The Gender and Equity Implications of Land-Related Investments
on Land access, Labour and Income-Generating Opportunities

A Case Study of Selected Agricultural Investments in Zambia

The Gender and Equity Implications of Land-Related Investments on Land access, Labour and Income-Generating Opportunities

A Case Study of Selected Agricultural Investments in Zambia

Food and Agriculture Organization of the United Nations
Rome, 2013

This report funded by FAO under the FAO Program entitled *Promoting gender-equitable and inclusive land-related investment policies and regulatory frameworks that contribute to enhance food security, reduce poverty and strengthen the livelihood of poor rural women and men*. The Gender, Equity and Rural Employment Division of FAO has the overall lead of the Program. This report was prepared by **Charlotte M. Wonani, William S. Mbuta,** and **Augustine M. Mkandawire** under the supervision, guidance and technical support of **Emily Polack (IIED), Martha Osorio (FAO)** and **Clara Mi Young Park (FAO).**

Contact for information: martha.osorio@fao.org and clara.park@fao.org

E-ISBN 978-92-5-107614-9 (PDF)

Table of Contents

Acknowledgements

This report is a culmination of concerted efforts of many individuals and organisations. The research team, which comprised Charlotte C. Wonani, William S. Mbuta and Augustine M. Mkandawire, is therefore deeply indebted to everyone who contributed to its successful completion.

First, the team wishes to express their deepest gratitude and warmest appreciation to FAO and IIED for funding this study and for an opportunity provided to the research team to contribute to this noble programme to explore gender and equity implications of agriculture investments in Zambia. Special thanks go to Emily Polack, for her useful comments to the draft report and her unwavering support and inspiration during the course of the implementation of field work and reporting. Special thanks also goes to Man-Kwun Chan and Lorenzo Cotula (IIED) for their comments and contributions provided to the text. Special thanks also to Martha Osorio (FAO), Clara M. Park (FAO) and for their guidance and in-depth review of the various drafts of the report.

Secondly, management and staff of both KASCOL and ETC Bio – Energy Limited were very supportive during the field work. They endured long hours of key information interviews and set aside their busy scheduled to participate in this study. They also provided time for wage workers to participate in this study without any hindrances.

The smallholder farmers at KASCOL, the wives of ETC employees, and the staff at the Ministry of Agriculture and Cooperatives were also instrumental in providing policy insight relating to gender, equity and agriculture in Zambia.

To all of you, we say a great thank you.

All Photos: Cover: ©FAO/Pius Utomi Ekpei, ©Sweeter Alternative, ©FAO/Alberto Conti; Introduction: ©Worldfish; Chapter 2-5: ©FAO/Alberto Conti.

Abbreviations and Acronyms

BBZ	Barclays Bank of Zambia
CAADP	Comprehensive Africa Agriculture Development Programme
CDC	Commonwealth Development Corporation
CEDAW	Convention Elimination of All Forms of Discrimination Against Women
CSO	Central Statistical Office
DBZ	Development Bank of Zambia
EBZ	Export Board of Zambia
ERC	Established Recoverable Crystals
ESW	Gender, Equity and Rural Employment division of FAO
ETC	Export Trading Company
FAO	Food and Agriculture Organization of the United Nations
FGD	Focus Group Discussion
FISP	Farmer Input Support Programme
FNDP	Fifth National Development Plan
GDP	Gross Domestic Product
GMWZ	Grain and Meat Workers of Zambia
GRZ	Government of the Republic of Zambia
ha	Hectares
HIV/ AIDS	Human Immuno Virus / Acquired Immune Deficiency Syndrome
HR	Human Resource
HRM	Human Resources Manager
IFAD	International Fund for Agricultural Development
IIED	International Institute for Environment and Development
ILO	International Labour Organisation
IT	Information Technology
JGSP	Joint Gender Support Programme
KASCOL	Kaleya Smallholder Company Limited
KASFA	Kaleya Smallholder Farmer Association
KI	Key Informant
LWG	Lands Working Group
MACO	Ministry of Agriculture and Cooperatives
MoL	Ministry of Lands
MDC	Mpongwe Development Corporation
MDG	Millennium Development Goals
MIGA	Multilateral Investment Guarantee Agency
mn	Million
MoFNP	Ministry of Finance and National Planning
NAMBOARD	National Agricultural Marketing Board
NAP	National Agriculture Policy
NAPSA	National Pension Scheme Authority
NEPAD	New Partnership for African Development
NIZA	Netherlands Institute for Southern Africa
NTFP	Non Timber Forest Product
NUPAAW	National Union of Plantation, Agriculture and Allied Workers
OVC	Orphans and Vulnerable Children
PTA	Parent and Teachers Association
PPP	Public Private Partnership
PRSDP	Private Sector Development Reform Programme
PSP	Fertiliser Input Support Programme
SADC	Southern African Development Community
SNDP	Sixth National Development Plan
SEDB	Small Enterprise Development Board

UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UN-HABITAT	United Nations Human Settlements Programme
WIEGO	Women in Informal Employment: Globalizing and Organizing
ZDA	Zambia Development Agency
ZAEMA	Zambia Environmental Management Agency
ZEPZA	Zambia Export Processing Zones Authority
ZIC	Zambia Investment Centre
ZPA	Zambia Privatisation Agency
ZSC	Zambia Sugar PLC

Executive Summary

In recent years, Zambia has witnessed increased interest from private investors in acquiring land for agriculture. As elsewhere, large-scale land acquisitions are often accompanied with promises of capital investments to build infrastructure, bring new technologies and know-how, create employment, and improve market access, among other benefits. But agricultural investments create risks as well as opportunities, for instance in relation to loss of land for family farmers. While much debate on 'land grabbing' has discussed risks and opportunities in an aggregate way, it is critical to understand the distribution of the costs and benefits created by an investment project. For example agricultural investments create gendered outcomes that are poorly understood. Gender inequalities in Zambia, as seen across much of Sub-Saharan Africa, shape access to land, agricultural assets, inputs, services and rural employment opportunities. These gender inequalities are partially responsible for the underperformance of the agricultural sector. Investments in the agriculture sector must therefore account for and challenge these inequalities if they are to deliver their stated benefits.

This study investigates the gender dimensions of agricultural investments in Zambia through two case studies. The first case study is the Kaleya Smallholder Company Ltd (KASCOL), an agribusiness company operating in Mazabuka district in Zambia's Southern Province since 1980. KASCOL produces sugar cane, which it sells to Zambia Sugar PLC. Cane is produced both from KASCOL's nucleus estate and from an outgrower scheme currently involving 160 smallholders who hold 14-year renewable sub-leases on company-leased land. The second case is ETC Bio-Energy Limited, previously Mpongwe Development Company (MDC), in Mpongwe District, Copperbelt Province. ETC cultivates a mix of crops, including jatropha, on company run plantations. In 2011 ETC sold the farms to a Zambian multinational agribusiness firm, Zambeef. As this transfer occurred so recently, attention is focused in this report on assessing the experience under MDC and ETC Bio-Energy. Both KASCOL and MDC projects began as joint ventures between the government of Zambia and the Commonwealth Development Corporation (CDC). This indicates the development orientation of both of the projects from the outset albeit through a vision of agricultural modernisation through large-scale agricultural enterprises. These two cases are not representative of the new wave of land-based investments for agriculture but, because of their duration, have some lessons to share concerning gender and equity in agricultural investments.

This report draws on a review of the literature and on field research conducted in late 2011 and early 2012. Fieldwork involved a combination of key informant interviews and focus group discussions with both men and women. A few important lessons emerged from these cases. KASCOL has established a viable smallholder scheme that provides farmers with increased access to land, some degree of tenure security and a say in the management of the company. ETC Bio-Energy Ltd is a major employer in Mpongwe. It offers some on the job training and encourages women into non-traditional roles such as drivers, mechanics and electricians. Permanent employees and their families are provided subsidised or free housing, piped water, electricity, maize meal, and have access to health and education facilities established by the company. The case studies also highlighted some challenges, particularly where a company takeover results in the reduction of benefits that had previously existed for workers and their families (namely, after the privatisation of MDC and its takeover by ETC Bio-Energy). In both cases, the lack of explicit corporate gender policies and strategies have meant that prevailing socio-cultural attitudes towards gender have penalised women in relation to the costs and benefits created by the venture

The long duration of these cases means that the direct impacts of changes in access to land and resources as a result of the projects are less clear due to the lack of baseline information and loss of historical memory. However, the acquisition of land in the case of MDC back in the 1970s led to loss of access to resources and in particular sources of livelihood and income for women. KASCOL acquired land that was previously

owned by three large commercial farms and therefore direct impacts on local communities were fewer. Instead KASCOL has provided access to land for 160 outgrowers, 45 of whom are women, with relatively secure tenancy as long as they are part of the outgrower scheme and honour their 'Cane Farmer Agreement'.

Concerning employment opportunities, the two schemes generate significant seasonal employment. Overall women's participation rates in waged employment are significantly lower than that of men. Culturally determined gender roles have clearly played a role in causing this gender gap. This relates to their domestic responsibilities as well as perceptions of cane production as a male activity in the case of KASCOL. Overall women hold a higher proportion of seasonal jobs than fixed-term or permanent positions, but even within seasonal work women generally secure work for shorter time periods than men. Seasonal work is also associated with poorer conditions (e.g. limited paid leave arrangements). The research indicated that wives of male wage workers do not necessarily benefit from the increase in incomes due to the way their husbands manage these funds.

That KASCOL provides land to its outgrowers is clearly beneficial to women since women's generally poor access to land in the region would have prevented the vast majority of them from joining the scheme, if outgrowers had been expected to cultivate cane on their own land. In addition, the selection criteria are equally accessible to women and men and the credit access minimises barriers to entry for many women. Fire and rain insurance also appear to be important risk reduction mechanisms for all farmers but may also be particularly important to women who, in general, have poorer access to credit and fewer assets in times of need. The inclusion of the succession clause is the main way in which women are now accessing the scheme and hence is an important inclusive feature of the model.

Although the proportion of women in the scheme is still low, female outgrowers appear to perform well on a number of fronts, producing marginally higher yields on average than men. This could be associated with their management of casual labour and their adherence to technical guidance. In addition, the household food situation was perceived to be better in families where women were making decisions over the use of income and of the marginal lands provided for domestic food production, focusing on subsistence crops over cash crops.

A key principle that emerges from the research is that a 'gender neutral' approach to agricultural investments is not enough: investors must adopt explicit gender policies and take proactive steps to ensure that company behaviours help to overcome rather than reinforce pre-existing gender inequalities. Regarding employment this means adopting policies to offer employment on a priority basis to those local women and men who have suffered a loss of livelihood as a result of the land acquisition. Companies should also be encouraged to adopt labour-intensive, as opposed to mechanised capital-intensive, production processes, although there is likely to be less flexibility to do so where the investment is mainly or purely private sector-led. Moreover, the adoption of proactive equal opportunities employment policies and practices is crucial in order to ensure that women's working terms and conditions are satisfactory. Particular attention needs to be paid to challenging patriarchal attitudes in the workplace and to the adoption of active measures to encourage more women to apply for jobs, including making terms and conditions of employment more amenable to women's particular needs (eg, provision of adequate leave, provision of free transport to/from work). Equally, companies should provide targeted training and coaching to women workers in order to increase the proportion of women in management positions. Given women's concentration in less secure jobs, improving the conditions of seasonal and casual workers, and bringing these more in line with those of fixed term and permanent workers, is also very important.

In sum, elements of gender-based inclusivity in outgrower schemes include: the provision of agricultural inputs on credit; incorporating a succession clause in outgrower contracts; encouraging outgrowers to train

other family members (or indeed training other family members directly); providing the option to purchase insurance against harvest loss and to obtain bridging loans should this occur; and providing the option to receive payments in regular (e.g. monthly) instalments. Importantly, all investors should also ensure that the scheme's membership criteria do not directly or indirectly discriminate against women, and should take proactive measures to encourage women to join. Fairtrade certification appears to have been a positive influence in terms of forcing wages – including those of casual labourers relied upon by smallholders - to stay above minimum wage and delivering some important welfare provisions. Overall, a social and gender equitable and decent employment approach is needed so that investments and agriculture contribute to beneficial outcomes for the different groups of rural dwellers.

Some of the challenges discussed in this report are rooted in national law and policy. Therefore, addressing those challenges requires rethinking aspects of the current national regulatory framework. Given weaknesses in the implementation of many good policies and gender mainstreaming strategies, mechanisms for monitoring progress and success on the ground is critical. A gender audit of the National Agriculture Plan is recommended so that recommendations can be included in its review prior to 2015. Gender mainstreaming in all institutions managing and administering land and natural resources is also critical. Zambia's draft Land Policy should go some way to addressing some of the gender and equity aspects of securing local land rights in rural areas; however, its current status is uncertain. Two fundamental aspects of land tenure governance in particular need to be addressed in the context of this increased interest from investors and increased pressure from national government on local state and traditional authorities to make land available. These are (a) the cost of land rent required for leasehold tenure (currently prohibitive for most rural citizens) and (b) the powers vested in customary authorities. Options for communal registration of customary land tenure should be explored. Affirmative action to protect women's rights to land and natural resources should also be prioritised including ensuring that the new land policy provides for joint registration of land under joint occupation by married people. Within the current wave towards decentralised planning, the government should also move in the direction of devolved long-term, participatory land-use planning frameworks, which include increased voice and visibility of local people, women and men, and strong accountability mechanisms.

The regulatory framework governing large-scale investments provides some checks and balances on paper but very few in practice. Enforcement of consultation and impact assessment requirements is needed, including more rigorous attention to gender. Processes that have led to vast areas of land leased to companies remaining unused must be reviewed, and the government must only allocate land that can be realistically developed within the agreed time-frames and in accordance with the terms of the investment agreement and with national law.

Furthermore, there could be an adjustment of tax incentives to promote investments that support smallholder farmers on their own land. A range of different business models should be considered including different forms of Private-Community Partnerships. Since most of the new farm blocks being opened up for commercial agricultural are on land under customary tenure (converted to leasehold by private actors), the government must not only ensure that the Free, Prior and Informed Consent of local communities is properly exercised, but also explore options for community/farmer/producer entities to hold equity shares in any business venture. The KASCOL model provides a good starting point for this, particularly given its financial viability and relative success over a considerable number of years.

It is therefore recommended that the government draws on aspects of the KASCOL model only with greater consideration for gender-based equity in access to both self and wage employment in its development of the smallholder agriculture sector; in particular it should encourage the establishment of outgrower schemes (with local bias, training opportunities, free loans, and opportunities for diversification of livelihoods and subsistence food production) supported by producer/outgrower associations that have gender-equitable

representation and provide participation in management decisions. The government should also strengthen the regulatory framework to ensure that rural employment meets international labour and decent work standards and is equitable in access. Finally, the government should see public investment in infrastructure, education (including adult education, literacy and vocational training) and health services as an important strategy for encouraging inclusive agricultural investments.

1. Introduction

1.1 Background and aims of the study

The Food and Agriculture Organization of the United Nations (FAO) plays a leading role in the achievement of Millennium Development Goal (MDG) 1 – the eradication of extreme poverty and hunger. The majority of the world's poor live in rural areas and have labour and land as their only or main productive assets. Therefore, promoting secure access to and control and use of land as well as secure and productive employment and decent work for women and men in rural areas is vital to achieving MDG1.

The *State of Food and Agriculture 2010-11: Women in Agriculture, Closing the Gender Gap for Development* (FAO 2011a), provides solid evidence that gender inequalities in access to agricultural assets, inputs, services and rural employment opportunities are partially accountable for the underperformance of the agricultural sector in many developing countries. Therefore without sustainable improvements in gender equity in access to land, employment and income-generating opportunities, the achievement of global food security and poverty reduction targets will be seriously undermined.

At the same time, over recent years the global food and financial crises have led development policy-makers and international organisations to re-prioritise the role of agriculture within both international and national policy agendas. Within this context, many developing countries are making strong efforts to attract and facilitate foreign and domestic investment in primary agriculture, with the expectation that they will contribute to production growth, poverty reduction and food security and provide developmental benefits through technology transfer, employment creation, access to markets and infrastructure development.

Recent findings show that some primary agricultural investments that have taken place during the last years are having complex and mixed economic, social, cultural and political effects on local communities. Moreover, research[1] has highlighted that positive outcomes do not flow automatically; rather, they depend on many factors, including the prevailing agriculture and rural development model; the institutional, policy and regulatory framework in place; the type and degree of inclusiveness of the business models adopted, and the extent to which social and gender equity issues are considered, among others. Certain types of investments, in particular large-scale land acquisitions, may have negative effects on host countries such as displacing small farmers, undermining or negating existing rights, increasing corruption, reducing food security, aggravating gender and social inequalities and environment degradation. Conversely, other investments adopting more inclusive business models and respecting rural populations' rights seem to be more beneficial for the livelihood of small farmers and workers and for long-term development. Within this context, national governments need to have in place an enabling environment suitable for attracting and supporting agricultural investments conducive to sustainable rural development, poverty reduction and food security.

In line with these findings and recognizing the inter-linkages between investment in agriculture and land tenure security, food security and poverty reduction, FAO and other partners such as IFAD, UNCTAD, the World Bank and OECD have undertaken several initiatives to identify good practices in agricultural investments and policies that are conducive to sustainable agricultural and rural development. As a result, research focusing on inclusive business models and their implications on local populations has been carried out. Various processes have also taken place to foster international frameworks that promote more

[1] Among others, see: Anseeuw, W., Alden Wily, L., Cotula, L. and Taylor, M. 2012. Land Rights and the Rush for Land: Findings of the Global Commercial Pressures on Land Research Project. ILC: Rome; FAO, 2012. Trends and Impacts of Foreign Investment in Developing Country Agriculture. FAO: Rome. White, B., Borras, S. Hall, R, Scoones, I. and Wolford, W. (Eds), 2012. 'The new enclosures: critical perspectives on corporate land deals'. In *Journal of Peasant Studies*, 39(3-4)*;* Fairhead, J., Leach, M. and Scoones, I. (Eds), 2012. 'Green grabbing: a new appropriation of nature'. In *Journal of Peasant Studies* 39(2); Mehta, L., Veldwisch, G. J. and Franco, J. (Eds), 2012. 'Water Grabbing? Focus on the (Re)appropriation of Finite Water Resources'. In *Water Alternatives*, 5(2).

responsible investment in agriculture. These initiatives include the *Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources* (FAO et al. 2010), developed jointly by the FAO, UNCTAD, IFAD and the World Bank, the *Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* (FAO 2012a), endorsed in May 2012 by the Committee on World Food Security (CFS) and the *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security* (FAO 2005). Moreover, an inclusive consultation process to develop and ensure broad ownership of principles for responsible agricultural investments is currently taking place within the CFS. The expected outcome is a set of principles to promote investments in agriculture that contribute to food security and nutrition and to support the progressive realization of the right to adequate food in the context of national food security.

Despite the progress made to date, however, not enough work has focused specifically on the differentiated social and equity implications of agricultural investments on various groups of the affected population, including the gender implications. To contribute to fill this gap, the Gender Equity and Rural Employment (ESW) division of FAO has therefore developed a programme of work entitled ***"Promoting gender-equitable and inclusive primary agriculture investments that contribute to enhance food security, reduce poverty and strengthen the livelihoods of poor rural women and men"***.

The programme seeks to develop a better understanding of the gendered implications of land-related investments on rural livelihoods and labour-related issues in order to:

1) generate knowledge, raise awareness and inform policy-making processes about gender-differentiated implications of land-related investments to promote more beneficial policy and legislative frameworks for investments to take place;

2) identify and showcase good practices in terms of gender-sensitive business models and strategies that have positive implications for rural employment and income-generating activities for both women and men; and

3) foster constructive dialogue among policy-makers, local government authorities, civil society, rural organizations and the private investors so that more inclusive and gender-equitable investments can be secured.

The FAO work programme has a number of complementary components, including a series of case studies in developing countries that are intended to contribute to the objectives listed above. This report discusses findings from two case studies from Zambia[2]. The knowledge generated by this and the other case studies will be fed into the processes for the implementation of the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* and for the consultation over the Principles for Responsible Agricultural Investments led by the Committee of Food Security (CFS). The initial step in this process will be the production of a synthesis paper summarising key findings and recommendations from all of the case studies, which will be shared with participants in a multi-stakeholder workshop that constitutes the final component of the broader FAO programme.

The report is organised in five chapters. The remainder of Chapter 1 presents a brief overview of the companies selected and methodological aspects. The second chapter outlines the key contextual factors influencing land-related investments in Zambia. This includes an overview of the agricultural sector, agricultural policies, and other policies that affect women in the agricultural sector. The chapter concludes with an assessment of key processes and trends surrounding agricultural investments in Zambia. Chapters 3 and 4 present the findings from the two case studies – Kaleya Smallholder Company Limited and Export

[2] Additional case studies have already been conducted in Tanzania, Laos, Zambia and Sierra Leone and further case studies are planned in the Philippines and Mozambique.

Trading Company Bio-Energy Limited (ETC Bio-Energy). Both chapters provide an overview of the business models and assess the gender implications of land access and employment or income-generating arrangements. Chapter 5 concludes with a summary of the gender implications arising from the two case studies and identifies the main factors that have influenced these gender outcomes. These are followed by key policy implications setting out recommendations for investors and national policy makers.

1.2 Research methodology

1.2.1 Scope of the study

The research was designed from the outset to be an exploration of issues rather than any kind of systematic or statistically representative quantitative study. In common with the other case studies commissioned in the series, this Zambia study aims to shed light on the extent to which:

- the selected investments/businesses have gender-differentiated implications with respect to labour and income generating opportunities for small scale farmers and wage workers directly involved in and/or affected by these initiatives;
- the selected schemes affect poor rural women and men differently in their access, use and control of land;
- the business models studied provide good practices in relation to employment and land which can be used as models for regulatory frameworks on investments and policy-making; and
- the investment and agricultural policies and strategies in place in the country support the establishment of land-related investments that are inclusive of local populations and conducive to rural development, while being sensitive to gender and equity concerns.

The starting point for this study was a critical review and analysis of literature on investments in land-related agricultural investments in Zambia since 2005. This helped to map and select the case studies and sharpen the researchers' understanding and knowledge of the type of business models adopted by each of the identified companies, and how they are related to the Zambian policy environment. Primary research was conducted by a team of three researchers (2 males and 1 female) between October and December 2011. Since the emphasis was on the collection of qualitative data, methods included key informant interviews and focus group discussions based on semi-structured questionnaires. Some quantitative data was also sourced from company records to provide objectively verifiable information on the business model and employment and income-generating opportunities. More detailed information about the primary data collection is provided in section 1.2.3 below.

1.2.2 Background to the case studies

The first case selected is the Kaleya Smallholder Company Ltd (KASCOL), an agribusiness which began operations in 1980 in Mazabuka district in Zambia's Southern Province. KASCOL produces sugar cane, which it sells to Zambia Sugar PLC. Zambia Sugar then mills the canes for sugar and sells it on domestic and export markets. Sugar is sold on the export market with Fair Trade certification, which secures a premium on the price for the benefit of KASCOL's producers. At KASCOL, cane is produced on KASCOL's nucleus estate and through an outgrower scheme. The configuration of shareholders has evolved overtime to its current set-up, whereby the association representing the smallholders now holds an equity share, as do the Mazabuka Cane Growers Trust.

The second case is that of Export Trading Company Bio-energy (ETC Bio-Energy), previously Mpongwe Development Company (MDC). MDC went into liquidation in 2006 and was acquired by ETC Bio-Energy. Production of a mix of crops – including jatropha since ETC took over - is through company-run plantations. In 2011, ETC sold the farms to a Zambian multinational agribusiness, Zambeef. The current name of the business is Zambeef Mpongwe Farms. As this transfer occurred very recently, this report focused on assessing experiences under MDC and ETC Bio-Energy. MDC was established in what is now known as Mpongwe District in Copperbelt Province as a plantation farm with employment creation as its main intended social benefit. KASCOL was designed to provide smallholders with access to new technologies, inputs, and markets with pre-determined prices to increase smallholder incomes.[3]

Both projects began as joint ventures between the government of the Republic of Zambia (GRZ) and the Commonwealth Development Corporation (CDC).4 This indicates the development orientation of both of the projects from the outset, albeit through a vision of agricultural modernisation with large-scale agricultural enterprises at its core. The British government was interested in providing low-interest loans to support state-led investments in smallholder agriculture and the government of Zambia wanted to explore mechanisms for increasing agricultural production for national food self-sufficiency and stimulate rural employment and income-generating opportunities, including improving the lives of Zambian smallholder farmers.

Both ventures have since been privatised. They reflect different models of agricultural investment and therefore provide contrasting cases but both with implementation experience spanning three decades. KASCOL in particular has been rated in numerous studies as a 'successful' longstanding investment, so it was hoped that this study could provide important lessons for the new wave of agricultural investments. The case study districts are shown in Fig 1.

Figure 1: Location of Mpongwe and Mazabuka Districts of Zambia

[3] For further discussion of its inception see Baumann, 2000; Glover & Kusterer, 1990; Weatherspoon, Cacho, & Christy, 2001
[4] CDC is the development finance institution of the UK government

1.2.3 Key informant interviews and focus group discussions

Overall, 87 informants participated in the study: 63 in relation to KASCOL and 24 in relation to ETC Bio-Energy. For the KASCOL case, interviewees (totalling 13) included management, members of the executive committee of the Kaleya Smallholder Farmers Association (KASFA) and 7 outgrowers (3 female, and 4 male between 25 and 50 years of age). Four focus group discussions (FGDs) were held (2 female, 2 male) involving between 6 and 8 participants each. The groups were further divided by age, with one from each age bracket (30-35 and 36-50 years) per male and female groups. The female outgrowers – both interviewees and participants in the FGDs – were a mixture of female heads of households and married women living with husbands. For ETC Bio-Energy, interviewees (totalling 12) included senior managers, middle managers, wage workers, a local business man and female market traders. Four FGDs were held with female spouses of ETC wage workers across different age brackets (2 groups of 26-34 years and 2 groups of 35-45 years). Further details of FGDs and key informants are provided in Annex 1.

1.2.4 Limitations of the research and methodology

The limited scope of the study and the lack of baseline data meant that conducting a detailed analysis of changes over time was not possible and therefore much of the analysis draws on the recent experiences illustrated by the respective interviewees. In addition, both case studies involve private companies that do not ordinarily disclose company information to the public, especially information on salaries. Both companies, however, did their best to provide some access to company data to facilitate the research.

In the case of ETC Bio-Energy, contacting wage workers proved difficult both at weekends and on weekdays. However, the in-depth discussions with spouses of male workers provided important insights into how the business had changed over time and the implications of all aspects of employment and income generation on the wellbeing of employees' families. These discussions provided useful insights on intra-household dynamics, and on household incomes and expenditures. However, these were spouses of fixed-term contract workers. The majority of seasonal workers were migrants who were not based on the farm and were not around at the time of study since the jatropha cultivation had ceased. ETC also did not keep gender disaggregated data for its seasonal wage workers so a detailed presentation of the gender composition of staff and of the associated earnings and conditions was not possible.

2. The Zambian Context

2.1 Socio-economic context and the agriculture sector

Zambia is a landlocked country in Southern Africa that borders Mozambique, Zimbabwe Tanzania, Malawi, Angola, and Democratic Republic of the Congo, and Namibia. Zambia's population stands at around 13 million (mn) (51 percent female), comprising 70 different ethnic groups. Sixty-one percent of the population resides in rural areas, against 39 percent living in urban areas, making Zambia one of the most urbanised countries in the region. Rural poverty is extremely high with 83.1 percent of the population in rural areas living under the national poverty line, compared to 56 percent in urban areas (FAO 2012c). The North-western, Eastern and Southern provinces have a particularly high concentration of poverty compared to the more fertile central regions (IFAD 2012). The population growth rate has been decreasing (by around 1.5 percent since the mid-1990s) due to HIV/AIDS and rising child mortality. Life expectancy currently stands at 49 years.

After independence, copper production was the main driver of the country's relative wealth within the Southern Africa region. This went into decline over the following decades, due to poor governance of the mining sector and falling copper prices, followed by unfavourable economic reforms in the 1990s. Higher copper prices and better management of the sector in the past decade mean that copper continues to dominate Zambia's foreign exchange earnings (IFAD 2012). Moreover, much of the economy's growth is due to foreign investment in Zambia's mining sector and to favourable copper prices. Between 2005 and 2012, Zambia's economy has experienced sustained annual GDP growth rate of around 6 percent. The agriculture sector has been growing at an average annual rate of 4.5 percent over the past two decades and currently accounts for about 22 percent of the country's GDP and around 72 percent of all employment in Zambia.

The country is endowed with rich resources, a favourable climate and abundant labour to stimulate agricultural and rural development. Of the country's 75.2 mn ha, 58 percent is reportedly suitable for arable use (GRZ 2006). A later estimate suggests that of the 9 mn ha of suitable land for agriculture, only about 1.7 mn ha are under crop cultivation for subsistence and commercial farming (GRZ 2009).[5] The country's main food crops are maize, sorghum, cassava and millet. A revival in commercial agriculture, including production of maize, sugar, tobacco, cotton and coffee, has also been seen in recent years. Productivity is heavily influenced by weather patterns and chronic shocks such as cyclical drought severely exacerbate rural livelihood insecurity. Productivity is further stifled by poor infrastructure, markets, and agricultural inputs and services (FCO 2012).

After independence, the government entered a number of joint-ventures, in particular with the Commonwealth Development Corporation (CDC), to establish large-scale initiatives in the agricultural sector. The Zambia Sugar Company is one such example. The Tobacco Settlement Scheme and the Family Farming Tobacco Project were also large government-led ventures set up with CDC support. Many of such ventures, including the two case studies explored in this report, have since been privatised as this was the dominant trend under the structural reforms of the 1990s. However, since then, investment in agriculture has been low and the sector is dominated by small-scale farmers cultivating on less than five hectares (IFAD 2012).

The female share of those economically active in agriculture was 46.5 percent in 2010 (FAO 2011a). Women perform 65-70 percent of all agricultural tasks in Zambia, and produce 80 percent of the nation's food stock (SIDA 2008). In agricultural households, women are generally responsible for more chores (including weeding, harvesting, stocking, marketing and processing) than men who are largely involved in soil preparation and ridging. However, men perform their tasks over a longer period of time during the year.

[5] As the estimates for these two reports are conflicting, caution must be taken over interpreting these figures.

Women farmers also usually bear the responsibility of cooking, heating and collecting firewood.[6] The HIV/AIDS pandemic has brought an extra burden to many women in addition to working in their fields as caring for sick relatives is traditionally seen as a feminine task. Despite the introduction of legal and policy reforms to promote gender equality, women are disadvantaged compared to their male counterparts on most indicators including economic empowerment, educational attainment, reproductive health and political empowerment. Zambia's gender inequality index stood at 0.627 in 2011, ranking 131 globally out of 146 countries (UNDP 2011a). The literacy rate for women is 64 percent against 82 percent for men. Only 19 percent of females have secondary or higher level education compared to 34 percent of males and women's average monthly income is around 55 percent of men's (ZK 196 453 compared to ZK 354 988) (UNDP 2011b; SIDA 2008).

2.2 Policy context shaping investment in agriculture

2.2.1 Agricultural policy context

Zambia's Sixth National Development Plan (2011-2015) (SNDP) recognises that the livelihoods of the majority of Zambians depend on agriculture-related activities and therefore that developing the sector could contribute significantly to welfare improvements, especially of poor and landless rural households. The SNDP highlights the agriculture sector as a priority focus area for promoting economic growth, reducing poverty and creating employment through "enhancing investment for sustainable agricultural production and productivity of crops, livestock and fisheries" (GRZ, 2011b).

The development of Zambia's agriculture sector is also guided by its National Agriculture Plan (NAP) (2004-2015) and Vision 2030. Zambia has also embraced the Comprehensive Africa Agriculture Development Programme (CAADP) principles and Zambia's CAADP Compact is designed to guide and supports the implementation of the NAP and the SNDP. An embedded assumption in the government's strategy is that sustained economic performance is going to be supported by increased investment flows from both local and foreign sources, primarily prompted by a stable, predictable and transparent social and political environment, a well-managed macro economy, and regulatory and policy frameworks. The government is embracing and promoting private sector investment and Public Private Partnerships (PPPs) in all sectors and in agriculture this is targeted towards production, processing and value addition, as well as diversified extension, particularly to small-scale farmers and strengthening cooperatives and other farmer organisations as a vehicle for development (GRZ 2011). These efforts are to be supported by private sector development reforms.7 This includes the private sector playing a lead role in the revised government's Fertiliser Input Support Programme (FISP).8 According to the NAP the commercialisation of the agricultural sector, both large-scale and small-scale, is seen as key. The integration of small-scale farmers into commercial production through outgrower arrangements or as independent producers is one pathway. The government is committed to proactively linking potential foreign and national investors to the Zambia Investment Centre and other relevant institutions in order to facilitate their role in large-scale agricultural development initiatives (GRZ 2004).

[6] Zambian women spend, on average, more than 800 hours a year, an equivalent of 2.3 hours every day collecting wood fuel compared to 50 hours per men. Women in Zambia also spend another 4 -6 hours daily on cooking (SIDA 2008).
[7] Private Sector Development Reform Programme, PRSDP II (2009-2014) (GRZ 2011)
[8] The Fertilizer Support Programme (PSP), renamed Farmer Input Support Programme (FISP) in 2009 is a government-led programme of maize subsidies. The FISP appears to be linked to bumper harvests during the last three consecutive farming seasons (Mujenja 2012).

2.2.2 Gender in the national and agriculture policy context

The government recognizes that gender is relevant to growth and poverty reduction as it cuts across economic and social dimensions. Zambia is signatory to numerous international and regional agreements related to women's rights and gender equality.[9] The National Gender Policy of 2000 and its strategic plan of action of 2004 are key policy instruments with the objective of mainstreaming gender across the Zambian public sector. This policy of mainstreaming is further supported by other instruments such as the Joint Gender Support Programme (JGSP) developed in 2008 by the government and its cooperating partners (Mwenechanya 2011).

Specifically on agriculture, the Fifth National Development Plan (FNDP 2006-2010) committed the government to: gender-balanced research-extension and farmer linkages; gender equality in resource allocation and access to agricultural services; increased women's participation in business-oriented co-operatives and farmer organisations; increased gender awareness and sensitization among agricultural staff and farmers; and increased gender equality in professional and technical training programmes in agriculture (GRZ 2006). However, no expenditure was released for gender-related programmes in the FNDP budget and most agricultural extension programmes and services continue to be gender blind.

Gender is theoretically mainstreamed in the SNDP and there is a focus on increasing representation of women in decision-making positions and in formal employment from 21 percent in 2010 to 30 percent in 2015 (GRZ 2011b). However, there is no mention of the agriculture sector within the gender mainstreaming strategy and little is explicitly mentioned with regards to women in agriculture. The Crop Development Programmes include a 'Gender welfare sub-programme' and also propose promotion and strengthening of 'equal participation of male and female farmers in improving production through outgrower schemes' and 'equitable and reliable access to agricultural land' (GRZ 2011b, 112). However there is no mention of targets in these areas. Gender strategies within the NAP are also limited, albeit specific references to women and gender-sensitive approaches are made in relation to: resource allocation and access to agricultural services; addressing technological needs and priorities of women farmers; utilizing local knowledge systems; and creating a conducive environment for equal participation of women and youth in co-operative development. Furthermore, the implementing strategy seems to focus mainly on capacity development amongst policy makers, the Ministry of Agriculture and Cooperatives (MACO) and field level staff and mainstreaming gender in Agricultural Training Institutions' curriculum (GRZ 2004).

Despite solid evidence from MACO's Agriculture Support Programme demonstrating significant welfare gains from greater inclusion and participation of women in agricultural development programmes and intra-household decision-making (SIDA 2008), there appears to be a persistent lack of effective gender mainstreaming in agricultural policies both in content and follow-through. The FISP, for example, came under criticism for its selection criteria (the ability to pay 50 percent upfront) which marginalise women from accessing inputs. Also, the subsidised fertiliser loans under the FISP are distributed through co-operatives within which female membership is generally low, resulting in loans being disproportionately distributed to male farmers.

The National Gender Policy does recognise that acquisition and ownership of land in Zambia is a major hindrance to women's participation in national development. The FNDP included a target of 30 percent of

[9] These include, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW 1984), The Beijing Declaration (1995) and the MDGs as well as a number of regional frameworks which advocate for gender equality and equity. Regional frameworks include the African Union's Solemn Declaration on Gender Equality in Africa (2002) (for gender parity in public sector and political representation); the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa, 2003; and the SADC Declaration on Gender and Development (1997) and the Resulting SADC Protocol on Gender. The objective of this protocol was to achieve a minimum benchmark of 30 percent female representation in decision-making by 2005. This has since been revised to 50 by 2015.[9]

land allocated to be reserved for women and according to the mid-term review of the JGSP the programme contributed to significant change in land policy and administration in favour of women, resulting in increased land allocations, in one case exceeding the 30 percent guideline (Mwenechanya 2011). Zambia's Draft Land Policy includes a target of 30 percent of the land to be allocated to women. This policy is still in draft form and if it were to be approved, it may only apply to state land (GRZ 2006c). The Ministry of Lands (MoL) has reserved 10 percent of advertised land for women; however, the land in question is in remote rural and un-serviced areas (UN-Habitat 2005). Gender and land issues are discussed in more detail in the following section.

2.2.3 Land tenure policies and practice

All land in Zambia is vested in the President and is held by him in perpetuity for and on behalf of the people of Zambia (Lands Act No.20 of 1996, Chapter 184 of the Laws of Zambia). Land in Zambia is generally divided into two categories: land in customary areas, and state (or Crown) land. Customary land is land that was defined and reserved for indigenous peoples by the colonial rulers under the Zambia State Land and Reserves Orders of 1928-1964 and under the Zambia Trust Land Orders of 1947-1964. About 94 percent of Zambia's land is said to be in customary areas. However, this is contested by many on the basis that much of the land traditionally under customary domain has been converted to leasehold. Leasehold tenure is regulated by statutory laws which provide for a maximum of 99-year renewable leaseholds. There is thus some confusion as to the current ratio of customary to state land, as the size of land under leasehold tenure is sometime equated to the amount of state land. Officially state land remains at 6 percent. Estimates suggest that ratios of leasehold to customary land may be more like 10:90 or even 20:80 (Nolte 2012). Customary tenure is recognised under the 1995 Lands Act; the same Act that has also allowed for the conversion of customary land to 'leasehold land'.

The permanent conversion of customary land to leasehold tenure (there is no mechanism for converting leasehold to customary) poses considerable challenges for ensuring the recognition and protection of customary rights established by the Act (German et al 2011a).

Land that is held under customary tenure is controlled by traditional chiefs on the basis of local customary laws, which are legally recognised as long as they are not in conflict with statutory law (e.g. the Lands Act of 1995). Customary law is unwritten and varies substantially from place to place. In general, by virtue of belonging to a chiefdom, a person has the right to use and occupy land in that chiefdom free of charge. However, the area chief has the right to withdraw land from anyone he deems to be violating customary rules. This can be an important source of tenure insecurity.

The procedures for gaining leasehold for rural landholders are cumbersome and demand the payment of ground rent, which is a challenge for subsistence farmers. The concept of a title deed also challenges traditional perception that the land is theirs by virtue of them (or their ancestors) having lived there even before Zambia was born. The cost element pits those who can afford to convert large areas to statutory tenure against those who can't and these barriers to obtaining leasehold underlie tensions that arise when customary land is allocated by the government to an outsider investor (Mujenja 2012). However, it is estimated that 20 percent of the rural population hold leasehold titles as this is their only means of improving security of land access.

Whilst customary systems differ across the country, all are patriarchal in structure with women only able to access land through male relatives. The Southern Province, where the case studies are located, is patriarchal and patrilineal whereby the man has full rights over the land, with the wife having only cultivation rights and rights to half of the standing crops if the marriage ends. The local chief may allocate a plot to a single

woman, particularly if she has children, but would not allocate a plot to a married woman in her own right. Often women are given land of lower quality. Traditionally, when divorced or widowed, women return to their parents' village where they are dependent on male kin for access to land (Sida 2008). There is a growing trend in some provinces to let a widow use the land after the death of her husband until the children are grown up but in most cases they will likely lose at least 35 percent of it (Ibid); less so in the case they are related to the local chief. In all cases, if a widow remarries she loses the right to use the land. Land control also vary dramatically across the country. For instance, while 80 percent of women in Kaoma in Western Province claimed to have control over their land, in Monze in Southern Province, and Chipata in Eastern Province, the percentages were down to 10 and 5 percent respectively. These differences are attributable to inheritance rights. Inheritance rights for male and female children are much more equal in Kaoma (Kachika 2011). Under state law, spouses and children have equal rights to inherit (Intestate/Succession Act 1989/1996) but this is not widely known and limitations on inheritance imposed under customary law remain dominant in most rural areas. The 1995 Lands Act does allow for joint title registration between spouses and for women to become land owners in their own right (with 99-year tenure). However there is little evidence of this process happening on the ground, particularly in rural areas. There are some signs of change nationally; the percentage of leasehold titles issued to women increased from 5 percent in 2005 to 16.5 percent in 2009 (UNDP 2011b).

The current Draft Land Policy sets out a number of challenges and related policy measures to address issues concerning gender and land (See Table 1).

Table 1: Proposed Policy Measures on Gender in the Draft Land Policy (2006 version)

Challenges	Policy Measures
(a) Lack of an enabling environment for gender inclusiveness in both customary and leasehold land areas; (b) Discriminatory inheritance rules and rights; (c) Lack of disaggregated data based on gender which makes it difficult to plan; (d) Lack of recognition of women's labour in agriculture leads to marginalisation of women in land ownership; (e) There is inadequate participation of women in land administration at all levels; and (f) Lack of advocacy and sensitization to encourage women to own land.	(a) Review statutory and customary laws and practices that perpetuate gender discrimination; (b) Mainstream gender in all institutions administering and managing land; and (c) Implement at least 30 percent land ownership for women; and (d) Devise an advocacy and sensitization programme on gender.

2.2.4 Agricultural investment promotion and recent trends

As mentioned above, investments in agriculture are considered a priority for the government and the Land Act of 1995 has helped open the doors to foreign investment. More recently, additional provisions and measures have been adopted to provide an enabling environment. The Zambia Development Agency (ZDA) was established in 2005 as a one stop shop for investors. This brought the Zambia Investment Centre (ZIC)[10], the Zambia Export Processing Zones Authority (ZEPZA), the Export Board of Zambia (EBZ), the

[10] The Zambia Investment Centre was established by the 1995 Investment Act

Zambia Privatisation Agency (ZPA) and the Small Enterprise Development Board (SEDB) together under one roof. The ZDA with the MoL assists investors in identifying suitable land for investment and applying to the responsible authorities (GRZ 2006b) for the necessary authorisation and permits and in obtaining core infrastructure and services (water, electric, transport and communications) (ZDA 2011).

Investors are guaranteed free repatriation of profits and dividends, a high degree of protection - from compulsorily acquisition by government (except by an Act of Parliament in extreme circumstances) and against non-commercial risks (Zambia is a signatory of multilateral investment guarantee agency (MIGA) and Africa Trade Insurance Agency) - and access to an impartial forum for resolving disputes (ZDA 2011). The following tax and financial incentives are also offered:

- 0% tax rate for the first 5 years, 50% reduction from 6-8 years and 25% reduction from 9-10 years for priority sectors under the ZDA Act 2006;
- Corporation tax at 10% on income from farming;
- Farm work allowance of 100% of expenditure on clearing land, preventing soil erosion, bore holes, surveys and water conservation;
- Duty free importation of most capital equipment for the mining and agriculture sectors;
- Development allowance of 10% of the cost of capital expenditure on growing of coffee, banana plants, citrus fruits or similar plants;
- Farm improvement allowance - capital expenditure incurred on farm improvement is allowable in the year of incurring the expenditure;
- Dividends paid out of farming profits are exempt for the first five years the distributing company commences business.

(Mujenja 2012; ZDA 2011)

Investors can apply to tender for lands under the Farm Block Development Programme which has been developed based on the NAP (2004-2015) to foster integration of smallholder agriculture into supply chains driven by large-scale commercial agriculture. Farm blocks are large tracks of land set aside by the government to attract and facilitate large-scale agricultural investment. The idea is to aim for the establishment of a "core venture" of 10 000 ha around which small and medium satellite farms of 1 000 to 5 000 ha, as well as small farm holdings of between 30 to 3 000 ha – 'preferably under out grower arrangements,' - would be established (ZDA 2011; 23; Nolte 2012). The 'main' investor has to set up an outgrower scheme and build a processing plant. Local farmers can also apply to be given a piece of land – between 30 and 300 hectares - in the farm block area and become outgrowers. As of 2010, the government had established 9 farm blocks, 1 in each of the 9 provinces, involving a total of 1.002 mn ha (see Table 2). Three blocks (Nasanga, Kalumwange and Luena blocks) have been prioritised for the installation of basic infrastructure including roads, bridges, power, schools and health centres (ZDA 2011).

Table 2: Provincial distribution of farm blocks and land area sizes

Name of Farm Block	Province	District	Size (hectares)
Nansanga	Central	Serenje	155,000
Kalumwange	Western	Kaoma	100,000
Luena	Luapula	Kawambwa	100,000

Manshya	Northern	Mpika	147,000
Mikelenge/Luma	North-Western	Solwezi	100,000
Musakashi (SADA)	Copperbelt	Mufulira	100,000
Muku	Lusaka	Kafue	100,000
Simango	Southern	Livingstone	100,000
Mwanse-Phangwe	Eastern	Mufulira	100,000
Total land area			1,002,000

Source: ZDA 2011

The MoL is the entity with the legal authority to alienate land on behalf of the President. This applies to both state and customary land, although customary land must first be converted to leasehold, and to lands that are to be included in the farm block system. Consent is required from the respective Chief to convert the land into leasehold tenure after which a feasibility study and site planning are carried out. This process is managed by a team from MACO, local authorities and the MoL (Nolte 2012). The Administrative Land Circular No.1 of 1985 provides general guidance for land alienation procedures (Box 1).

Box 1: Formal land alienation procedures

Local authorities are appointed as agents to process applications and select suitable candidates on behalf of the Commissioner of Lands (CoL). Once land has been identified and surveyed by local planning authorities, developers are publicly invited to apply to the CoL through the local authorities. On receipt of applications, the local authorities will select the most suitable applicants and make recommendations in writing to the CoL. The CoL considers the recommendations and approves or rejects them. The CoL will not approve a recommendation if it is apparent that doing so would cause injustice to others or if a recommendation is contrary to national interest or public policy.

Procedures for alienation of customary land

A person who has a right to the use and occupation of land under customary tenure, or has been using and occupying land for a period of not less than five years, may apply to the Chief of the area where the land is situated to convert their land into leasehold tenure not exceeding 99 years. The Chief shall consider the application and shall give or refuse consent. Where the Chief refuses consent, s/he shall communicate such refusal to the applicant and the CoL, stating the reasons for such refusal in a prescribed form.

Source: Ministry of Lands, http://www.ministryoflands.gov.zm/index.php?option=com_content&view=article&id=60&Itemid=87 [accessed May 2012]

Investors may apply to the MoL for pre-identified land (through the Farm Block system) or approach local village headmen and chiefs directly. Acquiring land in customary areas requires the written consent of the area Chief and approval of the District Council (ZDA 2011). Once approval is acquired, the District Council submits the application to the CoL. When the application is approved, the formal offer from the CoL stipulates the relevant fees and survey requirements (Ibid). There is no ceiling on the size of land that can be allocated (Nolte 2012). An investor must also conduct an Environmental Impact Assessment. Work must begin within the first nine months and substantial development must take place within 18 months and, like any leaseholder, the investor must pay ground rent to the government, although there is no fixed price (Ibid). Alienation of land by chiefs without consultation with and consent of local communities is illegal under the 1995 Land Act (Nolte 2012).

According to the ZDA, between 2000 and 2009 total pledged investments in agriculture increased from USD 8.3 mn to USD 315 mn. An analysis of 2010 media reports on large-scale land acquisitions identified six deals in Zambia, totalling 2.245 mn hectares (Frijs & Reenberg 2010). A significant proportion of this includes purchases and expansions of existing farms. This may in part be due to the high costs of clearing virgin lands (USD 900 per ha) (Mujenja 2012). Investors are also likely to be attracted to areas with good accessibility and infrastructure already in place, as confirmed by German et al. who reported that one company turned down land offered due to its distance from transportation routes (2011). Many commercial farms hold large areas of undeveloped or underutilized farm land. This is the case in the two ventures investigated here.

A number of studies have questioned the way negotiations at the local level take place. German et al (2011) documented the experiences of two companies who negotiated directly with the chiefs with the support of government intermediaries. The companies acquired 302 749 and 79 300 hectares in Mpika District. Both projects involve jatropha production, and the latter project is still awaiting final authorisation. The researchers reported that consultation was minimal, information exchange incomplete, and the beneficial aspects of such land acquisitions and resulting investments were oversold, while consequential negative aspects are generally downplayed (German et al. 2011). Other studies have documented accounts of local farmers being violently forced off land that had allegedly been acquired by investors (Nolte 2012, p. 10). Research has indicated that state authorities can put pressure on traditional authorities to release land for investment on the premise that customary land is insufficiently utilised and should be brought under productive use through large-scale commercial investments. However, chiefs also have much to gain from land deals. German et al. documented benefits coming to chiefs in the form of construction or rehabilitation of palaces (2011).

3. Case Study 1: Kaleya Smallholder Company Ltd.

3.1 Overview of the company and the business model

Kaleya Smallholder Company (KASCOL) is an agribusiness company operating in Mazabuka district in Zambia's Southern Province. It was financed by a 3.55 mn GBP loan as a joint venture smallholder sugar settlement scheme between the CDC and the government of Zambia. KASCOL produces sugar cane which is sold to Zambia Sugar PLC (ZSC). Zambia Sugar mills the cane for sugar for both domestic and export markets. Sugar is sold on the export market with Fair Trade certification, which guarantees global buyers that it was produced under conditions that are not harmful to the environment, fair to farmers and free of child labour practices.

The company's production model is a combination of own-production and contract farming on company leased land. Of the 4,314.9 ha of land leased by the company from the government on a 99-year lease, a quarter is subleased for free to outgrowers. Outgrowers currently number 160 of which 43 are women.

When KASCOL was established, it had four major shareholders, each with a 25 percent stake in the company. These consisted of the CDC, the Development Bank of Zambia (DBZ), Barclays Bank Zambia PLC and the ZSC. At that time, DBZ and ZSC were both state-owned entities which brought the total national government stake in the company to 50 percent. ZSC has since been privatised. CDC, ZSC and Barclays Bank have since sold their interests to Kaleya Smallholder Farmers Association (KASFA) through its investment wing, the Kaleya Smallholders Trust (which currently holds 13.26 percent), and to other private shareholders, Nzimbe Ltd and KASCOL Consultants (jointly owning 36.74 percent), collectively known as View Point Investment Holdings. The Mazabuka Cane Growers Trust, a district-level sugar cane grower association, had its 25 percent equity share donated by Zambia Sugar likely due to the company's interest in sustaining strong collaboration with local producers whom the Mazabuka Trust is mandated to support. This divesture has resulted in the shareholding structure shown in Table 3 below. This shareholding structure means that currently KASCOL is a wholly domestically owned Zambian company.

Table 3: Current Equity Structure in KASCOL

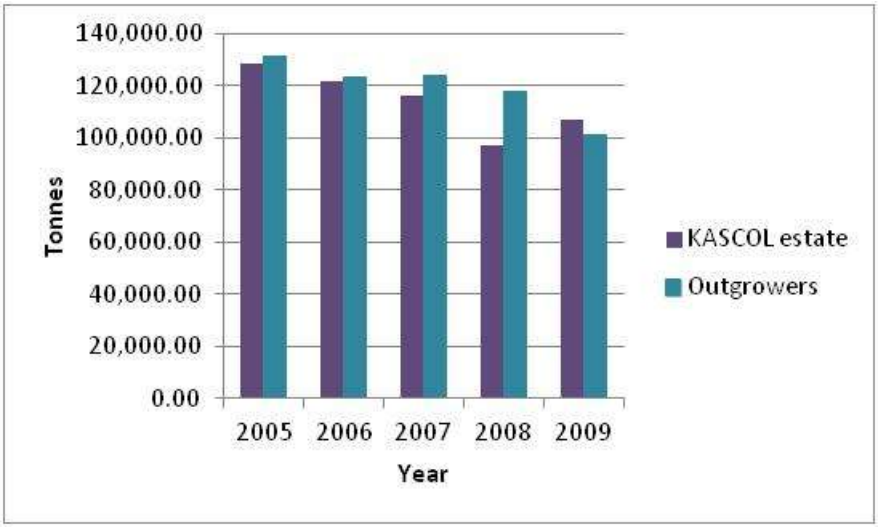
Shareholder	Percent Equity
Development Bank of Zambia	25.0
Mazabuka Cane Growers Trust	25.0
Kaleya Smallholder Trust (KASFA)	13.26
View-Point Investment Holdings	36.74

Based on 2009 figures, KASCOLs production of cane accounts for 8.3 percent (240 040 tonnes) of Zambia's national cane production thereby contributing significantly to the national economy. An analysis of cane production levels between 2005 and 2009 shows a downward trend in production in both nucleus estate and the outgrower scheme. For example, in 2005 total cane production in the estate stood at 128 384.24 tonnes, while in 2009 total production reduced to 107 148.56 tonnes. The outgrower scheme experienced fluctuations over the same period declining overall from 131 514.10 tonnes in 2005 to 101 116.78 tonnes in 2009 (Fig 1). This decline could be due to a number of factors such as changing weather patterns, changes in size of cane land and changes in stages of the cane production cycle all of which have bearing on overall productivity. However, an increase to a total of 246 000 tonnes is predicted for 2012.[11] The figures from 2005-2009 suggest that the outgrower scheme has been more productive than the estate (Fig. 1), and figures for 2010 and 2011 give a similar picture - that the outgrower scheme accounts for

[11] KASCOL production records are based on Key Informant interviews with KASCOL Agriculture Extension Office, October, 2011.

around 50 percent of the KASCOL's total yields on just under 50 percent of the land cultivated (1 040 of 2 197 ha under irrigated cultivation).

Figure 1: Production from KASCOL's nuclear estate and outgrower scheme 2005-2009



Source: KASCOL Records from 2010 reported in Mungandi (n.d.)

Linkages between the company and smallholders

The main mechanism of smallholder representation within KASCOL, as well as with the government and other stakeholders, is through membership in the Kaleya Smallholder Farmers Association (KAFSA). KASFA is a producer association which supports farmers on issues of welfare and production, including representing their business interests to Zambia Sugar, policy-makers, regulators and KASCOL management. Although KASFA was created by KASCOL Management in the 1980s, it has continued to run as an independent producer association, focused on representing the interests of its members. All outgrowers are members of KASFA so the association currently has a total membership of 160 (117 male, 43 female). It is directed by an Executive Committee which is elected by the members every 2 years. At the time of this study, there were nine Executive Committee members, of which only one was a female farmer. The elected chair of the Committee becomes the official representative on the KASCOL board for the entire duration of his/her mandate. KAFSA does not get involved in the day-to-day running of KASCOL, except when the company is tendering for procurement of major inputs for use on outgrower farms (Mujenja 2012). KASFA also lobbies the government and other stakeholders on any issue related to the business environment in which its members are operating.

To ensure that KASCOL money revolves within the scheme, KASCOL has entered into a standing contract with KASFA, whose members do the cutting and harvesting of sugar from the KASCOL estate as well as their own farms. As to all mechanised operations on the estate and on the outgrower scheme (such as heavy ripping, cross-ripping, first disking, land forming, final disking and furrowing), KASCOL carries them out directly. KASCOL is also responsible for contracting a haulage company to transport sugar to the mill.

All the cane produced by KASCOL is sold to Zambia Sugar. The The Established Recoverable Crystals (ERC) committee is the main mechanism by which cane growers in Mazabuka negotiate with Zambia Sugar. The ERC is related to the sucrose content of the cane and mill
efficiency. KASCOL and KASFA as well as independent cane growers sit on this committee and the price set is the one at which KASCOL sells KASFA members' cane. KASCOL's Fair Trade status also ensures

that the prices set by Zambia Sugar conform to Fair Trade Standards. KASCOL's Fair Trade certification secures a premium of USD 60/tonne of sugar (European Commission 2012), which must be used for community projects. Certification also requires compliance with a number of social and environmental standards, monitored by annual compliance audits, which apply to both the outgrower scheme and the nucleus estate.

The other major link between the company and the smallholders is the Agricultural Extension Office. This office has a dedicated Smallholder Relations Officer, a full-time employee of KASCOL, who is in charge of providing agricultural extension services to the outgrowers as well as facilitating communication between the company and the outgrowers.

3.2 Background to the case study location

Mazabuka District, the host district for KASCOL, is located about 125 kilometres South West of the Capital Lusaka along the country's first railway line. This access attracted missionaries and commercial settler farmers and led to private and state investments in social development and commercial enterprises (e.g. Zambia Sugar PLC). It is the second largest district in the Southern Province after Kalomo and spans an area of 6 687 square kilometres. Largely, the district consists of plateau land with fertile soils. As a result, 80 percent of its land is used for agricultural activities. Key economic activities in the district include cane farming, coffee, maize, cotton, and groundnut cultivation, dairy farming, fishing along Kafue River, and wholesale and retail trading.

The population of Mazabuka is 261 268, of which 130 881 (50.1 percent) are female (GRZ 2011c). Over the last decade, the district population grew at an annual growth rate of 2.5 percent with that of females being marginally higher at 2.7 percent. The district population represents 16.3 percent of Southern Province population. With a population density of 49.1 people per square kilometres, it is the second most densely populated district in the province after Livingstone (currently 204.4 people per km2).

Limited data is available on socio-economic conditions before KASCOL was established due to the time lapse, but most of the rural population were likely to have been dependent on subsistence farming and herding. Today most of the rural population is involved in subsistence farming and cattle rearing. KASCOL is one of the largest employers in the district.

3.3 The acquisition of land and land tenure arrangements under the outgrower scheme

KASCOL secured its 99-year lease of 4 314.9 ha from the government of Zambia, following a compulsory acquisition by the government of land belonging to Zambezi Ranching and two other commercial farmers. The former owners, who had held the land on a 99-year lease, had made some improvements on the land, such as a solid stone-reinforced building that currently houses some of KASCOL's offices. The three original land owners were fully compensated by the government both for the land and the improvements that had been made on it. Consistent with the terms of statutory leasehold tenure arrangements, KASCOL is required to pay annual ground rent to the MoL.

Because at the time of its acquisition the land belonged to individual commercial farmers, there is no evidence to suggest that this had any significant gender and equity implications on local communities

through deprivation of their ownership, rights and interests to this land, nor on employment and income generating opportunities of women.

Only 2 197 hectares of the total 4 314.9 land leased by KASCOL are under irrigated cultivation. The acquisition of these particular parcels of land was linked to: proximity to the Zambia Sugar mill; good soils to support productive cane growing; and proximity to the Kafue River, which is a stable and reliable source of water for cane irrigation and domestic use. Their location near the mill is also important not only as transporting cane over long distances is a costly venture, but also as cane deteriorates quickly and therefore must reach the mill within 48 hours after harvest.

The remaining 2 118 hectares of the land held by KASCOL are reportedly characterized by poor rock land and limited water for irrigation. Approximately 1 040 hectares of the irrigated land is under 14 year renewable sub-leases issued to smallholder outgrowers. Each smallholder farmer was initially allocated 4 ha of cane land which has since grown to an average of 6.5 ha through negotiations between KASFA and KASCOL. In addition, each outgrower household is given between 0.5-1 ha of land for dwelling, domestic food production and income generation activities.

Scheme members do not pay any ground rent for their 14-year sub-leases. Each smallholder signs a 'Cane Farmer Agreement', a legally binding contract between KASCOL and the outgrower, which stipulates roles, responsibilities and obligations of each party. The agreement stipulates that any improvements on the outgrowers' land or production-related decisions must be agreed upon between the farmers and KASCOL. This arrangement has established a form of co-management of the land. Farmers are free to make improvements on the 0.5-1 ha of land within the provisions of the Cane Farmer Agreement. The agreement also provides for full compensation at market value for all improvements on this land (as well as the standing cane on the 6.5 ha) in the event that the contract is terminated. The Cane Farmer Agreement further provides a succession clause which allows outgrower farmers to nominate a family member to succeed them in the event of their death or infirmity. The next of kin (surviving spouse, child or other family member) undergoes probation for a period of one to two years before their continued participation can be approved by KASCOL.

Based on the current sizes of land holdings under customary tenure arrangements surrounding KASCOL's land, many of the smallholders are likely to have had access to land of around 0.5 to 2 ha prior to joining the scheme. Therefore, their current landholding of around 6.5 ha of cane land plus 0.5 to 1 ha of dwelling and cropland means that, for most outgrowers, their landholdings and therefore their income generating opportunities are likely to have significantly increased under the scheme.

Interviews with KASCOL's Smallholder Relations Officer suggested that although outgrowers enjoy relatively secure 14-year leasehold tenure arrangements, there have been a number of cases of farmers being evicted based on non-compliance with the terms of the Farmer Agreement. There are four possible contexts in which termination of the agreement may take place, namely:

- If the farmer is declared bankrupt;
- Upon the death of a scheme member, where the nominated person to continue with the scheme does not satisfactorily qualify to carry over the activities;
- In the event that the person so nominated to succeed the original member does not meet the minimum criteria to be approved by KASCOL after undergoing a probationary period of between one and two years;
- Failing to comply with the provisions under the disciplinary code.

In addition, under the disciplinary code, farmers can be evicted for:

- Performing below expectations, which is operationally defined as getting cane yields below 75 percent of the highest achiever in the respective block purely on grounds of bad management practices;
- Absence from the scheme for at least 30 days without obtaining prior permission or authorisation from KASCOL;
- Bringing the name of KASCOL in to disrepute through issuance of press statements, or theft of agriculture inputs;
- Involvement in illegal activities such as brewing of illicit beer.

Farmers may also resign from the scheme, in which case the agreement would be terminated. Records indicate that since the inception of the scheme in 1983, there have been 16 evictions and 3 resignations. However, two of those who had been evicted for failing to manage their field were later reinstated. Key informant interviews revealed that in 1986 the first five farmers left the scheme. Four of these were reportedly evicted for abrogating the tenancy agreement while one left through resignation. Between 1993 and 1996, KASCOL evicted a total of eight farmers for reasons ranging from failure to manage their fields, misrepresenting the company and involvement in the brewing and selling of illicit beer. Finally, between 1997 and 2005, when the number of farmers stabilised at 160, two evictions and two resignations were recorded by KASCOL. Amongst the evictions, one was motivated by failure to manage the cane fields, while the other was on grounds of the farmer having been absent from the farm for more than 30 days.

According to key informant interviews, KASCOL has been very flexible with the utilisation of the company's marginal lands that are yet to be brought under cane cultivation. Since most of the marginal land is already cleared, it is not used for the collection of Non-Timber Forest Products (NTFPs) by the local communities, KASCOL staff or outgrowers. Instead, KASCOL has allocated this land to outgrowers and staff members to temporarily use it for growing staple food crops, such as maize, to complement their household food situation. However, towards the end of 2011, KASCOL had issued a notice that three areas that were under food crop cultivation by outgrowers or its staff members would be prepared for cane cultivation as part of the company plantation, thereby removing access to this land for domestic food production, with potential impacts on those farmers' access to farmland and food security.

3.4 Waged employment: Opportunities, conditions and gender implications

KASCOL has created a total of 364 direct jobs in two main categories: 63 fixed-term staff (27 fixed-term non-unionised staff of whom 6 are female; 36 fixed-term unionised staff, of whom 1 female) and; up to 299 seasonal wage workers (17 per cent female) who are unionised workers under the National Union of Plantation Agriculture and Allied Workers Union (NUPAAW) (See Table 3). The union has a branch at KASCOL. Employment figures vary throughout the production cycle and from year to year, so these figures provide a snapshot of employment at the time of fieldwork in October 2011. When the researchers revisited the company in May 2012, the number of seasonal workers was down to 170, none of whom were female. According to the HR department, they include a statement encouraging women to apply in all vacancies advertised in the media. Despite this, women's representation in the company is low and there is no policy for affirmative action or promoting gender parity in decision-making positions. The company stated that there were plans to include more women in KASCOL field operations as wage workers.

Table 4: KASCOL Employment Category by Sex, 2011

Category	Total	Men	Women	Female (%)
Fixed-Term Non-Unionised Contract staff	27	21	6	22
Fixed-Term Unionised Contract staff	36	35	1	3
Seasonal Wage employees[12]	299	248	51	17

Compiled by author from KASCOL records

Fixed-term employees

In 1980 KASCOL had over 300 permanent staff but by 1999, the number had dropped to 78 and today stands at 63 on fixed-term contracts. The six women in this category hold a range of positions which are detailed in Table 5.

Table 5: Management positions held by women in KASCOL as of November 2011

Position	Number of Staff
Management Accounting Officer (Resigned)	-1
Agriculture Management Trainee	+1
Human Resources Assistant	+1
Environmental Health technologist	+1
Nurse	+1
Secretary	+1
Zone Leader	+1
Cashier (Discharged on medical grounds)	-1
Non-unionised fixed term female staff	6

Source: Key informant Interview with KASCOL HR Office, 2011

Fixed term contract staff work 8 hours per day, from 8 am to 5 pm Monday to Friday up to a maximum of 48 hours a week. It was not possible to access company data on salaries for male and female staff. All fixed-term employees are eligible for a range of benefits. These include: a monthly salary; eligibility for pension under the National Pension Scheme Authority (NAPSA); and death and disability insurance on grounds of infirmity and accidental death. Additionally, all employees on fixed-term contracts are entitled to a gratuity of between 15 and 18 percent of their gross annual earnings. Further, the company has a favourable Chronic Illness Policy for its employees. An employee who falls chronically ill for up to 180 days or six months is entitled to paid sick leave. If the employee is unable to resume duties, the company continues to pay a salary for another 90 days after which management will refer the matter to the Medical Board, chaired by the Permanent Secretary for Ministry of Health, for further guidance. In the event that an employee has to be discharged on medical grounds, full gratuity is paid as the company treats this as normal retirement. Both male and female fixed-term employees are entitled to annual leave, sick leave, compassionate leave, and leave to care for a biological child who is less than 21 years of age.

Seasonal employees hired by KASCOL

[12] At the time of research in Oct 2011. In May 2012, 170 were on the books including no females.

Sugarcane has essentially four growth phases namely: germination phase, tilling phase, grand growth phase and maturity and ripening phase. Within each of the phases, a number of farming activities have to be performed to guarantee optimal yields. These activities include land preparation, planting, germination irrigation, weeding, irrigation water management, fertigation, earthing up, propping, removal of water shoots, and harvesting, among others. Apart from land preparation, irrigation and earthing up, which have been highly mechanized, the rest, comprising approximately 80 percent of the production value chain, is not mechanized and thus labour intensive. This is a deliberate strategy of the company, rooted in the original project design, to establish an investment that would promote employment and social benefits. KASCOL provides employment to between 170 and 299 seasonal workers for 9 to 11 months each year. These workers are recruited for the labour intensive phases of cane growing, which include planting, fertiliser and herbicide application, and irrigation.

Seasonal workers work for 8 hours per day with start times varying according to the season. A minimum daily rate of K 12 720 (USD 2.5) per day has been secured through negotiations between the union and the company. Currently KASCOL pays its seasonal workers a daily wage of K16 159 (USD 3.2). Seasonal wage workers are eligible to access health services from the company clinic and for paid sick leave. For every month in employment, they accrue two days of paid leave which they can use at the time of their choice within the contract period. Occupational health and safety audits apply to all workers and so provide a level of protection for seasonal labourers.

The diversity of tasks means that each aspect of cane production demands a different number of workers with different sets of skills. So whilst daily rates are standardised, women are generally engaged in particular tasks which are more limited in quantity and period of employment. Fertilisers application, which involves lifting of heavy bags, irrigation, which requires efficient use of irrigation water, spraying of herbicides to control pests and weeds, clearing the farm surroundings, undertaking smart disease control, which involves uprooting diseased cane and trash, and cutting or harvesting of cane are considered heavy operations and remain the exclusive domain of male wage workers. Women tend to be engaged in what is deemed lighter work such as replanting. As cane is perennial this happens only every few years. Cane weeding is also done by a higher proportion of women than men. Although weeding is considered a heavy operation by the company, both seasonal wage workers and the KASCOL extension services officer indicated that women were preferred for this task primarily because they tend to be more careful and thorough.

Furthermore, cutting or harvesting of cane takes place around October or November of each year. This presents another barrier to women engaging in this activity as they are busy at this time with domestic food crop production, and with men absent working on the estate, they have a higher burden of domestic tasks. It was reported by KASCOL management and seasonal wage workers that women are being segregated into the shorter seasonal jobs.

Communities in the Southern Province are largely patriarchal. Gender divisions of labour in agriculture are strong and tend to confine women to the production of staple crops or domestic food crops. Cash cropping, and therefore cane sugar, is considered to be outside of women's roles. There is a strong perception in the local society that cane growing is predominantly a male domain, suggesting that it is deemed inappropriate for women to be seeking work or working in cane production.

The company did state that the time without income, which can be up to four months of the year, was challenging for seasonal workers. A lack of sufficient income to invest in their own farms, food purchasing, education and healthcare, and a lack of access to as micro-credit, training, farm tools and inputs made life and income generation more difficult. Some interviewees expressed a desire for more training schemes for local people to increase their employment prospects.

Seasonal workers hired by the outgrowers

In addition to the 299 seasonal workers from the surrounding communities that were hired by KASCOL to work on the estate, Kaleya smallholders also make use of casual labour from the surrounding communities. Precise data on this is hard to get as farmers use workers as and when required, sometimes for as little as one week in a year. This hiring of seasonal workers is discussed in more detail in section 3.5 in relation to the productivity and production patterns of outgrowers.

3.5 Kaleya smallholder scheme: Access, benefits and impacts

3.5.1 Overview of the scheme

The scheme is based upon an agreement between the company and a smallholder farmer for the production of cane on company leased land. Once outgrowers have completed their initial training and assessment and have been accepted into the scheme (discussed below), KASCOL provides interest-free in-kind loans to the smallholders to cover the required resources for land preparation, planting, irrigation, fertigation, weeding and harvesting such as irrigation infrastructure, extension training, tools and inputs. These constitute indirect loans for which repayments are deducted at the point of sale. All the inputs provided on credit are exclusively procured by KASCOL which monitors their effective utilisation.

According to the Cane Farmer Agreements, sugar cane yields are required to range between 84 tonnes to 120 tonnes per hectare. The current benefit sharing arrangement between KASCOL and smallholder farmers stands at 57 to 43 percent respectively. This means that each farmer is entitled to 43 percent of the revenue realised from the sale of cane to Zambia Sugar PLC, while KASCOL receives the remaining 57 percent. Equally, each farmer is expected to meet 43 percent of the total costs of planting, irrigating, weeding, harvesting, including transportation of cane to the mill through the buyer credit.

The money realised from the sale of cane is paid to farmers in two tranches. The first tranche, which is 50 percent of the total revenue, is paid as a lump sum soon after payment is received from Zambia Sugar. The second instalment is spread over an 11 months period and paid either in equal monthly instalments or quarterly. The payment of monthly instalments is a way of diversifying and mitigating some of the financial risks carried by the farmers and promoting financial prudence among them to prevent indebtedness. However, it is up to the farmers to decide which payment scheme they prefer and request.

In the event that a smallholder farmer makes a loss, as it has been the case lately among some farmers, KASCOL enters a further loan agreement with the farmer in the form of fixed-monthly instalments to be spent on food consumption health care, children's education and farm inputs.

3.5.2 Access to the scheme and key gender differences

The process of becoming a smallholder farmer begins with KASCOL's public invitation in the local press to apply for consideration. According to KASCOL Smallholder Relations Officer, when this was first done in 1983, it was received with suspicion by people from the surrounding communities:

> *"Because of the general disbelief that a company can offer resettlement land for free, the initial response was very poor as many people were sceptical of the underlying motive and intention of KASCOL to give land and settle smallholder farmers with all the infrastructure for free." (KASCOL smallholder relations officer)*

To overcome this scepticism and demonstrate the seriousness of the project, KASCOL management entered into negotiations with selected employees to serve as pioneers of the scheme. Subsequently, eight of KASCOL employees agreed to join the scheme and serve as role models. Each of these employees, turned smallholder-contract farmers, was initially given 4 hectares of cane fields and a 0.5 hectares of dwelling space on which to build houses and produce food for their own consumption. Because the employees were still insecure about their chances of success under the scheme, they negotiated with KASCOL to agree to reinstate them in the event that the scheme proved less successful than initially anticipated. There were no female farmers in this initial group of 8 employee-smallholder farmers.

In the subsequent years, as local people's knowledge of the scheme grew and its results became evident, interest, including of women, also grew. This induced the need for a more democratic and transparent recruitment, selection and performance appraisal system. A 'farmer selection and appraisal' committee was established consisting of members of KASCOL Management, four local chiefs, representatives of local agriculture co-operatives, the Permanent Secretary in MACO, and the Permanent Secretary in the Department of Labour and Social Security. This committee is responsible for short-listing, interviewing and selecting successful potential farmers.

The main outgrower selection criteria are: a strong interest in receiving the training and participating in the scheme; being a local resident; having some experience in livestock and crop production; and good health conditions. These criteria are assessed through written applications, interviews and the apprenticeship training. Again due to the loss of institutional memory, it was difficult to establish how many people responded to the first and second rounds of farmer invitations and of these, how many were women.

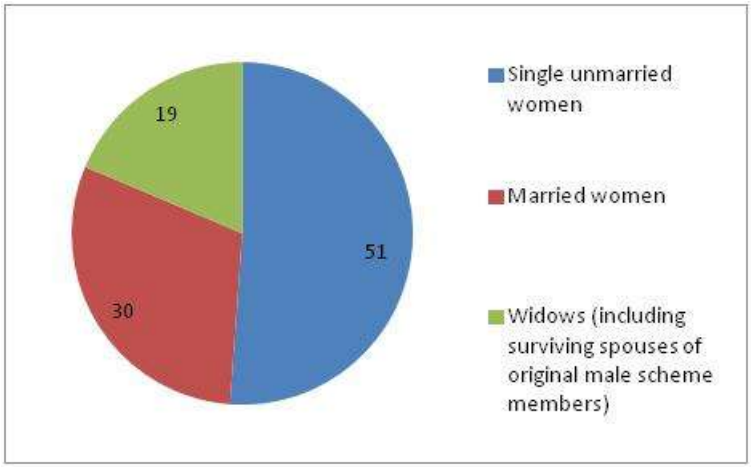
Once selected, the would-be smallholder farmers undergo a six months field training on the A to Z of cane agronomics. This training ranges from land preparation, planting, irrigation, weed management, fertigation, to harvesting management. During this period, all trainee-farmers are considered temporary employees of KASCOL and are eligible for a fixed monthly stipend. After the six months intensive training programme, the same selection and appraisal committee assesses each candidate's suitability to the scheme and conducts the final selection of outgrowers. The successful farmers are then allocated their 4 to 6 hectares of standing cane field and a further 0.5 to 1 hectares of dwelling land. They can then begin cultivating immediately, although it often takes up to two years to reach expected levels of productivity.

Initially most of the land was leased to men; however, over the years, the number of female farmers has grown, largely through succession planning. Today, 43 of the 160 farmers, representing 27 percent, are women (Table 5). Further analysis of the composition of female members by marital status shows that the majority of women (51 percent) are single young women who have never been married before. All of these have entered the scheme through inheritance. Married women constitute 30 percent of the total female population in the scheme, while widows or surviving female spouses of original male scheme members represent 19 percent (see Fig. 2). Ten women became registered outgrowers just in the year prior to the research (2010-11), mostly through inheritance from their husbands. So whilst the total number of outgrowers has stayed at 160 for some time, the male-female ratio has changed. The implication of these findings is that the succession arrangement imbedded in the scheme has led to greater participation of women over time.

Table 6: Number of female and male outgrowers and seasonal workers

Category	Total	Men	Women	Female (%)
Smallholder Farmers	160	117	43	27
Seasonal wage workers or apprentices hired by smallholder farmers	1 034[13]	-*	- *	*-

Figure 2: Composition of female scheme members by marital status



Access to loans for land preparation and other inputs are equally accessible to both female and male smallholder farmers. Therefore, despite the absence of a gender policy advocating for gender equity proactively, the KASCOL's smallholder outgrower scheme has few explicit gender biases and the lower participation of women is more associated with domestic divisions of labour, perceptions of cane growing as a male dominated activity, and intra-household relations. Moreover, men are more likely to sign an agreement when cash crops are involved and thus, economic benefits are foreseen. No proactive measures have been adopted to address the gender gap.

Hiring of casual labour by outgrowers

The outgrower scheme, whilst relatively small in terms of numbers of members, is an important source of indirect employment. Smallholders rely on additional labour to cultivate their plots. Labour comes from both unpaid family labour and casual wage labour. The extension officer observed that female outgrowers tend to rely more on paid casual labour and attach remuneration to performance or accomplishment of specified tasks. In the case of female outgrowers, some 20 percent of the labour comes from unpaid family workers, compared to an estimated 50 percent in the case of male out-growers.[14] Women also take a more hands-on approach to supervision by being present and working alongside the workers, whether casual paid labour or family members, and through this are able to enforce efficiency and quality control. Conversely, male outgrowers tend to rely more on family labour and take a more hands-off approach to supervision.

Hired casual labour is paid by the task but the wage is always kept above the prevailing minimum wage, as smallholders are required to comply with fair trade rules. However, casual labourers do not enjoy any of the security and welfare benefits of the company's wage workers. As in the case of the seasonal wage workers,

[13] This figure was arrived at by multiplying the average number of seasonal employees (5 workers) of per female outgrower household and that of male scheme members (7 workers per household).
[14] These figures and percentages were estimated by FGD participants and KASCOL Smallholder Relations Officer.

there are differences in tasks between men and women. Women tend to be restricted to weeding of cane due to them being considered more careful and thorough in the task. The same gender divisions are also seen amongst unpaid family labour.

3.5.3 Benefits of the smallholder scheme participation for men and women

Overall, through the smallholders programme, KASCOL has created employment for slightly over 1 100 people and supported the livelihood of approximately 7 000 people (based on an average household size of 7). The smallholder farmers have been generating an average net annual income equivalent to USD 12 000 from sugarcane production and sales only.[15] This is after deducting all the production costs including, workers' salaries, direct and indirect inputs and services provided by KASCOL, and KASCOL's share of revenue. Smallholders who were also fully engaged in growing high value crops, such as tomatoes (see below), were able to generate, on average, an additional net income of USD 3 000 annually.[16] Assuming equity in intra-household income distribution based on the average household size of 7, this means that the total income generated annually translates into an intra-household per capita income of at least US$5.00 per day.[17]

Focus group discussions concerning control over income generated by the scheme revealed that in male headed households where women were the main member of the scheme, women had a greater say over how the income was used than when the man was the registered member.

Interestingly, female smallholder yields in 2010 averaged 101 tonnes compared to the male average of around 96 tonnes, according to company records. The differences in productivity between males and female outgrowers farmers could be attributed to a number of factors, including management styles and approaches to seasonal/casual labour, as discussed above. FGD participants also believed that female smallholders are more inclined to adhere to technical instructions not only on how to manage the crops and attendant tasks but also on how to ensure that loan expenditure is managed according to planned or intended activities. However, the difference in yields is not a major one and the direct causes are hard to ascertain without breaking down the figures further and conducting longitudinal monitoring of yields and productivity across a larger sample of out-growers.

Food Security[18]

Informants indicated that the majority of outgrower households were able to afford three meals a day. This was a result not just of income from cane production but also of use of the domestic plots held by each outgrower family. Interviews with the KASCOL extension officer and individual farmers suggested that many of the smallholder farmers have been able to utilise the 0.5-1 ha piece of land to produce enough food for their own consumption. A visit to the farmers' dwelling houses in all three farmers' blocks revealed that most households visited had backyard vegetable gardens. In many of these gardens, farmers cultivated tomatoes, impwa, egg plants, onions and winter maize. All of the ten farmer households visited had diversified their income sources into high value vegetable growing and winter maize.

One distinguishing feature of women outgrowers' use of domestic plots was that they were all using the land for household food crops rather than cash crops. Discussions with 10 female outgrowers suggested that this was due to time constraints on women for the selling of cash crops. Conversely, anecdotal

[15] Figure provided by KASCOL Extension Office
[16] Average taken from income of outgrowers consulted with during the study
[17] Author's calculation
[18] This discussion on food security outcomes is based on anecdotal data and on informants' perceptions of food sufficiency and diversity of food types throughout the year.

evidence suggests that on average men were more likely than women to use this piece of land to grow cash crops. Women's multiple work burden therefore limits their potential to generate income from this land. Eight female outgrowers (of those met) had opted instead to diversify their risk by buying residential plots in the Mazabuka Central Business district and constructing houses specifically for rentals, as managing rentals needs less supervisory time than other economic activities once the investment is complete.

However, in terms of food security, it appeared that, partly due to this focus on domestic food crop production, female-headed households were faring better in terms of nutrition. Focus group participants explained that while most female-headed households were able to have foods such as meat, fish, vegetables, rice, potatoes, maize meal derivatives and bread throughout the year, male-headed households experienced fluctuations and could access foods such as rice, bread and meat only during certain periods, particularly the harvest season when cash flows and disposable income was much more solid. Male headed households tend to rely more on maize meal based foods for breakfast, lunch and supper during times of financial stress.

Another reason for better food security in female headed households could be related to female outgrowers' preference to receive their payment from KASCOL in monthly instalments, compared to male farmers' preference to be paid in quarterly and semi-annual instalments. Women were thus managing finances more prudently throughout the year, being able to supplement subsistence food production when necessary. The Smallholder Relations Officer perceived women to be investing more income from the scheme in household welfare than their male counterparts. This perception has also made KASCOL management inclined to approve female nominations in the succession planning process.

According to the FGD participants, the value of the houses of Kaleya smallholder farmers range between USD 15 000 and USD 90 000 USD. All Kaleya farmers have quality of housing which is superior to that of the majority of the people from the surrounding communities not involved in the scheme. Some farmers have also been able to invest in fixed assets like motor vehicles, indicating the improvement in their income level under KASCOL. Nearly all smallholder farmers interviewed owned one form of transport or another, including vehicles, motor bikes and bicycles.

Box 2 Testimony: Benefits enjoyed by a female outgrower for KASCOL

Mrs. Edina (not a real name) is a 38 year old married female smallholder farmer at KASCOL married to a 42 year old local resident of Mazabuka District. She has 5 children, 2 girls and 3 boys. The girls are 19 and 7 year old respectively while the boys are 2, 13 and 16 years old respectively. In addition, she looks after two dependants, 1 boy who is 17 years old and 1 girls aged 15. Her household therefore comprise 9 members. She joined the scheme in 1998 after her mother, who joined the scheme in 1993, passed away. When her mother used to worked for NAMBOARD, life was good but as a farmer, life has become much better. Her mother was trained for six months in cane cultivation, cutting, planning, weeding and had left her 7.4 hectares of standing cane when she passed away.

"*I am able to grow maize on the 1 hectare of dwelling space to meet my food security requirements and generate additional income for my households. With proper management and care, we are able to feed ourselves for the whole year. Last year, I harvested 24 x50 kg bags.*

I have built a 3 bed-room house with a 2 roomed servant quarters. All my children are in school except for two, of which one has completed school and is about to enter college and the other is below primary school age. I belong to Group 2 of farmers which has 50 houses but only 4 of us are women. Yet female farmers generally perform better with respect productivity and investments in household welfare improvements. They invest more in household goods and family education. As you can see, I own a car and have bought a 30 x 30 metres residential plot in Mazabuka town at K4.5 mn (about USD 1,000). I have already bought 1,500x 4 inch blocks you see over there next to the car for this venture. I want to rent the new house so that I diversify my risk portfolio. In addition, I have employed 25 irrigation workers which most of the male farmers fail to do. And because KASCOL has strict labour compliance audits through their Fair Trade affiliation, we are compelled to pay the stipulated minimum wages.

My husband has been very supportive of me. His key role is advisory but I am in-charge of receiving all payments with respect to my business. But I think that 7.4 hectares of cane land is much smaller and inhibits our expansion and growth. Something between 10 and 15 hectares would be manageable. So as you can see our benefits from the scheme and contribution to employment creation for the surrounding communities is largely constrained by our (women's) gross underrepresentation in the scheme. Even in KASFA, there is only one woman in the Executive Committee."

The focus group discussions with outgrowers indicated that women who were participating in the scheme played a strong role in intra-household decision-making and community initiatives. This included married women who felt they had a greater say in the management of household expenditure compared to previous times. They believed that through their involvement they have challenged negative attitudes about their capabilities and their rights. They also felt they were able to articulate their problems and identify solutions when necessary, particularly when in group settings. Some female outgrowers have formed groups for mobilising savings and addressing issues of child health. Box 2 gives one female outgrower's account of how she has benefitted from KASCOL's scheme.

Non-monetary benefits

All outgrowers interviewed in this study reported that all their children of school going age were attending school.[19] Interestingly, more female-headed households were sending their children to fee-paying government and private schools than those headed by males indicating that women may be more inclined to invest in quality education for their children as a result of the increase in income. Some outgrowers were able to invest in college and university education of their children.

The farmers reported that they got specialised training in land preparation, planting, weeding, irrigation and all the other skills required for growing and harvesting of sugar cane and that they have been able to apply

[19] Two who were not attending were cases related not to finances but to health delinquency issues

this knowledge to their other farming activities. They have also developed capacities in managing human resources, financial management and marketing.

The outgrowers are eligible for cane insurance against fire and rains at harvest time and, as discussed above, soft loans in the event of a poor harvest. They are not, however, eligible for other social security benefits such as pension, sick leave or maternity leave or other forms of insurance. This is the main reason why most outgrowers pursue diversification of incomes including real estate investment and cash crop production. Full assessment of gender-differentiated activities outside of cane growing was not possible within the scope of this study.

HIV has impacted the scheme, causing the loss of many of the scheme's original farmers. The Fair Trade Committee has been supporting Orphan and Vulnerable Children (OVC) activities through feeding programmes and other care activities to try to reduce the impacts on the surviving families.

3.6 Other benefits and impacts for both workers and out-growers

KASCOL has established two schools and employs teachers for one other government run school. Workers are under no obligation to send their children to a particular school. The company has provided a school bus to KASFA to collect children from the outgrowers' farms and take them to schools in the central business district. In addition, KASCOL has established a nursery school, a clinic, a tavern, a community hall, a market place with shop stalls under construction and a football ground. These facilities are used by all workers and scheme members. The company also organises recreational activities such as soccer matches. However, based on the discussion, it was not clear if KASCOL supported recreational activities for girls and women.

KASCOL is also very attentive to occupational health and safety issues of both its workers and contract farmers. It has an Occupational Health and Safety Committee, which is chaired by the Company's Extension Officer who has been with the company since its inception. The company's occupation health and safety policy focuses on five key elements, namely safety at work or in the field, first aid, protective clothing, sanitary health and hygiene in smallholder dwelling areas, and disposal of waste, chemical and burning. Key informant interviews indicated that every year inspectors from the Zambia Environmental Management Agency (ZEMA) (the state agency mandated with integrated environmental management, the protection and conservation of the environment and the sustainable management and use of natural resources) visit the company to conduct compliance inspections and audits with respect to environmental health and hygiene.

Table 6 provides a summary of the income and other types of non-monetary and fringe benefits provided by KASCOL. This indicates that fixed-term employees receive good standards of employment, and that on income terms out-growers appear to fare better that seasonal workers on the estate.

Table 7: Summary of salaries, benefits and additional facilities for different categories of KASCOL workers and smallholders

Type of worker	Remuneration	Non-monetary benefits	Additional facilities
Fixed-term employees	Not disclosed by company	Maternity leave, sick leave, disability insurance, medical discharge with full-package, gratuity, compensation for occupational accidents. Union membership for non-management staff	2 schools a clinic A tavern A market place with shop stalls under construction, A community hall Recreational facilities (football ground) and support for activities such as soccer matches. A bus to transport children of out-growers. Education support to needy households.
Seasonal workers on KASCOL estate	USD 2.5 – 3.2 per day / USD 70 -90 per month (minimum wage compliant)	Affiliated to National Union of Plantation Agriculture and Allied Workers Health care access and paid leave arrangements	
Out-growers	USD 5 000 -12 000 a year	Fire and rain insurance	
Seasonal workers hired by out-growers	USD 90 -112 per month	None	None

3.7 Summary and lessons for good practice

At the time of KASCOL sugar settlement there was political will, both at the national and international level, towards large-scale investments that are more equitable and economically inclusive to smallholder farmers. The government's support for employment creation and poverty reduction was the key driver for CDC's investment in KASCOL in 1980. The interest of the Zambian government, local chiefs and political representatives to ensure that investment benefitted local people and participating farmers through direct labour, contract farming, technology transfer, skills training and forward and backward market linkages have meant that the scheme has provided a sustained way of building the skills of local people and offered opportunities for improving livelihoods and well-being over time. A number of notable factors make the scheme inclusive: eligibility criteria prioritising local low income communities; maintaining labour-intensive production techniques; provision of free specialised training in all aspects sugar cane growing; and access to financial resources by way of loans and staggered payments to facilitate good financial management.

Despite these strengths, KASCOL lacks an explicit corporate gender policy and strategy. This means that KASCOL does not specifically reach out to women in recruiting full-time staff, seasonal wage labourers or smallholder farmers. As discussed above, a number of disadvantages are experienced by women with regard to accessing "quality" employment, both as wage workers and as smallholder farmers. These disadvantages are reflected in the number of women in both types of positions. Marginalisation across decision-making roles in the KASCOL company board, in senior and middle management and in the KASFA Executive Committee suggests that issues of gender have not been given the consideration they

would deserve and that women have a far weaker voice to influence and have their interests addressed in recruitment policies either at Board, senior management or KASFA levels or in broader aspects of employment and of the outgrower scheme.

In terms of wage labour, women are limited by their being confined to occasional and lower paying tasks. Engaging in lower paid work for shorter periods is largely a consequence of public perception, including those held by women, regarding gender divisions of labour in agriculture. Furthermore, the multiple burden faced by women puts competing pressures on their time and ability to work outside of domestic care work and subsistence food production. Female involvement in the outgrower scheme is however increasing, in part due to the succession clause in the agreements which provide inheritance rights to family members irrespective of gender. This has been particularly important in the context of HIV/AIDs impacts on family labour.

4. Case Study 2: ETC Bio-Energy Ltd

4.1 Overview of the company and the business model

In 2007, the Mpongwe Development Corporation (MDC), a large-scale plantation agriculture venture in operation since the 1970s in Mpongwe District in Zambia's Copperbelt Province, went into voluntary liquidation and its assets were acquired by ETC Bio-Energy Limited (herein ETC). MDC was initially jointly owned by the government of Zambia and CDC. Over several stages CDC increased its share until in 2005 it owned 100 percent of MDC.[20] In 2011, ETC sold the farms to a Zambian multinational agribusiness firm which now operates under the name of Zambeef Mpongwe Farms.

ETC was engaged in the production and processing of a range of agricultural products for sale on local and international markets. The company took over MDC's lease on 46 873 hectares comprising three farm blocks, each with a separate 99-year lease (Mujenja 2012). One farm block (11 463 ha) was held for ranching whilst the remaining two were for crop production. MDC focused on food crops including soya beans, wheat, barley and maize. ETC introduced jatropha and set up a bio-fuel refinery. Wheat is irrigated whilst soya and maize are mostly rain-fed. The coming of Zambeef in 2011 marked the end of the jatropha project. Jatropha was the most labour intensive crop and therefore a significant source of seasonal employment. The study investigates employment opportunities across the company's operations (not limited to crop production), largely based on input from the wives of company employees who were most available and keen to recount their experiences.

Due to the recent nature of this take-over, discussions with informants for this study focused on the situation under ETC with some reference to experiences under MDC. ETC Bio-Energy is therefore referred to in the present tense – whilst recognising that many of the characteristics of the investment may be in transition under Zambeef.

4.2 Background to case study location

Mpongwe district has a total of 18 238 households with a total population of 91 765 people (50 percent female). The district has an average annual population growth rate of 3.6 percent with a population density of 11 people per square kilometre (GRZ 2011c). The two localities where ETC agricultural activities are situated – Nampamba and Mukumpu – have a total of 4 360 households with a total population of 20 574 (Ibid). Agriculture is the main economic activity for the district and major crops grown include maize and groundnuts alongside the gathering of NTFPs, such as mushrooms, as a major supplementary activity. In recent years retail trading and services have also increased as major sources of off-farm economic activity. ETC Bio-Energy is Mpongwe District's largest employer and accounts for nearly 30 percent of the local economy.

4.3 Acquisition of land and its gender implications

MDC's land acquisition can be traced back to a government-owned and driven wheat production scheme (Mpongwe Wheat Project). The government had initially acquired, through compulsory acquisition, 1 100 ha of land that was under customary tenure. When MDC was incorporated in 1984, the government had acquired significantly more than it subsequently leased to MDC bringing MDC's total land holding to 46

[20] MDC was not facing liquidity problems but could not meet the higher targets of returns on investment demanded by CDC (Mujenja, forthcoming).

764 ha. When ETC acquired the company, it also acquired a 99-year land lease (with water rights included) granted by the MoL and MACO to which the company paid ground rent and water fees. At the time of this study, the ETC had paid a total of K 223 449 580 (USD 47 542.46) in land fees and K 43 442 000 in water use fees (USD 9 242.98) since it took over operations (Mujenja 2012).

According to ETC's HR department, the land acquired was not inhabited so there was no physical displacement of communities. However, the land belonged to the local chiefs, and the local communities enjoyed access to NTFPs and other common property resources. Major activities practiced on this land, prior to its acquisition, included: game hunting, ad hoc slash and burn agriculture, gathering of wild fruits, honey, mushrooms and firewood. At the time of the acquisition, the land rights were ceded to the government by the local chiefs and their constituencies. A women's focus group discussion also suggested that the land acquisition was associated with some livelihood losses. Since then, women have needed to walk longer distances in order to collect the timber and non-timber products they depend upon.

Under MDC, a degree of flexibility allowed workers' families to produce domestic food supplies locally on marginal land. However in 2004 MDC stopped the growing of maize for domestic consumption on the. This was triggered by company suspicions that the amount some employees were storing was beyond what could be cultivated on the small plots that had been allocated by the company. Women interviewees reported that the result of this ban is that they have to walk long distances - up to 3 hours - to access agricultural land to cultivate maize. The maize must also be processed into maize meal before it can be brought on to company land. The company instead encourages vegetable growing to enhance household nutrition. Restrictions on maize cultivation continue to be of major concern to women workers or spouses. They also expressed a desire for more land for food cultivation. Particularly in light of their understanding that only a portion (10 661 ha) of the total land held by MDC first and then by ETC was under cultivation. According to the FGD interviewees, much of company remains unused, fenced off and inaccessible to company employees and local communities. As it has been cleared, the land is of no use for hunting or gathering fuelwood and NTFPs.

> *"We need to grow our own food. That is very important. So the company should give us land to produce our own food. Since we are many, each employee should be given 0.5 hectares of the idle land to promote our food security objectives and additional income generation."* (FGD respondent)

> *"One hectare of land outside is also very expensive to rent. So since we cannot grow our own food we have no peace. If this company was not here, we would perhaps have found other means of surviving. I am sure we would have been growing crops and selling to Food Reserve Agency like other people do and life could have been considerably better. And those others have money and have bought cars."* (FGD respondent)

FGD participants felt this was particularly unfair in light of the fact that

4.4 Waged employment: Opportunities, conditions and gender implications

ETC Bio-Energy has four categories of employees: permanent; fixed-term contract; seasonal; and casual.[21] From 2004 to 2011, the company maintained an average of 600 permanent and fixed-term contract workers. At the time of this study, the total figure stood at 692, of which just 69 were women. The company also employed a total of 1 082 seasonal workers, of which women accounted for around 30 percent. The bulk of

[21] According to the Industrial and Labour Relations Act of 1993, full-time employees are workers who are engaged for an unspecified period exceeding six months, while fixed-term contract employees are those engaged for any specific period ranging from 1-3 years in the case of ETC Bio-Energy. Seasonal employees are farm workers who are engaged on a full-time basis for a period not exceeding eleven months while casual employees are farm workers engaged for a continuous period not exceeding six months. For sake of clarity 'full-time' is referred to here as 'permanent'.

the seasonal workers, up to 800 of them, were engaged in jatropha cultivation and were migrant workers from other areas, as mentioned above. The company provides employment to 7 percent of the economically active population in the two localities – Mukumpu and Nampamba. Had ETC recruited entirely locally, they could have provided employment for closer to 12 percent of the local population. Finally, it was not possible to establish wage rates for all employment categories as this data was not made available by the company.

Permanent and fixed-term contract employees

The company has 8 senior managers (1 woman), 15 middle managers (5 women) and 37 junior managers or supervisory staff (4 women). Most of the senior management positions have been traditionally held by non-Zambians (five of the eight senior managers are expatriates). In terms of age composition, the majority of those in management are over 50 years, while only 10 (6 percent) are under 34 years. The 692 permanent and fixed-term employees comprise medical staff, drivers, electricians, plumbers, cooks, carpenters as well as agricultural workers. They receive between USD 80-200 per month equating to a daily rate of USD 3.3 – 6.60 depending on the job category and position. Their weekly working hours range from 40 – 48 hours. [22]

Under MDC salaries had been paid mid-month and month-end under MDC to reduce the need to call on loan sharks. In addition to wage income, permanent and fixed-term employees of ETC are entitled to free housing, free water and electricity. The houses, which were built by MDC, range from two to three bedrooms and are maintained by the company. Nearly all ETC fixed-term employees reside in the company compound.

Focus group participants felt that the acquisition of MDC by ETC Bio-Energy in 2007 was associated with a loss of income and decline in working conditions and benefits to employees and their families. Many wives of employees from the workers' reported an increased dependence on high interest loans:

> *"The salaries our husbands are paid are very low. So it is generally difficult for us to survive to the next month end. Although we enjoy free housing, water at our door steps and electricity, it is tough to get children to schools, especially secondary. My husband is an auto electrician and has been with the company when it was still CDC 19 years ago. But his salary is around K 400 000 (USD 80). So we normally spend this money before we even see it. We often resort to loan sharks from the shanty township you saw outside there".* (FGD respondent)

> *"We are paid USD 80 a month and immediately we have to repay 'kalowa'.*[23] *Suddenly we are broke again. MDC used to pay us child education support based on one's salary scale or job grade. This is no longer the case. We get kalowa to pay school fees. "* (FGD respondent)

This category of employees is also eligible for a gratuity of between 15 and 16 percent of their annual gross pay (reportedly under ZAMBEEF, this has been reduced to 10 percent). In addition, they are eligible for the National Pension Scheme Authority (NAPSA) and entitled to 2 days of annual leave for each month of service. Besides their normal leave days, permanent or full-time employees are further entitled to 90 days of fully paid sick leave, and to an additional 90 days on half-pay, after which they are eligible for medical discharge after seeking medical guidance.

Permanent and fixed-term contract employees are also eligible for special or compassionate leave of between 5 to 7 days in the event of the death of a father, mother, registered spouse or biological children under the age of 18 years. The number of days allocated depends on the distance of the location of the funeral and the discretion of management. In the event of death, the company further provides K 200 000 (USD 40) for transport, K 170 000 (USD 34) for coffin and K 150 000 (USD 30) for food. Discussions with

[22] Data on working hours for each category of employees came from the company administration. Data on wages of fixed term and seasonal wage workers is based on findings of the FGDs with spouses of ETC fixed term workers.
[23] Kaloba is the Zambian term that is generally used to describe money borrowed from loan sharks which most often than not attract exorbitant monthly interest rates.

the HR and accounts departments suggest that there is no gender or age-based discrimination in accessing these social benefits.

Female employees of the company who have been in employment for a continuous period of 24 months are eligible for a 90 days maternity leave on full pay (120 under Zambeef). Below 24 months in employment, a woman is only entitled to a 90 days unpaid maternity leave. A further 24 months have to elapse before an employee can qualify for a subsequent paid maternity leave. Both male and female employees are also eligible for a maximum of 30 days either to nurse a registered biological child or a registered wife or husband on condition of a hospital admission report. Beyond 30 days, unpaid leave can be applied for.

According to the HR department, the company supports professional development through on-the-job training and by means of in-house training seminars, as well as connecting staff to specific training schools and paying the full cost of tuition and lodging for staff to attend the training. In addition, there is a system of providing loans for attending relevant skills training that can be converted to grants on successful completion of the training. Employees undergoing training are entitled to four days of study leave to take their exams. In the last 3 - 4 years, the ETC Bio-Energy trained between 60 and 80 employees in different skills such as driving, plumbing, electrical maintenance, secretarial skills, and agricultural equipment mechanics and maintenance. Some female staff in administrative or technical positions have benefited from professional development and promotion opportunities. For example, the IT Assistant, who joined ETC upon her graduation in Public Administration, was hired as a store clerk in 2007 and promoted in 2010 to the position of IT Assistant where she deputises the IT Manager. Similarly, the HRM Assistant (also female) joined the company in 1993 as a HR clerk and has risen through the ranks to the position of Secretary to the HRM. During her employment, she has completed a 6 months secretarial course fully sponsored by the Company and a one week record management course. ETC staff stated that it encourages women to apply encourages female employees into non-traditional positions such as tractor drivers, electricians and mechanics. At one stage there were 11 women in these roles. This has since declined. Despite company intentions, the overall low female participation in such positions suggests that the company is not actively promoting equal opportunities in its HR planning and recruitment practices.

Additional income generating opportunities

According to the HR department, ETC seeks to encourage supplementary income generation amongst the employee's spouses mainly in growing and trading ground nuts on the company's marginal land. However, FGD participants suggested that this had not been taken up. Interviewees recounted that would ideally like to grow maize for domestic consumption or to sell to the Food Reserve Agency. As indicated above, the company's restrictions on maize production were due to challenges of establishing whether employees maize was genuinely cultivated by them on their own plots. Under MDC market stalls provided by the company had supported vibrant businesses and a local economy, but ETC's policy to restrict people from the surrounding communities from entering the company premises led to the market's decline. At the time of this study just 5 of 50 stalls had traders.

The women felt that the loss of access to income or means of domestic food production not only influenced intra-household power dynamics but also consolidated their financial dependency on male spouses. They also expressed concern that company support for recreational and leisure activities for men such as the opening up of beer taverns within the company compound had adverse implications on women's access to and use of household disposable income, and therefore their household nutritional status and food security.

> *"they opened social clubs …[Our husbands] surely used to drink the beer on credit and at the month end we would receive a paper of deductions. There would be no money for food. In turn, to ensure our survival, we would resort to borrowing from the local loan sharks."* (FGD respondent)

Finally, because of its size ETC sources all of its supplies outside the district, and sells all its produce outside the district, mainly into regional markets. This limits further potential benefits to the local economy.

Seasonal and casual wage workers

Despite being the largest source of formal employment in the district, seasonal workers were also recruited from distant locations (e.g. Lukulu and Mongu in Western Province, Kasempa in North-Western Province and Luanshya) particularly during a period of coffee cultivation in 2004. The company indicated that recruitment from elsewhere was due to a lack of adequately skilled workers from within the local area. Wages for seasonal workers were up to USD 60 per month for the 10 month duration of the farming season, translating to a daily rate of USD 1.60. Both company staff and focus group participants indicated that people from the surrounding communities found the wages unattractive. Many local farmers are involved in growing their own commercial hybrid maize for sale to the Food Reserve Agency, which can be more profitable than casual or seasonal work with ETC.

Seasonal workers are eligible for a maximum five days paid leave while casual labourers are entitled to five days unpaid leave. This creates some constraints on women's access to seasonal and casual work due to their additional reproductive work burdens. Illness, pregnancy and competing community or domestic responsibilities of women often lead to a loss of income. Local cultural attitudes regarding the types of work that are appropriate for women (nursing, teaching, secretarial or administrative jobs as opposed to agricultural ones), have also not helped women to access training to widen their opportunities. More broadly, anecdotal data suggests that some skills transfer through the employment of casual and seasonal labour has taken place in the area of agronomics, field health and safety and general management and care of certain agricultural crops to increase yields. As a result, many of the people in the surrounding communities are now able to use tractors for ploughing and herbicides to control the growth of weeds.

Other benefits and impacts

All the unionised employees belonged to NUPAAW. However, interviewees did report that cases of unfair dismissal became more frequent under ETC leading to greater job insecurity and some felt this had led to a climate of fear amongst staff to speak out. ETC has a very strict health and safety policy which provides protection for all categories of workers. The company employs an environmental technologist and workers are provided with full protective clothing. The HR officer noted that it was considered a breach of contract for any of its workers to work without protective clothing.

FGD participants felt that the company could have invested more in key infrastructure like roads, especially the portion from the main road to the company premises. It can reportedly take more than four hours to get a van or a private taxi between the town and ETC and the road is almost impassable in the rainy season. This hits women particularly hard because they have the greater responsibility for traveling to Mpongwe town to seek health care for family members or procure household supplies.

> *"There is no transport here. You can be at the station for more than four hours before you get on a van or private taxi. The road from Mpongwe business district is pathetic and as you saw nearly impassable during the rainy season. This is one of the largest farms in the country and we produce so much food here but see the road. One time a truck full of load overturned."* (FGD respondent)

The company runs three clinics on a cost–sharing basis with employees. Employees pay user fee contributions of USD 4.7 which are directly debited against their salaries every month. In addition, patients are expected to pay USD 1 consultation fees. However, one clinic, as reported by focus groups participants, is short-staffed and has no mid-wife. This, combined with the limited transport, poor roads and poor facilities for birth delivery, is problematic for pregnant women and women going into labour.

The company provided free basic education (grades 1 to 7) to all children of company workers including those from the surrounding villages. This was before the current government policy on free basic education was pronounced. ETC put all the teachers in the two schools it took over from MDC on the company payroll to reduce disruption to classes and ensure teachers were well motivated. The school had built and maintained separate toilets with running water which had helped girls, especially adolescents, to enter and remain in school due to the improved sanitation and hygiene. The only requirement was that parents contribute USD 30.00 per term at grades 8 and 9. Those from the surrounding villages had to pay USD 34 per term, which was still low compared to standard school fees for public schools. The interviewees expressed satisfaction with this arrangement, but still found it challenging paying fees out of their own

pockets, and still struggled to pay the fees for pre-school. When children progress to high school parents face more significant financial struggles.

The wives of ETC employees reported that there had been a reduction in the provision of maize meal to employees from 100 kg to 25 kg with an additional 25 kg if the employee attended work regularly. The company reported that this was always the case and that the additional 25kg was offered at a subsidised price to be recovered from the employees pay should they fall short during the rainy season, The company's production and processing of maize meal, and the limitations on domestic production on company land, the lack of subsidies to employees is seen as a significant injustice by the FGD participants.

5. Lesson Learned and Policy Implications

5.1 Introduction to findings

The two case studies demonstrate that women and men are affected differently by changes in access to land and resources and that there are gender-differentiated implications of employment opportunities offered by agricultural companies. These two cases are not necessarily representative of the new wave of land-based investments for agriculture but, in part because of their duration, have some lessons to share concerning gender and equity. There are a few good practices that emerge, particularly in terms of a viable smallholder scheme that provides farmers with increased access to land with some degree of tenure security and some say over the management of the land. However, there are some shortcomings related to women's access to the scheme. Both cases have fallen short on gender and equity concerns stemming in part from a lack of explicit attention to gender issues. This section explores these implications in a comparative way. It also makes some specific recommendations concerning the particular case studies as well as drawing out lessons for investments in general and the policy processes that can ensure its quality from a gender perspective.

5.2 Key gender implications of KASCOL and MDC/ETC bioenergy

5.2.2 Key gender implications relating to access, use and control of land

The key gender implications relating to land were quite different for the two case study companies, due to the contrasting business models involved and the differences in previous use of the land in question. In the case of ETC/MDC, the acquired land was communal land that had previously been used by local community members for a number of subsistence and income-generating activities, including collection of fuelwood and other NTFPs, hunting, and cultivation of subsistence food crops. Women reportedly suffered disproportionately compared to men from loss of access to this land, for two main reasons. Firstly, women have primary responsibility for collecting fuelwood for household consumption, and hence bore the brunt of the increased labour burden from having to travel further to collect fuelwood. Secondly, women's poorer access to land compared to men's meant that women depended much more heavily on the communal land both for growing subsistence crops and for income-generating activities (mainly collection of NTFPs for sale). ETC also has relied on a substantial amount of migrant labour and the case study showed that local populations were put off by the low wages in comparison to other opportunities particularly in maize growing for the government reserve agency. This suggests that many local farmers had reasonable access to land for maize production.

In the case of KASCOL he land in question was previously owned by three large-scale commercial farmers, and hence relatively few local women and men were directly affected by loss of land access. However, because the company provides land on a share-cropping/lease basis to its outgrowers, those women who have become outgrowers (45 in total) have gained access to several hectares of land for dwelling space and subsistence crops, as well as for cultivation of sugar cane. Given women's generally poor access to land in the Southern Province (where KASCOL is based), this constitutes an important gain for the women involved. Nevertheless, the absolute number of women involved is small, and their access (as well as their male counterparts) to the land is not fully secure and could be lost if the company changed its policies and/or went bankrupt. It is also unclear whether the lease holdings have enabled women outgrowers to obtain credit and/or other services requiring collateral. In addition, given the mix in marital status of women joining the scheme, with some inheriting only recently, it is not completely clear what associated burdens versus control and independence this landholding brings for say married women over widows or young single women, including what happens to the plot when they marry. This would be an important question for further study.

5.2.3 Key gender implications relating to waged employment

With regard to the gender implications arising from waged employment, similar patterns emerge from the two case studies. Overall, women's participation rates in waged employment at the two companies have been significantly lower than that of men: women workers represent only up to 14 percent and about 33 percent of the total workforce at KASCOL and ETC, respectively. Culturally determined gender roles have clearly played an important role in causing this gender gap. Women's primary responsibility for domestic work and subsistence food production has limited their ability to engage in wage work: thus, the very limited amount of leave available to seasonal workers at ETC prevents many women from taking these jobs, since it does not allow them to meet their domestic and food production responsibilities alongside wage work. Moreover, in the case of KASCOL, cultural perceptions of sugar cane production as a male activity have also played a part in discouraging women from seeking employment at the company. Those women who are employed are on average in less secure employment relationships and receive poorer wages and non-wage benefits as compared to male workers. Women workers' poorer conditions can be attributed to three main factors. Firstly, there is substantial horizontal segregation of jobs by gender, with women concentrated in tasks that command lower wages, such as weeding and fertigation. Secondly, vertical segregation by gender is marked, with women poorly represented in more senior positions: at KASCOL, women represent 10 percent of senior or middle management positions at all, and at ETC, women represent only 13 percent of senior managers, 33 percent of middle managers, and 11 percent of junior managers/supervisors. Thirdly, women workers at ETC are concentrated in informal jobs, with female workers making up 30 percent of seasonal workers but only 10 percent of workers on fixed term contracts. Seasonal workers have much poorer working conditions compared to those on fixed contracts: for example, whereas fixed term employees who have been working for ETC for more than 2 years receive 90 days maternity leave on full pay, in addition to other types of paid leave, seasonal workers are only entitled to 5 days paid leave in total. At KASCOL, the situation is atypical[24] in that women constitute a higher proportion of the fixed-term workforce (28 percent) as compared to of the seasonal workforce (of which women comprise only 17 percent); however, the absolute number of women in fixed-term positions is small (only 8 women in total).

Finally, the research indicated that wives of male waged workers are likely to receive little benefit from the increase in household income arising from waged employment. In the case of ETC, for example, wives of male employees complained that much of their husbands' wages are spent on alcohol and other personal expenditure, and that the amount remaining is frequently inadequate to pay for food for the family.

5.2.4 Gender implications of outgrower schemes

The following observations regarding the gender implications of outgrower schemes are drawn only from KASCOL. Differently to many other schemes in Africa, the outgrowers do not have to provide their own land to engage with the company in cane cultivation. Where local land tenure systems undermine access and use of land for women, this feature potentially opens up more opportunities for women to participate in the outgrower scheme. The potential further expansion of the Farm Block Development Programme may mean that other future investors in Zambia may adopt similar practices. Moreover, findings from other studies (e.g., Chan 2011) confirm that many of the observations outlined below can be found in other African outgrower schemes.[25]

[24] Compared to general employment trends in the export agriculture sector – see, eg, Chan 2011

[25] The gendered characteristics of smallholder outgrower schemes are highly crop dependent as well as country or locality context specific. For example across the board there are patterns whereby women are marginalized in production and competing in terms of productivity by way of limited access to labour, credit and extension training. But where fewer women than men were involved in

The proportion of outgrowers who are women (currently 27 percent) is relatively high, especially in the context of sugar cane being considered a "male" crop. However, women's participation remains substantially lower than men's, and this is significant given that prior access to land – typically the single biggest barrier to entry for women outgrowers – is not a prerequisite for this scheme. This points to the fact that non-land factors are also important in determining women's access to outgrower schemes. In particular, the findings indicate that the relatively high labour requirements of sugar cane production prevent many women from becoming outgrowers, due to women's weaker access to unpaid family labour. As discussed, unpaid family labour contributes only 20 percent of the required labour input on female outgrowers' plots, as compared to 50 percent of male outgrowers' plots. Equally, women's weak representation in senior government positions and producer organisations' governance structures means that the committee responsible for selecting outgrowers is male-dominated (no historical records, but also no reports of female representation), which in turn is likely to have influenced the number of women accepted on the scheme. The association representing outgrowers, KASFA, is also male dominated with only one female on the executive committee.

The research found a number of important differences between female and male outgrowers. As already noted, female outgrowers rely much more on hired labour than on family labour; women also tend to employ less labour overall (an average of 5 waged and family workers) compared to men (averaging 6.5 workers). Interestingly, average yields of female outgrowers are actually slightly higher than those of men (101 tonnes as compared to 96 tonnes per ha for men) - a difference attributed to the tendency for women to follow production instructions more diligently, to perform more of the labour themselves, and to supervise workers more carefully. The study also found that women and men outgrowers have different livelihood diversification strategies, with men focusing on additional income generation around the production of high-value cash crops, including on their allocated "domestic" plots. In contrast, women were three times more likely to use the domestic plots for subsistence food production (as intended), and pursue alternative income-generating strategies that were longer-term investments and required less supervision/labour input than cash crops such as, for example, the purchasing of property in urban areas for rental. One important consequence of the priority given to subsistence crops, combined with women's tendency to spend more of their cash income than men on household food supplies, and to request monthly payments from KASCOL, is that on average the nutritional/food situation status of female outgrowers' households is considered to be better than that of male outgrowers. Moreover, the findings point to the fact that participation in the scheme has increased women outgrowers' voice and decision-making power within the household, particularly with regard to decisions around household expenditure.

The impacts of the scheme on wives of male outgrowers are less positive. Assuming that wives are responsible for a substantial proportion of labour on male outgrowers' farms, 50 percent of which is performed by unpaid family workers, these women are bearing a significant share of the labour burden of outgrower production. Yet the findings indicate that they frequently see little of the benefits accruing from sugarcane income, with husbands spending much of the money on personal items rather than on meeting household needs.

5.2.5 Other gender implications

The research revealed a number of implications for the wives of male employees living on site at ETC. On the positive side, on-site employees and their families receive free or subsidised housing, piped water, electricity, maize meal (a local staple food), primary school education and healthcare (access to clinics).

export mango production in Ghana and Mali, they were dominating coffee production in Rwanda and non-traditional export horticulture crops in Kenya and Zimababwe. The sources of these gender divisions is in access to those inputs mentioned above but also land access and control and need or ability to invest significant amounts upfront for longer-term returns (Chan, 2011).

The majority of these benefits are only for permanent and fixed-term workers. Many of these services are important to women in terms of reducing time spent on daily domestic chores.

ETC has also made some attempts to support income-earning opportunities for wives of male workers (e.g. allowing wives to grow groundnuts on un-cultivated sections of the company's land, construction of a market place for women to sell produce). However, the extent to which these women are actually benefiting from these services is limited for two key reasons. Firstly, the income-earning activities do not appear to have been appropriately tailored, with few women taking up groundnut production, and the market stalls being underutilised due to a lack of customers (ETC reportedly prevents non-employees from entering the company property due to fears of theft). Secondly, ETC has cut back on a number of benefits previously provided by MDC to workers and their families, and restrictions by the company on using company land to cultivate and store maize creates additional work burden for the families of employees. One unwelcome result is that wives feel they have become more dependent on their husbands for cash, with negative implications for intra-household power relations.

5.3 Key factors influencing gender outcomes

5.3.1 Company practices influencing gender outcomes

Apart from vague initiatives encouraging the recruitment of women workers, neither ETC nor KASCOL have explicit gender policies, nor have they made proactive attempts to promote women's participation in the outgrower scheme or promote equal opportunities for their female employees. Unfortunately, as section 5.2 indicates, the lack of proactive gender policies and strategies on the part of the two companies has led to a perpetuation and at times worsening of existing gender inequalities.

It is well documented that compulsory acquisition of previously communal lands tends to have negative implications for local women as women are more dependent on access to these communal land for their livelihoods. With regard to waged employment, the lack of equal opportunity policies and practices on the part of both companies has led to women workers being substantially disadvantaged in access to employment and, on average, suffering from worse pay and conditions than their male counterparts. In the case of KASCOL's outgrower scheme, the lack of an explicit and proactive effort to attract women outgrowers represents a missed opportunity to extend the benefits of the scheme to a larger number of women.

On the positive side, many of the general practices adopted by KASCOL have been a help rather than a hindrance to women's participation in the scheme. First and foremost, the fact that the scheme provides land to its outgrowers is clearly beneficial to women, since women's generally poor access to land in the region would have prevented the vast majority of women from joining the scheme, if outgrowers had been expected to cultivate sugarcane on their own land. In addition, unlike many other outgrower schemes, the selection criteria for the scheme are equally accessible to women and men; the provision of agricultural inputs on credit minimises the initial investment costs for outgrowers potentially removing barriers to entry for many women; and the provision of intensive training on production methods has helped overcome women's generally inferior technical knowledge arising from their weaker access to public agricultural extension and information services compared to men. Also significant is KASCOL's acknowledgement of the important role played not only by the registered outgrower, but also by their spouses (usually wives) and other family members in the production of sugarcane. Thus, the inclusion of a succession clause in the outgrower contract, and the company's encouragement for outgrowers to cascade training received to other members of their household are practices that have helped more women benefit from the scheme, both as

outgrowers in their own right and as spouses of male outgrowers, the latter demonstrated by the successful adoption of plots by wives and daughters. Finally, the fact that KASCOL has put in place various measures to help mitigate the risks involved with contract farming (e.g., rain and fire insurance, provision of emergency loans) is also likely to have encouraged women to become outgrowers, since women generally have poorer access to credit and fewer assets to draw from in times of need.

5.3.2 Socio-cultural factors

As the analysis in Section 5.2 clearly shows, socio-cultural factors have also played an important role in contributing to unequal gender outcomes of the two investment projects. The fact that cash crops in general, and sugar cane in particular, are seen as a "male" domain, has meant that many local men and women saw it as inappropriate for women to seek either waged employment at KASCOL or become sugar cane outgrowers. Women's lower social status, combined with their lower education levels, is likely to largely explain their under-representation in senior roles within both KASCOL and ETC.

Likewise, women's marginalisation in decision-making processes at both household and community levels has also played a role. Women's weak negotiating power within the household may partially explain the fact that wives of male workers and outgrowers have not been receiving a fair share of the benefits from the increased household income resulting from waged work/sale of cash crops; it also accounts for women's weaker access to family labour, which in turn has restricted their ability to become outgrowers at KASCOL. Women's weak/lack of representation in community governance structures has also contributed directly to marginal female representation on the outgrower selection committee at KASCOL, with likely negative implications for overall female membership of the scheme and chances of representation on KASFA executive committee. Finally, as already noted, women's primary responsibility for domestic work and subsistence food production has influenced the extent to which women have been able to engage in waged work (and possibly also the outgrower scheme).

5.3 Investment good practice regarding gender and equity

As Section 5.3.1 indicates, the study findings point to a number of good practice principles that individual companies/investors should be encouraged to adopt in order to support more positive gender outcomes. As already noted, the key underlying principle is that a "gender neutral" approach is insufficient: investors must adopt explicit gender policies and take proactive steps to ensure that company behaviours help to overcome rather than reinforce pre-existing gender inequalities.

With regard to the management of land acquisition processes, investors should be urged to conduct systematic social and economic impact assessments of their proposed investments, including an assessment of the gender impacts, and put in place reasonable mitigation measures to minimise predicted negative impacts on local women and men. The assessment should include meaningful consultation with both female and male representatives of local communities, and where mitigation is impossible, the companies should compensate previous users of the acquired land for loss of livelihood, including those who previously had communal access rights to the natural resources on that land.

The case of KASCOL has also demonstrated that there are a range of options that can enable farmers to be integrated into local or global supply chains whilst retaining at least a degree of secure access to and control over the land they are farming, albeit many challenges, including women's equitable access – or lack of in most cases. These options should be explored in full and from a gender perspective by local authorities and farmers in order to seek to attract the right business model from the right investors in this regard.

The research also pointed to several good practices with regard to how investors can ensure that local women benefit fully from waged employment opportunities. As far as possible, companies should adopt policies to offer employment on a priority basis to those local women and men who have suffered a loss of livelihood as a result of the land acquisition. Companies should also be encouraged to adopt labour-intensive, as opposed to highly mechanised, capital-intensive production processes, although there is likely to be less flexibility to do so where the investment is mainly or purely private sector-led. Moreover, the adoption of proactive equal opportunities employment policies and practices is crucial to ensure that women's working conditions are satisfactory. Particular attention needs to be paid to challenging patriarchal attitudes in the workplace and adoption of active measures to encourage more women to apply for jobs, including making terms and conditions of employment more amenable to women's particular needs (e.g. provision of adequate leave, provision of free transport to/from work, provision of child care facilities etc.). Equally, companies should provide targeted training and coaching to women workers in order to increase the proportion of women in management positions. Given women's concentration in less secure jobs, improving the conditions of seasonal and casual workers and bringing these more in line with those of fixed term and permanent workers, is also very important.

The findings at ETC also highlight the importance of company policies and practices in relation to workers' families, in cases where workers live on site. Given family members' high level of dependence on the company in such situations, investors should be urged to take this responsibility seriously and to make adequate investments to ensure family welfare. In addition, company management should consult with workers' wives (and other family members) in determining the type and nature of services to be provided, in order to ensure that wives' key priorities are met and that the services provided do actually deliver the intended benefits.

Finally, as already discussed in some detail in Section 5.3.1 above, KASCOL's experiences provide a considerable number of good practices in relation to the management of outgrower schemes. It is recognised that not all of these practices are necessarily replicable in other agricultural investment projects, where Fair trade certification is not an option and/or no or minimal public money is invested in the scheme. Nevertheless, principles and practices that all investors should be able to adopt include the provision of agricultural inputs on credit, inclusion of a succession clause in outgrower contracts, encouragement of outgrowers to train other family members (or indeed training other family members directly), provision of the option to purchase insurance against harvest loss and to obtain bridging loans should this occur, and provision of the option to receive crop payment in regular (eg, monthly) instalments. Importantly, all investors should also ensure that the scheme membership criteria do not directly or indirectly discriminate against women, and should take proactive measures to encourage women to join.

Moreover, in cases where investment projects involve public as well as private funds (ie, public-private partnerships) and/or where suitable parts of the land area acquired by private investors remain uncultivated, investors should also consider offering land to potential outgrowers on a sharecropping basis. In these cases particular efforts should be made to ensure that women and men are able to participate in the scheme on an equal basis, including ensuring that the outgrower selection committee has significant female representation. All public-private investment schemes should also support awareness-raising initiatives to encourage more equal sharing of household income and decision-making between husbands and wives.

5.4 Encouraging good practice through national and international regulatory frameworks

An assessment of dominant trends in agricultural investments revealed that whilst KASCOL illustrates a model facilitated by the government involving inclusion of smallholder farmers, very few other investment projects in Zambia follow this model. There is therefore an urgent need to review national policies promoting particular investment models and strengthen the regulatory frameworks within which investments are taking place.

As in many countries, national gender policies and gender objectives within broader agricultural development and poverty reduction strategies and policies exist on paper, but are often lacking specific targets and budgets. As a result, gender mainstreaming in agricultural programmes is lacking. In Zambia, this is illustrated by the FISP selection criteria and distribution mechanisms, which in effect marginalise women from access to farm inputs. Ensuring that women have better access to land and other inputs is key to enabling more women to participate and benefit from outgrower schemes. A gender audit of the National Agriculture Plan should be conducted so that recommendations can be included in its review prior to 2015. Concerning land laws, the draft Land Policy should go some way to addressing some of the gender and equity aspects of securing local land rights in rural areas. Gender mainstreaming in all institutions managing and administering land is critical, and the JGSP evaluation suggests some progress is being made in this regard, but with considerable distance to go. Without awareness-raising and training within institutions, the implementation of gender-sensitive strategies will fall short of the stated objectives. Reforming land management in the interests of women and poor farmers in this context of increased interest on land from investors requires challenging current systems on a number of fronts. Two fundamental aspects are (a) the cost of land rent required for leasehold tenure (currently prohibitive for most rural citizens) and (b) the powers vested in customary authorities. Securing local land rights and achieving the equity objectives provided for in the Land Act of 1995 would require support for collective registration of customary land rights. Affirmative action to protect women's rights to land and natural resources is also required and the new land policy should provide for joint registration of land that is under joint occupation by married people. Within the current wave towards decentralised planning, the government should also move towards devolved long-term, participatory land-use planning frameworks, where there is increased voice and visibility of local people, women and men, and establish strong accountability mechanisms. Concerning changes in customary practices, considerable awareness-raising and education for public and traditional authorities is needed. This is a complex and sensitive process. More inclusive consultative practices by customary authorities in the course of negotiations concerning land alienation will also only take effect if less pressure is put on traditional authorities by government to release communal land for large-scale commercial investors.

Concerning the regulatory environment surrounding large-scale investment, current national law provides some checks and balances on paper, for example with regard to the chiefs' obligation to consult and receive consent of local communities. Equally, an EIA must be conducted, and substantial development of land must take place within 18 months. However, research has shown that these arrangements are not being properly implemented. The regulatory framework needs strengthening with monitoring and enforcement mechanisms in practice as well as on paper, and to include a greater emphasis on addressing gender and equity (e.g. ensuring consultation with women and marginalised groups). Processes that have allowed vast areas of leased land to remain unused in the two case studies discussed here, and the lack of a cap on the size of land leases, should be reviewed. The government should only allocate land that investors can realistically develop within the set time-frames, and investors should be required to relinquish land that is not developed as agreed.

Furthermore, there could be an adjustment of tax incentives to promote investments that support smallholder farmers on their own land. A range of different models should be considered including a range of Private-Community Partnerships. Since most of the new farm blocks being opened up for commercial agricultural are on land under customary tenure (converted to leasehold by private actors), the government must not only ensure that the Free, Prior and Informed Consent of local communities is properly exercised, but also explore options for community/farmer/producer entities to hold equity shares in any business venture. The KASCOL model provides a good starting point for this, particularly given its financial viability and relative success over a considerable number of years. It is therefore recommended that the government promotes aspects of the KASCOL model only with greater consideration for gender-based equity in access to both self and wage employment; in particular the government should encourage the establishment of outgrower schemes (with local bias, training opportunities, free loans, and opportunities for diversification of livelihoods and subsistence food production) supported by producer/outgrower associations that provide gender-equitable representation and participation in management decisions. Given that this model is also dependent upon a nucleus estate with considerable employment of seasonal labour, the government should also strengthen the regulatory framework to ensure that rural employment meets international labour standards and that it is equitable in access. Finally, the government should see public investment in infrastructure, education (including adult education, literacy and vocational training) and health services as an important strategy for encouraging inclusive agricultural investments.

Bibliography

Anseeuw, W., Alden Wily, L., Cotula, L. and Taylor, M. 2012. *Land Rights and the Rush for Land: Findings of the Global Commercial Pressures on Land Research Project*. ILC: Rome

CAADP, 2009. *Zambia Comprehensive Africa Agriculture Development Programme Compact*, available at http://www.caadp.net/pdf/ZAMBIA%20CAADP%20COMPACT%20-26%20APRIL%202010%20%28unsigned%29.pdf [accessed 20 May 2012]

Chan, M-K., 2011. *Review of Value Chain Analyses in the Commodities and Horticulture Sectors: Roles, Constraints and Opportunities for Informal Workers*. Manchester, UK: Women in Informal Employment: Globalizing and Organizing (WIEGO)

European Commission, 2010. *Strategic Environmental Assessment (SEA) of the Sugar Sector in Zambia*, Contract Nº 2009/209305, FWC BENEFICIARIES - LOT N° 6. European Commission: Lusaka

FAO, 2005. *Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security*. Rome: FAO

FAO, 2011a. *The State of Food and Agriculture 2010-11. Women in agriculture: closing the gender gap for development.* Rome: FAO

FAO, 2012a. *Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security.* Rome: FAO

FAO, 2012b. *Trends and Impacts of Foreign Investment in Developing Country Agriculture*. FAO: Rome.

FAO, 2012c. *Gender and Land Rights Database: Zambia*, available at http://www.fao.org/gender/landrights/report/en/, Rome: FAO [accessed 20 May 2012]

FAO, IFAD, UNCTAD and the World Bank Group, 2010. *Principles for Responsible Agricultural Investment that Respects Rights, Livelihoods and Resources – Extended Version*

FCO, 2012. *Country Profile: Zambia*, available at http://www.fco.gov.uk/en/travel-and-living-abroad/travel-advice-by-country/country-profile/sub-saharan-africa/zambia/?profile=tradeInvestment

Friis, C. and Reenberg, A., 2010. *Land Grab in Africa: Emerging Land System Drivers in a Teleconnected World: Global Land Project Report No. 1. GLP-1PO*

German, L., Schoneveld, G. and Mwangi, E., 2011. *Contemporary processes of large-scale land acquisition by investors: case studies from sub-Saharan Africa*, Occasional Paper 68. CIFOR: Bogor, Indonesia.

GRZ, 2004. *National Agricultural Policy, 2004-2015*. Lukasa: MACO

GRZ, 2006a. *Fifth National Development Plan (FNDP) 2006 -2010*. Lusaka: MoFNP

GRZ, 2006b. *Zambia Development Agency Act.* Lusaka: GRZ

GRZ, 2006c. *Draft Land Administration and Management Policy.* Lukasa: MoL

GRZ, 2011a. *Foreign Private Investment and Investor Perceptions in Zambia 2010 Report*. Lusaka: Balance of Payments Statistical Committee

GRZ, 2011b. *Sixth National Development Plan 2011 -2015 (SNDP).* Lusaka: MoFNP

GRZ, 2011c. *Zambia Census of Population and Housing: Preliminary Report*. Lusaka: CSO

IFAD, 2012. *Rural Poverty Profile: Zambia*, available at http://www.ruralpovertyportal.org/web/guest/country/geography/tags/zambia [accessed 20 May 2012]

Kachika, T., 2011. *Women's Land Rights in Southern Africa: Consolidated Baseline Findings From Malawi, Mozambique, South Africa, Zambia and Zimbabwe*. Johannesburg: NiZA/ActionAid International

Mehta, L., Veldwisch, G. J. and Franco, J. (eds.), 2012. 'Water Grabbing? Focus on the (Re)appropriation of Finite Water Resources'. In *Water Alternatives*, Vol. 5(2)

Mujenja, F., 2012. 'Zambia: Investments in agricultural land and inclusive business models', in Liu, P., Koroma, S., Arias, P., Hallam, D. (eds), *Trends and impacts of foreign investment in developing country agriculture - evidence from case studies*. Rome: FAO

Mungandi, S. and Conforte, D., (no date). *Integration of smallholders in modern agri-food chains: lessons from the KASCOL model in Zambia*. Palmerston North, New Zealand: Massey University

Mwenechanya, J. M. , 2011. *Mid-term Review of Joint-Gender Support Programme (2008 –2011).* New York, USA: United National Development Programme (UNDP)

Nolte, K 2012 *Large-scale agricultural investments under poor land governance systens: Actors and Institutions in the case of Zambia*. Paper prepared for the World Bank Land and Poverty Conference, Washington, April 23-25, 2012

SIDA, 2008. *Sida Gender Country Profile – Zambia.* Lusaka: Embassy of Sweden

UNDP, 2011a. *Sustainability and Equity: A Better Future for All*, *Human Development Report 2011.* New York, USA: UNDP

UNDP, 2011b. *Service Delivery for Sustainable Development: Zambia Human Development Report.* Lusaka: UNDP

UN-Habitat, 2005. *Land Tenure, Housing Rights and Gender in Zambia*. Nairobi: UN-Habitat

White, B., Borras, S. Hall, R, Scoones, I. and Wolford, W. (eds.), 2012. 'The new enclosures: critical perspectives on corporate land deals'. In *Journal of Peasant Studies*, Vol. 39(3-4)

ZDA, 2011. *Zambia Investor Guide Handbook*. Lukasa: Zambia Development Agency

Appendices

Appendix 1: Key informants and FGDs

A. CASE STUDY 1: KASCOL

1. **Key informant interviews:** KASCOL Management, Workers, KASFA Executive Committee members and outgrowers

- 2 Senior Managers (2 Males, 40 +)
- 2 Middle Managers (1 female; 1 male: 40 +)
- 2 KASFA Trustees (2 males, 40 + years)
- 3 Females outgrowers (36 – 45 years)
- 3 Male outgrowers: (35-50) years
- 1 Male outgrower: (25 -30 years)

2. **Focus Group Discussions**:

- 1 Female outgrowers (8 participants) aged (30 -35 years)
- 1 Female outgrowers (6 participants) aged (36 -50 years)
- 1 Male outgrowers (6 participants) aged (30 -35 years)
- 1 Male outgrowers (6 participants) aged (36 -50 years)

B. Case Study 2: ETC Bio-Energy Limited

1. Key informant interviews:

- 3 senior managers (males, 40+ years);
- 3 middle managers (2 females, aged 30 – 45 years; 1 male, aged 45 -50 years)
- 1 male wage worker, aged 40 -45 years
- 1 female wage worker, aged between 36 – 45 years
- 1 Mpongwe small-scale entrepreneur (local business man)
- 3 female market traders (30 - 45 years)

2. Focus Group Discussions

2 groups of female spouses of ETC wage workers (6 participants; 26 -34 years)
2 groups of female spouses of ETC wage workers (6 participants; 35 - 45 years)