaffordably high.

4.5 Constraints in the Zambian agricultural sector

There is poor access to service expertise in terms of support with input supplies and production equipment required for mechanised farming operations. These obstacles, coupled with high electricity prices (World Bank 2018), increase the risk for investors. Skills shortage and low labour productivity in Zambia is another challenge. For a new core investor, this is a major concern.

4.6 Outgrower schemes

The arrangement with small-scale farmers, and the business model to be applied in relation to the implementation of outgrower schemes, rests with the investor as stipulated in the latter's application to secure access to a farm block. The MAL is not involved in the outgrower schemes; rather, these practices are managed by the core venture. An outgrower scheme, a term sometimes used interchangeably with contract farming, involves smallholder farmers growing crops under production contracts with large-scale enterprises, in exchange for crop-price guarantees, inputs such as fertilizer and seeds, and other services (Glover 1984; Sambo *et al.* 2015; Matenga 2017).

Small- and medium-scale farmers require funding to be part of an outgrower scheme. An obstacle to obtaining finance for these farmers is the lack of collateral that they can offer to financiers as they may not necessarily have title deeds to the land on which they farm. Title deeds are provided to the core venture, but a financier requires a supplier – also termed an 'offtake' – agreement before financing is provided. An offtake agreement is one between the farmer and the purchaser of his produce (processor) willing to buy his produce. However, in the Zambian case, the ability of a small- or medium-scale producer to conclude offtake agreements depends on the arrangement with other investors in a farm block, which increases the risk and cost relating to financing arrangements. The failure to access funding shifts the burden and risk of assistance to the commercial farmers. This consequence contrasts with the goal of the FBDP to reduce poverty through agricultural development.

4.7 Markets

It was reported by the interviewees that the Zambian export market is not yet well developed and that state interference often restricts exports.

- As it is a land-locked country, the export destinations are generally neighbouring states, which may however limit or restrict imports from Zambia because of political tensions between countries including trade policy restrictions. The interviews revealed a general perception of mismanagement at international borders.
- Poor access to major transport routes due to the location of the farm blocks, as mentioned above, leads to increased transport cost and longer time taken to deliver products for the export market.
- Policies on exports are often inconsistent, making the decision to open or close the border for exports susceptible to use as a political instrument. For example, in 2016 the government imposed an export ban on maize (Chapoto *et al.* 2017). Despite the policy rationale – ensuring local food security – for implementing these measures, it could result in farmers being unable to carry on profitable enterprises.

4.8 Policy uncertainty

Policy uncertainty is a major concern in the country. This uncertainty can arise from agricultural policy changes

during election campaigns. An example is the banning of exports, similar to the Tanzanian government banning the export of maize on several occasions since the 1980s (Makombe and Kropp 2016). One of the interviewees asserted that it is very difficult to plan long term if there is political uncertainty – if decisions are taken by the government that are directly opposed to the interests of the agricultural sector – such as imposing export bans. He retorted that the government must also stop making decisions without consulting the industry.

5 Discussion

Some of the key findings of this study are the security of land tenure, the role of government and sector constraints. It was found that the security of land tenure plays a key role in a potential private agricultural investor's decision to invest in Zambia. On the other hand, the lack of land tenure security restricts the access to financing by small- and medium-scale producers which is a precondition to be part of an outgrower scheme. The latter was confirmed by Schüpbach (2014), who highlighted that small-scale farmers in developing countries – such as Zambia – often do not have formal land titles to use as collateral for financing. Other authors have confirmed that the strengthening of security of tenure for agricultural producers will promote long-term investment in the agricultural sector (Deininger et al. 2012; Larson and Nash 2012). Contrarily, research conducted by Sambo et al. (2015) found that customary land tenure in Zambia remains insecure.

The government failed to provide adequate (1) farm block infrastructure, (2) efficient management of the international borders and (3) policy certainty during election campaigns and policies, amongst others, around cross-border trade. Mujenja and Wonani (2012) confirmed the lack of farm block infrastructure by commenting that the large farm blocks have 'very little supporting infrastructure or any other support' which is similar to what was conveyed by some of the interviewees. The lack of poor infrastructure development was ascribed to governmental budget constraints. The World Bank (2018: 53) agreed with the mismanagement of borders as it reported 'weak governance at the border (with officials extorting bribes and performing abuses) are regularly observed at Zambian borders and ports.' In addition, the World Bank (2018) averred that agricultural products – especially perishable and refrigerated goods – are particularly vulnerable

when inefficiencies and transport delays lead to increased costs (World Bank 2018). With regards to trade policies, Makombe and Kropp (2016) found during a research study conducted in Tanzania, that export bans tended to hurt the local farmers. This is similar to that found in Zambia. The World Bank (2018) reported that due to the prevailing policy uncertainty, private sector development – especially by foreign investors – has been seriously limited.

It was found that the agricultural sector constraints present a major obstacle for a potential investor. Low labour productivity and poor access to service expertise are key concerns. Chitonge (2016) concurs and attests that a primary obstacle for the Zambian economy is how to raise productivity in the agricultural sector.

6 Conclusion and recommendations

The study aimed to assess whether the FBBDP achieved the goal of facilitating agricultural land development and encourage private sector investment. The findings illustrate that the programme falls far short in terms of implementation and policy uncertainty and support. Key corrective actions are recommended to address these obstacles described above are presented in Table 3 and include the following:

- Land rights should be legally recognised and acknowledged through consensus at the local level. Additionally, a land-information system and mechanism should be developed for managing land transactions at the communal level that can be used to improve land tenure security and in turn encourage FBBDP investment.
- The government can introduce taxation incentives for private infrastructure development to encourage infrastructure expansion by core investors of the FBBDP.
- The barriers to trade (both tariff and non-tariff) should be removed by the government to encourage exports. Additionally, the governance at borders should be improved by the state through enforcement of anti-corruption legislation.
- The low labour productivity in agriculture can be addressed through the redesign of FBBDP outgrower schemes. The latter should have a key focus on skills development. To expand the footprint of foreign service providers, the existing "generous" taxation regime (Fumpa-Makano 2019: 2) can be properly marketed by the Zambian government.

This study highlights the importance of not only a sound policy environment, but that innovative policy interventions should be created to support agricultural development. It will however require the Zambian government to build institutional capacity through the strengthening of partnerships across the private, public and non-profit sectors including NGOs and donors.

Acknowledgments: The authors gratefully acknowledge the Chartered Institute of Management Accountants' (CIMA) Centre of Excellence South Africa [grant number 16004] and the National Research Foundation for providing the financial support to carry out this investigation.

Conflict of interest: Authors declare no conflict of interest.

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