

**Large-scale Agricultural Investments and Livelihood
Dynamics on the Zambian ‘Sugarbelt’**

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Submitted in accordance with the requirements for the degree of

Doctor of Philosophy

The University of Leeds

Sustainability Research Institute (SRI)

School of Earth and Environment

January 2019

The candidate confirms that the work submitted is his own, except where work which has formed part of jointly authored publications has been included. The contribution of the candidate and the other authors to this work has been explicitly indicated below. The candidate confirms that appropriate credit has been given within the thesis where reference has been made to the work of others

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PhD Related Publications and Conference Presentations

Parts of this thesis have been published in the following:

Journal Papers

Manda, S., Dougill, A., and Tallontire, A. (2019). Large-scale Land Acquisitions and Institutions: Patterns, Influence and Barriers in Zambia. *Geographical Journal*.

Manda, S., Tallontire, A., and Dougill, A. (2018). Business ‘Power of Presence:’ Foreign Capital, Industry Practices and Politics of Sustainable Development in Zambia. *The Journal of Development Studies*. DOI: <https://doi.org/10.1080/00220388.2018.1554212>.

Manda, S., Dougill, A., and Tallontire, A. (2018). Outgrower schemes, livelihoods and response pathways on the Zambian ‘sugarbelt.’ *Geoforum*, Vol. 97: 119–130. DOI: <https://doi.org/10.1016/j.geoforum.2018.10.021>.

Working Papers

Manda, S., Tallontire, A.M. and Dougill, A.J. (2018). Business ‘Power of Presence:’ Foreign Capital, Industry Practices and Politics of Sustainable Development in Zambia. SRI Paper 114 (Online): ISSN 1753-1330, University of Leeds.

Manda, S., Tallontire, A.M. and Dougill, A.J. (2017). Large-scale Agricultural Investments and Institutions in Zambia: Patterns, Possibilities and Barriers. *SRI Paper 106* (Online): ISSN 1753-1330, University of Leeds.

In the above papers, I designed the research including the methodology, and analysed the data. I wrote the manuscript and all co-authors contributed to the revisions and editing of these papers.

Conference Presentations

Manda, S., Tallontire, A., and Dougill, A. (2017). *Politics of sugarcane promotion and sustainable development: foreign capital, power dynamics and policy practices in Zambia*. Paper presented at the DSA Conference Paper, DSA2017: Sustainability Interrogated: Societies, Growth, and Social Justice: 6-8th September 2017, Braddford University, UK

Manda, S., Tallontire, A., and Dougill, A. (2017). *Food Security and Sustainable Agriculture in the era of Land-grabbing: Insights from the Zambia’s Sugar-belt*. Paper presented at the University of Sheffield Conference: ‘Africa in the Era of Sustainable Development Goals.’ University of Sheffield, 22 June 2017.

Acknowledgement

I gratefully acknowledge the support, participation, encouragement and guidance of many people during the different stages of this project.

I would like to sincerely thank my supervisors, Professor Andy Dougill and Dr Anne Tallontire, for their patient encouragement, insightful advice and unwavering support throughout this PhD. I could not ask for more from an amazing supervision team. From establishing the focus and boundaries of this study, to complementary intellectual support, knowledge and experience whilst advancing contrasting perspectives to my research and writing style, they were resolute in their belief in me. Beyond academic guidance, they also remained understanding and compassionate to me and my family during difficult moments including the birth of my lovely daughters.

I acknowledge the Commonwealth Scholarship Commission for funding my doctoral studies at the University of Leeds. In extension I acknowledge the support of the Sustainability Research Institute at the University of Leeds and the Department of Development Studies at the University of Zambia for additional fieldwork funding.

Am indebted to the very many institutions and individuals that assisted me during my data collection. Special thanks goes to many government institutions for their cooperation and guidance during data collection. This includes different NGOs, think-tanks and private individuals for their time and insights as well as Zambia Sugar Plc., Chief Mwanachingwala, and Chief Naluama for welcoming me in their chiefdoms and for granting me access to the sugarcane growing communities. This includes management at the Kaleya Smallholders Company Limited and Nanga Farms who were always willing to talk to me as well as facilitate discussions with farmers. I further thank all the participants and interviewees at national, district, and community levels who sacrificed their precious time to engage in this research. Special appreciation goes to Mr Bwalya, Mr Siamabele, Mr Milambo, Ms Chile, Mrs Habulezi, Ms Simushi, Ms Mfula and Ms Lydia for their support, encouragement and companionship during data collection. This includes two foot-soldiers Dorica and Foshen – sugarcane farmers from Kaleya and Magobbo respectively for their role in mobilising participants, including my driver Jailos for his unending commentary on Zambian politics.

To my mother I say thank you for believing in me and for all the hardwork. To my late father who could not wait to see this project, I say your positive words remain impactful. To Sissy Thoko, Sissy Ta, and one 'Mad Joy' including 'Bigman PJ, Pastor Essau and one Kenneth 'Diety Boy,' thank you for all your support and may God richly bless you. I also thank my other parents: Mr J.K Miti and Grace Miti for their understanding and guidance. This includes Benjamin 'Puzzles Mendez' for his support and contributions.

Special thanks to my lovely wife Caroline and children Sibusiso Dikhaan, Kondano Mandipa, and Aliyanah Chiwoniso for their patience, love and encouragement. Their emotional sacrifice and support throughout this project provided the crucial foundational rock for me to focus on my studies. To my *bravehearts*, I say many thank you for faithfully accompanying me on this journey.

Abstract

Current discourse on “agriculture for development” generally serves smallholders in developing countries poorly: their visibility in international development and policy processes is minimal and their exclusion from large-scale agricultural investments (LaSAIs) constructed as a “problem.” While LaSAIs have brought optimism around agriculture for development, identifying what more national actors can do in sub-Saharan Africa requires further investigation. The dominant narrative is that LaSAIs, value-chain expansion and ensuing coordination schemes for smallholders are development-oriented and inclusive but these claims remain contentious in the context of national politics, power dynamics and institutional processes, and how they shape rural livelihoods and welfare.

Grounded in an interdisciplinary case study strategy that integrates the Global Value Chain (GVC) framework and the Sustainable Livelihood Approach (SLA), this thesis explores the extent to which LaSAIs impact local development and rural livelihoods among smallholder sugarcane growers in Zambia. Drawing on multiple frameworks of analysis at national, industry and local level, it takes a mixed methods approach drawing on interviews at multiple levels, together with participatory approaches and a survey at the community level to develop case studies of two structurally different smallholder outgrower schemes linked to Zambia Sugar Plc, a subsidiary of a multinational corporation Illovo Plc.. Connections are particularly made between how LaSAIs are framed in the context of national institutional and governance dynamics, inclusionary and exclusionary dynamics, local livelihoods and response pathways among smallholders, and industry practices as they relate to an agribusiness power and influence.

This study reveals four key processes that affect LaSAIs and structural transformation in Zambia. First is that possibilities for LaSAIs are created by state institutions but their potential is limited through competing policy developments and governance processes that heighten tensions between and among different institutions. Second is that emerging inclusionary and exclusionary dynamics reflect *agribusiness-state-donor* relations and that implementation of projects remains problematic for industry and local participation. Third, the livelihood analysis reveals that sugarcane cultivation does

enhance household incomes but this focus on financial capital neglects other forms of capital relevant in shaping livelihood response pathways. Schemes that enable access to natural capital such as land beside sugarcane provides greater livelihood impacts across financial capital and other benefits, but these remain low quality, and fail to produce significant path-changing gains for households. Fourth is the way policy and governance dynamics at macro-level, patterns of inclusion and exclusion at meso-level, and livelihoods at micro-level play out reflect how an agribusiness' power exploits national, regional and local domains to exert control over policy developments, industry governance and influence sustainable development – referred to as “*power of presence*.” Corporations limit smallholder participation through tight controls on production resources and structures which reflect the limits and importance of power dynamics, and domestic institutions in mediating corporate standards and practices.

This thesis provides insight into the role of national institutional and governance dynamics in LaSAIs and agricultural expansion and how buyer-grower relations shape control over productive resources and influence at local level. In so doing, it makes visible the centrality of power, politics and institutional processes in LaSAIs and how they shape policy developments, rural social differentiation and agrarian change. The analysis links the implementation and coordination of investments to how mandates, overlaps and responsibilities among state agencies can be made clear and improve decisions around resources. It provides an understanding of how actors can participate in local spaces and closer to schemes to create supportive frameworks for local participants and poverty reduction. Recognition of macro-meso-micro interdependences should inform policies, institutions and investments to enhance rural livelihoods and development, specifically measures on resource availability, access and utilisation. Policy strategies should clarify the role of LaSAIs and their relationships with local participants and key political and economic instruments should be strengthened for this purpose. State institutions should advance a state-donor-agribusiness collaboration for policy development, industry structure, and organisation of smallholder outgrower schemes. In particular, strategies and regulatory mechanisms need to be strengthened to encourage cross-sector cooperation and coordination of policy developments, social and political efforts around “agriculture for development” in Zambia and elsewhere across sub Saharan Africa.

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Abbreviations

CoC	Code of Conduct
CSO	Civil Society Organisations
FDI	Foreign Direct Investment
GRZ	Government Republic of Zambia
GVC	Global Value Chain
IPE	International Political Economy
KaSCOL	Kaleya Smallholder Company Limited
LaSAIs	Large-scale agricultural investments
MCGA	Mazabuka Cane Growers Associations
MoA	Ministry of Agriculture
NaFPlc	Nanga Farms Plc
NGO	Non-Governmental Organisation
NTAE	Non-Traditional Agricultural Exports
NUPAAW	National Union for Plantation, Agricultural and Allied Workers
OGS	Outgrower Scheme
RAI	Principles of Responsible Agriculture Investment
SLA	Sustainable Livelihood Approach
VCD	Value Chain Development
Vit.AF	Vitamin A Fortification
WARMA	Water Resource Management Authority
ZaSPlc	Zambia Sugar Plc.
ZDA	Zambia Development Agency
ZEMA	Zambia Environmental Management Agency
ZNFU	Zambia National Farmers Union
ZNSS	Zambia National Sugar Adaptation Strategy

Dedication

Caroline, Dikhaan, Mandipa and Aliyanah

Chapter 1 Characterising Large-scale Agricultural Investments

1.1 Statement of Purpose

This thesis explores the extent to which large-scale agricultural investments (LaSAIs) impact local development and livelihoods. After more than two decades, agriculture is back on the global agenda –including a global vision which connects and conflates foreign LaSAIs and local development (World Bank 2007; 2011). The post-2007 conjuncture in food-feed-fuel debate and the financial crises with resulting export restrictions and policy-induced supply shocks reinforced agriculture’s prominence in global development policy (Borras et al. 2011a). Agribusiness interest in agriculture has helped reframe global problems at national scale in poor countries such as those in sub-Saharan Africa but “these conditions alone do not guarantee the more successful use of agriculture for development” (World Bank 2007, p.23). One distinctive feature of LaSAIs is the demand among domestic and international actors for diverse productive land for food and energy crops predominantly for exports (Borras and Franco 2012). Concentrating on sub-Saharan Africa, drivers to LaSAIs include global demand growth, increased agricultural commodity price volatilities and profitability potential associated with such investments (Deininger 2013). Global commodity supply shortages have induced a belief among policy makers about the increasing risks in global food systems, raising the need for agriculture-oriented strategies that could guarantee global commodity supplies (World Bank 2007). However, the merits of this policy advance are increasingly questioned particularly in terms of how they relate to the role of national states and in delivering the frequently quoted development imperatives in host countries as well as local livelihoods among smallholders (Spann 2017; Peters 2013; Peluso and Lund 2011). These have also been questioned in the context of national politics, power dynamics and institutional processes underpinning LaSAI implementation (Peters 2013; Arezki et al. 2013).

The agriculture for development discourse as set out in the World Development Report of 2008: “Agriculture for Development” brought forth a search for models that could increase production and link in to commercial value-chains whilst guaranteeing smallholders pathways out of poverty (World Bank 2007, p1). The World Development Report promoted corporate interests and LaSAIs in plantations, estates and outgrower schemes as large-scale farming models. This promotion emerges alongside the need for “accelerating smallholder entry into agricultural markets and raising smallholder innovation and competitiveness” (p.228). LaSAIs

in plantations and estates as contract farming have been touted as presenting inclusive business models and opportunity for smallholders to tap into global markets (Vicol 2017; Peluso and Lund 2011). Thus, linking smallholders as producers to Global Value Chains (GVCs) draws on economies of scale and concentration of land into larger holdings as opposed to small-scale (Spann 2017). Converting farmers into commercially oriented entrepreneurial smallholder farming integrated as outgrower schemes is encouraged in international policy as the only viable route. Whilst underpinning this are promises of job creation, market opportunities and other livelihood and development imperatives, models that can deliver greater livelihood benefits vary and have been a source of recent scholarly efforts (Hall et al. 2017a; Oya 2012; Vicol 2017).

Contractual coordination arrangements in outgrower schemes are presented in recent reports as important forms of land control, e.g. Vicol (2017). Indeed, analyses of LaSAIs often point to large-scale land acquisitions by multi-level actors in commercial agriculture that involve the use or transfer of land ownership to investors through various processes (Borras et al. 2011a). What qualifies and gets folded as large-scale land acquisition or investment varies greatly with reports ranging from 200 to 1000 hectares sometimes 500,000ha (Cotula 2009) – what Edelman (2013) calls “hectare-centric alarmism of the land grabbing discussion” (p.488). This PhD goes beyond land aggregation in LaSAIs to include water resources, the level of sophistication and investments at farm level that departs from and alters pre-existing patterns of agricultural production. Corporate access to natural resources variously impacts rural livelihoods and households’ ability to cope with and respond to livelihood shocks (Maxwell and Wiebe 1999). Dubbed “land-grabbing” in the social justice literature, corporate expansion in African agriculture has been criticised as compromising resource rights necessary for defining local livelihoods as small-scale farmers (smallholders) make way for big farms (Hall et al. 2017b; Borras et al. 2011a). Disposessions, loss of land and water as well as risks associated with participation in value-chains means that smallholders as well as small-scale farming face an uncertain future (Hall et al. 2017b).

In sub-Saharan African, smallholders remain the backbone of agriculture accounting for 90% of its food production (Hall et al. 2017b). The connections between land and agriculture and livelihoods are strong for the majority poor people, and so are the labour dynamics. Rural poverty is high in many areas where land access and utilisation is not guaranteed (Maxwell and Wiebe 1999; World Bank 2011). Demographic, environmental and climate change pressures

mean that agriculture continues to occupy a central position in donor and public policy debate on the sub-continent. However, although agriculture employs about 65% of the labour force and accounts for 32% of Gross Domestic Product (GDP), sectoral growth remains limited (3.8% per annum) with about 25% potential yields, which builds the case for increased agro-investments (World Bank 2011). While integration of smallholders into emerging value-chains is promoted as a pathway out of poverty (World Bank 2007), diversity in production and farming systems as well as related patterns of smallholder integration means the realities are more complex than are presented in the agriculture for development discourse (World Bank 2008; 2011). For the global majority smallholders whose commercial viability and orientation is selling surplus produce in local geographies, LaSAIs channels can be exclusionary (Spann 2017; Peters 2013). Yet, despite more than a decade of research, livelihood implications of LaSAIs and the models through which they unfold have not been fully understood, and in some cases, have simply been subsumed under economic impacts (Davis et al. 2014) and food security (Deininger 2013).

Overreliance on NGO publications in academic reports, compounded by a lack of fresh empirical evidence further limits insights on how investments play out in local communities and what this means for sustainable rural livelihoods (Seaquist et al. 2014). How agro-investments can be organised and structured to maximise benefits for smallholders, particularly that “inclusive development” is not necessarily bottom-up is an interesting area of research. The frequently quoted but partial success in LaSAIs such as across employment, infrastructure and incomes (World Bank 2011) is itself ambiguous. For instance, the way LaSAIs help expand local choices and determine livelihood pathways remains under-researched. With agriculture at its core, understanding livelihood implications of LaSAIs and related models is essential for tackling poverty and addressing many of the development challenges facing sub-Saharan Africa. National and commodity focused studies that can integrate how LaSAIs play out within national contexts, value-chain organisation and inclusion, local development and livelihood outcomes as well as the way agribusiness as new actors in African agriculture shape smallholder-firm interactions and industry practices are urgently required.

This thesis explores the extent to which LaSAIs impact local development and livelihoods. It presents a comprehensive and systematic connection of multi-level policy, institutional and governance processes, to industry and local dynamics within a specific country context. It places attention on how multi-level factors interplay, gives a fuller sense of the range of issues

that determine local outcomes within a framework which integrates policy and governance, value-chain, livelihood processes, and power dynamics. By drawing on multiple frameworks, the aim is achieved by focusing on the national policy developments and governance and institutional dynamics in LaSAIs in Zambia, integrating chain elements on the production-side (terms and conditions for smallholder integration), livelihoods and livelihood response pathways (elements that interrogate land and land-based resource access, and utilisation) and examining how these dynamics influence household welfare. These elements are then situated within sectoral configurations and how a dominant agribusiness deploys its power and influence to shape national governance dynamics, industry practices, and local outcomes. This study addresses these issues through the frames of the sugar sub-sector of Zambia.

1.2 Large-scale Agricultural Investments and the Modernisation of the Zambian Sugar Industry

Zambia is a LaSAI hotspot, experiencing a “*two-wave land-grab*” since 2000: 2003–2007 as *first-wave*, and post-2008 as *second-wave* (Land Matrix 2016). The country is dubbed resource abundant (World Bank 2011), yet it is one of the poorest in the world recording 76.6% rural poverty head count by 2015 (Merotto 2017, p7). Over the past decade, agriculture has gained a high priority in Zambia due to declining copper prices. However, the majority of poor Zambians (80%) are rural subsistence farmers raising potential conflicts between rural livelihoods and a national policy focus on foreign LaSAIs and value-chain commodities such as sugar (Merotto 2017, p7).

Legal provisions such as the Land Conversion of Titles Act of 1975 which vests all land in the power of the President and the Lands Act of 1995 which allows conversion of customary land to leasehold have made it easier for non-Zambians to acquire land whilst enhancing political leverage in land deals (Taliarino 2016; Giles 2017). According to Schoneveld (2014), 12% of land in Zambia is held under LaSAIs that are larger than 2000ha. Almost 90% of smallholders work customary land and are without title, a majority of whom cultivate less than 2ha (70%) (Hichaambwa and Jayne 2014). Legal frameworks also enhanced medium-scale emergent farmers cultivating between 5 and 20 hectares and growing at a rate of 62.2% and 28% higher than that of total smallholder population (2001-2011) (Sitko and Jaye 2014). By 2014, this cohort accounted for 18% of the total farming population, controlling 57% of the total farmland in Zambia, highlighting ensuing structural transformations (Sipangule et al. 2016, p3).

Since 2001, various actors have driven land acquisition and investment. A study by Sipangule et al. (2016) placed local investors top (84%) compared to Zimbabwe (4.4%), UK (3.1%) and South Africa (2.9%) respectively. The Land Matrix (2016) reveal that 34 LaSAIs under contract represented 390,074ha or 1.6% of the total agricultural land in Zambia. However, the figure reaches 1,588,916ha when considering intended land acquisitions irrespective of negotiation status. Recently, a total of 17,800ha of new land were brought under irrigation as state (6,800ha) and private-sector investments (11,000ha) (GRZ 2017a, p62). Since 2010, the government has been keen to commercialise agriculture, marketing over two million hectares of agricultural land as farm blocks and other projects (Ahlerup and Tengstam 2015; Sitko and Chamberlin 2016). While the average land size under production is below 5% of the average size under contract, the country's share of actualised concluded deals is higher than anywhere on the region – 65% (Land Matrix 2016) compared to 83% (562,312ha) reported by Sipangule and Lay (2015, p5). These processes have seriously eroded customary land from frequently quoted 94% in the mid-20th Century to 54% in 2016 (Sitko et al. 2016), providing a fertile ground for this study.

Sugarcane has been promoted in different commodity markets as alternative to fossil fuel equivalents (e.g. biofuel, bioelectricity and bioplastics etc.). However, as one of the targeted crops for expansion, actions of the industry have increasingly under scrutiny (Hess et al. 2016). Since 2000, Zambia has witnessed a LaSAI-led global value-chain expansion and modernisation of its sugarcane industry. Preferential access to the EU markets and a supportive national policy and institutional framework encouraged export-oriented LaSAIs in sugar (Palerm et al. 2010). Domestically, donor-state collaborations have since the market reforms of the 1990s promoted free markets and reduced government involvement in agriculture for instance through the Agricultural Sector Investment Programme (ASIP). The ASIP promoted irrigation, farm power and mechanisation, agricultural finance and rural investment funds with one crucial success being *“increased role of out-grower schemes and capacity enhancement in the ministry”* (Zulu et al. 2015, p.15). State-donor efforts encouraged development/rehabilitation of infrastructure schemes, rural access roads, irrigation and market facilities, enhancing corporate participation in high value commodities such as sugarcane. State-led sugarcane cultivation is blamed as limiting the modernisation of sugar production and manufacturing in Zambia, with recent reports arguing that the real modernisation of the industry only began towards the later 1990s in response to a new wave of regional investments (Richardson 2010).

Foreign LaSAIs have led to an expansion of the area cultivated for sugarcane, increased supply chain actors including smallholders as well as expanded processing capacity (Section 3.3.2). The sugar sub-sector contributes 3-4% to GDP, 6% of total national exports and employs over 11,000, highlighting its economic importance (Kalinda Chisanga 2014). Since 2000, expansion in the sugar value-chain responds directly to investments from the South African based multinational corporation Illovo Sugar Plc (Illovo) which operates as Zambia Sugar Plc (ZaSPlc), a former parastatal and largest sugar producer in the country. Despite a decade of research on the sub-sector, there is limited focus on the policy and governance processes at macro and meso levels, and their association to local livelihood dynamics remains weak. For instance, Kalinda and Chisanga (2014) focus on sugar value-chains, growth opportunities and challenges while Richardson (2010) explores contributions of sugar investments to rural development, wage labour opportunities and wealth distribution. Others such as Matenga (2017); Matenga and Hichaambwa (2017) and Hall et al. (2017a) examine rural livelihoods more generally than on how value-chain touch down and how institutional processes induce local responses. Livelihood dynamics as they relate to different outgrower models within the sugar sub-sector have remained less explored, and so are the livelihood pathways.

Much research in Zambia has narrowly focused on impacts of LaSAIs and related land acquisitions. For instance, studies have focused on labour opportunities (FAO 2012; Richardson 2010); smallholder productivity (Sipangule and Lay 2015); incomes and employment (Ahlerup and Tengstam 2015); and agrarian relations, livelihoods and social relations more generally (Matenga 2017; Hall et al. 2017a; Matenga and Hichaambwa 2017; Kalinda and Chisanga 2014). This focus on micro-level impacts of LaSAIs has produced fewer insights into the wider policy and institutional dynamics that govern LaSAI processes. More widely, there have not been investigations into the way LaSAIs play out within the national context and how these processes shape smallholder-firm interactions and possibilities for sustainable local development. Divergences in policy and diversity in production systems and outgrower models within specific sub-sectors such as sugar require commodity-focused studies, including critical interrogations of national politics, power dynamics and institutional processes, and how they shape LaSAIs, value-chains prospects and local development and livelihoods.

This PhD provides additional insights by delving into the national policy governance and institutional dynamics that govern LaSAIs processes. The commodity-focus on sugarcane

enable crucial insights into institutional processes, value-chain dynamics and livelihood impacts across different models including industry configurations as they relate to agribusiness power and influence. Recognition of the national and industry interdependences are crucial in informing policy, institutions and investments for enhanced livelihoods and rural development and is a focus for this country and product-specific study.

1.3 Statement of the Problem

The aim of this study is to explore the extent to which LaSAIs impact local development and livelihoods. This is addressed through a focus on Zambia's national policies and institutions shaping LaSAIs and commercialisation of agriculture and industry practices as they relate to the sugar sub-sector. Although there is a fairly broad awareness that there is an agricultural expansion in Zambia and in Mazabuka which has emerged a 'hot spot' for sugarcane production (Lay et al.2018; Land Matrix 2016), literature has until now focused on broader processes in land acquisition and related legal frameworks (Nolte 2014; German et al. 2011). While state institutions facilitate land-use expansion by exploiting political, legal and bureaucratic extensions, policy developments and institutional provisions that govern these processes as well as how they shape industry practices continue to receive peripheral attention.

Studies that examine the impacts of sugarcane and the role of outgrower schemes tend to be quite general (Matenga 2017; Matenga and Hichaambwa 2017; Hall et al. 2017; Richardson 2010). Part of the challenge facing researchers has been the existence of diverse production systems and outgrower arrangements in the industry (e.g. companies, commercial and smallholder farmers), which are highly coordinated and vertically integrated (Chisanga 2012). Integrating these elements in a conceptually coherent manner is difficult but also warrants comparative assessments. Smallholder dependency on one commodity and then on one company in the district (ZaSPIC) raise questions for inclusion, market dynamics and which outgrower arrangements guarantee sustainability of local livelihoods. It also raises potential tension between single commodity concentration and a focus on diversified livelihood practices (Barrett et al. 2001). Additionally, broader trade policy such as the EU, whilst stimulating production further raise uncertainties of smallholder market access, production and implications on grower livelihoods and welfare (Richardson and Richardson-Ngwenya 2014; Nolte et al. 2012).

In Zambia, understanding how investments play out in rural geographies and customary communities (livelihood impacts) remains limited (Hall et al. 2017; Matenga 2017). There is a

lack of knowledge about LaSAIs which relates to historical state intervention that constrained private sector growth (Poulton et al. 2006) and is interlinked with a policy focus on copper as well as a concentration on traditional commodities such as maize (Zulu et al. 2015; Scott 2002; Saasa 1996). However, despite Zambia's policy focus on maize, the structural context under which growers make strategic choices in majority traditional markets and agri-food chains differs from those associated with evolving agri-food systems that emerge as highly coordinated and vertically organised (Lee et al. 2012). These knowledge gaps present a particular urgent need for systematic country-based empirical evidence to explain factors, policy processes and institutions shaping LaSAIs and ensuing practices that integrate smallholders as growers in various outgrower models and unfolding value-chain expansions. Research is also needed on the specific implications for local development, the context and conditions influencing participation of small producers in agri-food chains, and the impacts of value-chain development and LaSAIs on community and household livelihoods. How national politics, institutional processes and power dynamics shape these elements is crucial in this study.

1.4 Thesis Objectives and Key Questions

This PhD aims to explore the extent to which LaSAIs impact local development and rural livelihoods among smallholder sugarcane growers in Zambia. This is addressed through four research objectives and twelve research questions couched within a multi-level focus and mixed-method study design.

1.4.1 Objectives

1. To identify drivers and actors shaping large-scale agricultural investments in Zambia and the policy developments and institutional processes that govern them

1.1. Who are the key actors shaping LaSAIs in Zambia?

1.2 What are the specific trends, patterns and dynamics surrounding LaSAIs in Zambia?

1.3 What are the specific policy developments and institutional processes driving LaSAIs in Zambia?

2. To identify and explore industry and local factors affecting smallholder participation in sugar value-chain as a livelihood enhancement strategy in rural Zambia.

2.1 How and under what terms do farmers participate in sugar production as a livelihood enhancement strategy in rural Zambia?

2.2 What are the factors affecting smallholder engagement in sugar production in rural Zambia?

2.3 How inclusive are sugar value-chains in Zambia?

3. To explore how large-scale agricultural investments in sugarcane expansion contribute to and affect rural livelihoods in Zambia

3.1 What are the household and community livelihood impacts associated with LaSAIs and participation in sugar value-chains in rural Zambia?

3.2 What are the specific opportunities and barriers towards enhanced household and community livelihoods in sugar producing areas of rural Zambia?

3.3 What response pathways do households pursue as a result of sugarcane adoption and expansion?

4. To explore the current configuration of the sugar value-chain and how LaSAIs shape and influence governing processes in Zambia.

4.1 How has the agricultural sugar sub-sector developed and how are value-chains currently organised?

4.2 Who are the key actors in sugar value-chains in Zambia?

4.3 In what ways do LaSAIs shape and influence industry and local dynamics in Zambia?

1.5 Defining Thesis Key Terms

For consistency, this thesis employs four key concepts and this section provides indicative working definitions.

First, the concept *large-scale agricultural investment* (LaSAIs) is highly contested. Despite a decade of research, the equivocal nature of LaSAIs means studies variously pick from a wide-range of concepts that describes the same phenomenon: foreignisation of land (Zoomers 2010), land acquisition (Margulis et al. 2013); off-shore farming and land export (Sequist et al. 2010); agricultural commercialisation and large-scale land-based Investments (World Bank 2011). Varying concepts means that studies are premised on partial definitions which highlight both the multi-dimensional nature of the phenomenon and difficulties of defining it. One key feature is that various terms and choices tend to reflect possible outcomes of LaSAIs (Boamah 2014). Frequently used terms in critical literature such as “land-grabbing” are understood as being a tag-line for “describing and analysing the current explosion of large-scale (trans)national and commercial transactions” (Borras et al. 2011a, p2010). Land-grabbing is defined as the:

“capturing of control or relatively vast tracts of land and other natural resources through a variety of mechanisms and forms, carried out through extra-economic coercion that involves large-scale capital, which often shifts resource use orientation into extraction, whether for international or domestic purposes” (Borras and Franco 2013, p1725).

In practice, the term highlights both appropriation of resources by foreign investors and criticisms for their potential impacts (Stephens 2011). The concepts ‘land grabbing’ is considered analytically narrow, suggesting an element of ‘force’ whilst ignoring consensual, sometimes voluntary and deals conducted under economic compulsion of deprivation and under the watchful eye of state actors (Holmes 2014). One major limitation of the concept land-grabbing is its lack of clarity on not only the definition but also on whether any land purchase constitutes land-grabbing.

This PhD seeks to explore and understand LaSAIs as broadly defined, not predicated on the assumptions of negatives outcomes. This suggests there is no necessary character to LaSAIs (neither necessarily win-win nor do they entail dispossession or deceit), framing investments “more broadly as embedded in complex multi-scale webs of relationships shaped by power, property, and production” (Wolford et al. 2013, p199). To widen the analytical scope, I use the term ‘large-scale agricultural investments’ understood as investments in commercial agriculture that involve use or transfer of land/ownership from local to investors directly/indirectly for various export-oriented commodities – for food and energy predominantly for export. This considers not only land aggregation but also level of investments as well as well as sophistication at farm level that ordinarily departs and alters pre-existing patterns of agricultural production.

Second is *value-chain development*, understood to be the full range of activities required to bring a product/service from conception, through the intermediary phases of production, delivery to final consumers, and final disposal after use (Kaplinsky 2000). National, sub-sectoral and community level dynamics remain crucial in livelihood analyses that aim to understand firm-practices and how these shape outcomes for participating smallholders and indeed livelihoods in rural communities. This study focuses on terms of engagement as well as elements of representation, governance, knowledge exchange, firm/buying arrangements, trust and mutual respect at production-end of the chain and considers how this shapes livelihood outcomes for participating smallholders (Bolwig et al. 2010).

Third is *outgrower schemes* understood as the development of processing facilities with a core commercially operated estate, “through which small producers are incorporated into commercial value-chains” (Hall et al. 2017a, p5). Here contractual arrangements, terms and conditions provide crucial links between foreign capital and outgrowers, as conduit for local accumulation by smallholders (Oya 2012). In this study, outgrowers are linked to a processing firm which holds a nucleus estate and augments its supply from outgrowers who supply their sugarcane under different land ownership, institutional and production arrangements.

Finally, a *livelihood* is understood as a means of gaining a living which entails combining various resources and activities comprising capabilities and assets (material and social resources) crucial for a means of living (Chambers 1995). A livelihood is thus sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base (Chambers and Conway 1992; Scoones 2009). This study examines how these elements are impacted, as well as diverse smallholder experiences because of LaSAIs and smallholder integration in value-chains, paying attention to micro-meso-macro processes and how they influence livelihood outcomes for smallholders.

1.6 The Case for Interdisciplinary Approach

The push for LaSAIs and rapid expansion in sugar value-chains in sub-Saharan Africa has created complex environments within which local people pursue their livelihoods (Pritchard et al. 2017). These environments mean that local livelihoods and prospects for local development cannot be understood in isolation. These require integrated research to understand various contributing elements such as drivers to agricultural expansion, value-chain development, industry practices that determine local inclusion and the extent to which these shape livelihoods and pathways (Bolwig et al. 2008; Challies and Murray 2011) and of mixed methods that deploy both quantitative assessments as well as qualitative approaches in data collection (Johnson et al. 2007). Two key frameworks are applied for this purpose. First is the global value-chain approach/construct that considers the integration of a group of smallholder sugar producers, and second is the sustainable rural livelihoods as social-economic and environmental impacts that together shape prospects of poverty reduction and sustainability (Bolwig et al. 2010). By drawing on these frameworks, this study enables a comprehensive understanding of dynamics in one particular setting that cuts across multiple levels. In particular, this includes how policy and governance dynamics at macro and meso level shape socio-economic dynamics at micro level. Scanty existing literature on sugarcane expansion and

industry dynamics and how this relates to local development and poverty reduction raises an urgent need for integrative research which can explore multi-level interdependences and outcomes (Miller et al. 2008).

1.7 Thesis Structure

The rest of this thesis is organised as follows. Chapter 2 focuses on the literature review. The chapter situates the study within wider theoretical debates of LaSAIs and impacts at local level, and associates these to the Global Value-chain and Sustainable Livelihood frameworks.

Chapter 3 is the research design and methodology. This chapter introduces the research design and methods employed in addressing the research aim, questions and objectives. It considers the overall conceptual framework development that underpins this study and delves into specific processes of data collection and analysis.

Chapter 4 focuses on national policy developments and institutional frameworks and processes that govern LaSAIs in Zambia.

Chapter 5 is a meso-level analysis on inclusionary and exclusionary dynamics for smallholders in the sugar industry, including terms and conditions for participation. Meanwhile, chapter 6 explores micro-level impacts of LaSAIs on livelihoods and local response pathways.

Chapter 7 is the final empirical chapter that places chapters 1-3 within the wider structure and organisation of the industry and the role, power and influence of a dominant agribusiness. This chapter demonstrates how corporations deploy the *'power of presence'* to influence national policies (Chapter 4), industry and local practices as they relate to inclusion and exclusion (Chapter 5), and impact local livelihoods (Chapter 6).

Chapter 8 brings together insights from result chapters 4-7 and attempts to revisit and associate each chapter to theoretical and/or methodological implications of the study.

The final chapter presents overall conclusions of the study (Chapter 9), summarising main contributions of the study and future research prioritises.

Chapter 2 Large-scale Agricultural Investments, Rural Transformation and Development

2.1 Introduction

The rise of large-scale agricultural investments (LaSAIs) in the post-2007/2008 food-feed-fuel crises has brought forth an ongoing debate about how incursion of foreign capital in rural spheres shapes land and labour dynamics – a somewhat reformulation of the Agrarian Question. Driven by rural displacements and dispossession, the centrality of land (struggles over access, how it is to be worked, how it is owned) and the politics of labour (emergent dynamics of rural social differentiation and class formation) are once again at the fore of contemporary agrarian political economy debates as well as policy-making interventions. Contested debates about LaSAIs across sub-Saharan Africa mean that asking about the nature, character and interpretations of these processes and how they are assumed to play out and operate is important if the “agriculture for development” imperatives are to be realised.

Growing global interest in corporate agriculture and food security; new global, regional and national commitments to investment in the agricultural sector; and the emergence of new actors in this expanding policy and research sector raise the need for systematic studies that can ask how LaSAIs, and the politics of land and labour play out within national contexts. Crucial also is the need to look critically at which, and whose narratives are being advanced, and why? Debates on elements of the agrarian questions such as land and labour is highly relevant to rural Zambia, where livelihoods for agricultural communities such as those in the sugar sub-sector have been shaped by changes driven by LaSAIs. This chapter provides a context to the study by situating the current research within the agrarian political economy literature.

2.2 Land, Labour and the Agrarian Political Economy

Despite theoretical tensions, and complexities in its reformulation and application, much of classic agrarian political economy literature resonates with, and remain useful for, looking into the current surge in corporate agriculture. Recent studies such as those by Akram-Lodhi and Kay (2010) suggest engaging debates around LaSAIs as they relate to land and labour requires rigorous and flexible frameworks that permit country-specific analyses of the “material conditions governing rural production, reproduction and the process of agrarian accumulation

or its lack thereof, a process that is located within the law of value and market imperatives that operate on a world scale” (p.255). This call necessitates a focus on capitalism and its development. Capitalism points to a system of production and reproduction anchored firmly in social relation between capital and labour. Whilst capital exploits labour for profit and accumulation, labour works for capital for a means of subsistence, which in the agrarian political economy points to “*the social relations and dynamics of production and reproduction, property and power in agrarian formations and their processes of change, both historical and contemporary*” (Bernstein 2010, p.1). In classic political economy literature, the centrality of Marx’s Capital, Polanyi’s Great Transformation, or Schumacher’s Small is Beautiful points to struggles over land, alongside questions about fragmented classes of rural labour. Linked to these are arguments that capitalist agrarian changes proceed by class differentiation in the country side (Lenin 1973); dispossession or displacement of people from the land ensues from capitalist intrusion into the country side, which in turn provokes political reactions and counter movements (Polanyi 1944); primitive accumulation is an ongoing, uneven process that accompanies capitalist development; and that part of social outcomes of land deals point to dispossessed peasants who become surplus people (Li 2011). Clearly, original translation of the agrarian question concerned itself with how the transition of capitalism shapes pre-capitalist agrarian social formations and transforms, displaces or eliminates them, by the emergence of capitalist social relations of production – the basis for the development of productive forces in farming (Bernstein 2006). This PhD draws on these perspectives as gateway to asking what is happening in the world of LaSAIs within the national context.

Contemporary development policy and practice has tended to translate classic views into doctrines of development as strategies for modernisation and accumulation (agrarian transition and industrialisation). For instance, the 1950s/1960s witnessed state interventions aimed at expanding domestic markets and boosting domestic demand for improved income distribution and poverty reduction. As Akram-Lodhi and Kay (2010) notes, this view on expanding domestic markets has been stretched into promotion of “agricultural export-led strategy for rural accumulation, deepening agricultural integration into global economic flows and agro-food value chains” (p.257). Underpinning these processes are policy conditionalities of the international development institutions which point to private-sector development, access to foreign exchange, and a boost to rural productivity and non-traditional agricultural exports (NTAEs). LaSAIs have thus been argued to be effective in enhancing agricultural profitability in rural economies, but these processes have been subject to theoretical tensions, and political

complexities (World Bank 2007). For instance, globalisation processes have implications on land tenure systems and labour regimes some of which might be less capable of maintaining a sustainable livelihood. The suggestion in critical perspectives which is now dominating the land grab debate is that expansion in agricultural exports (NTAEs) alter land, labour and capital intensity of production, reconfiguring rural production processes, including cropping patterns in ways that produce a variety of farming and social relations (Watts 2012; Akram-Lodhi and Kay 2010).

In extension, rather than an agrarian question of capital, Bernstein (2006) suggest an existence of an agrarian question of labour – the former believed to subsume the interests of the latter. Evident in this body of literature is the centrality of the population, production and political power (e.g. in the formation of classes of agrarian capital and labour) (Lenin 1899; Kautsky 1899) on the one hand, and how agrarian transition shapes accumulation for industrialisation. However, regulation of global commodity chains, agribusiness expansion, and agricultural trade and its regulation mean that any incursion of foreign capital in agrarian regions would not only intensify these processes but also produce unevenness and variations in the very land and labour relations than is assumed in classic agrarian question. As Bernstein 2006) notes:

“Agriculture in capitalism today is not synonymous with, nor reducible to, farming, nor is it constituted simply as a set of relations between agrarian classes (landed property, agrarian capital labour), as in the ‘classic agrarian question. Rather, agriculture is increasingly, if unevenly, integrated, organised, and regulated by the relations between agrarian classes and types of farms, on one hand, and (often highly concentrated) capital upstream and downstream of farming on the other (p.454).”

I draw on these views to understand how contemporary LaSAIs produce struggles over land on the one hand, and processes of class differentiation and their reproduction on the other. In exploring land and labour processes as they relate to rural livelihoods, four key issues remain central: 1) social relations of property (who gets what?); 2) social divisions/organisation of labour/work (who does what?); 3) social distribution of the product of labour (or income) (who gets what?); and 4) reproduction of producers and non-producers (social relations of consumption, reproduction and accumulation) (what do they do with it?). As Borras and Franco (2012) note, land-based social relations vary from one agrarian setting to another, which raises challenges for conceptual and empirical mapping of the nature and direction of land use change – which raises the need for cross-scale analyses that point to local pathways (Section 2.6

extended in Section 8.4). This produces diversity in the dynamics of land use changes and implications for different social groups. Development researchers face challenges of how to narrate these contradictory changes in a conceptually coherent fashion and in increasingly heterogeneous rural populations.

Borras and Franco (2012) have raised concerns that what is folded into differentiation processes of dispossession that form part of everyday dynamics of accumulation on the one hand, and those that reflect new forms of land grabs remains unclear, raising the need for more nuanced empirical research and advocacy. Indeed, a focus on land and how power relations shapes and fragments political struggles of labour are only part of the many processes of agrarian transformation – and they matter differently in different areas. However, of important concern is how and the extent to which smallholders and their political struggles over land and labour are or have been reconfigured in the era of LaSAIs and neoliberal globalisation (Akram-Lodhi and Kay 2010). While it is necessary to critically explore and understand how production, politics and processes of accumulation contribute or constrain agrarian transitions, attention in the analysis of the development of capitalism in agriculture, the way it plays out and its implications on local agriculture development such as in sub-Saharan Africa has been thin. This PhD attempts to close this gap.

2.3 Agri-food globalisation and Smallholders in Developing Countries

The past decade witnessed intensified commercial pressures on land in sub-Saharan Africa in areas such as tourism, national parks and extractive industries (Cotula 2012). This PhD goes beyond binaries of land-grabbing and commercial agriculture to investigate diverse realities of LaSAIs including: agrarian and tenure relations, history, geography, agro-ecology specificities (Hall et al. 2017a). These are crucial in exploring emerging political struggles over land and labour, sustainable and inclusive pathways of commercialisation in their entirety.

International food production, trade and consumption have been considered within specific institutionalised world historical conjunctures, i.e agri-food globalisation and food regimes (McMichael 2009). There is more that can be said here but suffice to say that the rise of global (and industrial) agriculture point to not only industrial basis for technical change, and formation and growth of global agriculture markets, but also changes in the agrarian sector as an object of national and international policy including agricultural modernisation alongside series of food regimes (Watts 2012; McMichael 2009). For instance, the post-1954 era saw agricultural modernisation in the global south, intersecting technical innovation and state-centered

development strategies (e.g. the Green Revolution political and geopolitical movements). Reardon et al (2009) argues two key economic processes have strengthened this transition.

First is investments in various agri-food industry segments, enabling a shift from traditional small-scale informal agri-food industry to formal sector larger farms (Reardon et al. 2009). Second, includes structural transformations shaped by trade liberalisation, private-sector investments in, and consolidation of, processing and retail, leading to the so-called “supermarket revolution” and the expansion of fast food chains (Reardon et al. 2009, p.1717). The centrality of this neoliberal corporate food regime points to agro-export expansion, institutionalisation of markets and property relations under the guise of free trade, food security and production efficiencies (see McMichael 2012). Studies show structural transformations induced organisational and institutional changes via the rise of vertical coordination (e.g. contracts and market-linkages) and private grades/standards in which smallholders participate (Swinnen 2007; Reardon and Barret 2000). Landmark studies such as those by McMichael (2012) and Baglioni and Gibbon (2013) interpret these global events as “symptomatic of a crisis of accumulation in the neoliberal globalisation project” (p. 681). Financial power and its articulation in new productive investments (agricultural lands), they argue, highlight direct expressions of wider economic crises with important consequences across sub-Saharan Africa. However, rising global food prices, demand growth, environmental and social concerns associated with LaSAIs means what gets folded into contemporary neoliberal corporate agriculture debate is variegated, producing a multiplicity of research areas. How, and what changes in land use and property relations emerge because of LaSAIs and adoption of NTAE crops such as sugarcane remain poorly understood, particularly that what constitutes a land grab is unclear and that these do not always lead to smallholder expulsion from their land. Borras and Franco (2012) note that what seems to matter in political economy literature include the international and transnational character of land deals, crops being farmed, terms of the new relations of property, division of labour, distribution of incomes and patterns of capital investments (Borras and Franco 2012). However, how the politics of changes in land use, property relations and how labour relations unfold under a variety of conditions as well as links between them remains an area of research interest (Borass and Franco 2012; Watts 2012; Akram-Lodhi and Kay 2010).

Decades of research however say more about wider industry transformation than the transmission effects of these changes on smallholders and local economies (Lee et al. 2012).

For instance, despite being central to classical agrarian studies, contemporary application in international political economy literature has largely ignored land and its transformation. These dynamics present important consequences particularly that companies tend to source from smallholders in the contexts where the latter dominate agrarian structures (Reardon et al. 2009). In this regard, social, political, cultural and economic contradictions underpinning global capitalism have opened opportunities to multinational corporations to create large-scale industrialised farms in sub-Saharan Africa, and thereby disrupting rural labour and land practices. However, a focus on global consumption, trade, labour, land, and future directions witnesses in recent literature makes it hard to see social relations on the ground. As Fukinish (2014) alludes to, overlooked are the impacts of modernisation of agriculture, incomes or technological diffusion and innovation in local spaces and how growth in demand for local products lead to changes in the smallholder economy. This PhD evaluates these knowledge gaps and informs the debate on agricultural expansion, value-chain integration and local welfare. Since inclusion or exclusion in value-chains by local communities might neither be desirable nor guarantee prosperity (McCarthy 2010), a focus on national dynamics advanced in this PhD provides insight on smallholder experiences, their role and position including prospects for local development in the transforming land and labour relations.

2.4 The Rise of Contemporary Large-scale Agricultural Investments

2.4.1 Contextualising Land Rushes: Evidence of the Past?

Past research shows the extent to which the current surge in LaSAIs reveals historical continuities and conjures violent enclosures of commons as capitalist expansion (Cotula 2012; McMichael 2012). However, little is known about how the current land rush differs from historical forms of land enclosures, or how the latter sets the stage and shape the character of the former. There is a growing interest among international development institutions, policy makers and scholars about contemporary LaSAIs and impacts on local development. A focus on impact and outcome assessments as well as processes of land acquisition (Vermeulen and Cotula 2010; Schoneveld 2017) is dominant in literature given persistent underdevelopment and low sector investments across sub-Saharan Africa (World Bank 2008). However, to many social commentators, the main pessimism in the contemporary ‘land rush’ concerns lies in the evidence of the past.

In sub-Saharan Africa, a large set of literature exist on colonial enclaves and land enclosures in indigenous people’s lands, but spatial dynamics and experiences vary. For instance, despite

being a huge territory with better agro-ecological conditions, Zambia avoided serious uptake of its land during colonialism on scales experienced elsewhere (e.g. Zimbabwe). Potts (2013) relates this to Zambia's geographical location and its vast size. This feature was to have a bearing on subsequent spatial dynamics in land rush and the Zambia's land abundance narrative frequently quoted in political and economic commentary (World Bank 2011). It is thus less surprising that the contemporary land-grab centres on sub-Saharan Africa (Deininger 2011) despite variations in investment intensity (Schoneveld 2014).

The post-independence era witnessed another twist in land expansion through state-driven commercialisation schemes (Cotula 2012). For instance, millions of hectares were converted into schemes between 1965 and 1990 in commodities such as cotton and groundnuts (Niger basin); Sesame and Sorghum (Sudan) wheat (Tanzania) and privatised ranching schemes (Kenya and Botswana), together with forest and mining concessions (Congo basin) (see Alden-Wily 2013). Driven by enhanced unionisation and labour legislation in the 1960s (Tiffen and Mortimore 1990), agribusinesses veered away from plantation models to long-term contractual relationships with local suppliers (UNCTAD 2009). Schemes and ventures however have not significantly transformed local production or create sufficient jobs (Alden-Wily 2013; Potts 2013). These concerns endure through to today and this study aims to explore some of these realities.

One enduring legacy of these changing land tenure processes in Africa is how historical land arrangements shape current legal pluralism in tenure relations with one outcome being the relegation of vast customary land claims in favour of statutory tenure (Jayne et al. 2014; Arezki et al. 2013). Current developments suggest a new shift towards greater agribusiness involvement in agriculture through direct land accumulation, the so-called "contemporary land-grab phenomenon" in Africa but this has important consequences on local livelihoods and welfare including land and labour relations as will be shown in this study.

2.4.2 Understanding Contemporary Land Grabbing

2.4.2.1 Data and Methodological Challenges

Plenty of claims with increasingly high and contradictory statistics about LaSAIs and land deals are being communicated in academia and elsewhere, mounting fears of exaggeration as well as under-reporting (Edelman 2013; Oya 2013). Recent research shows that methodological and data deficits means accurate quantification of land acquisition is difficult, leading to duplication

of statistics (Oya 2013). Similar and questionable figures have frequently been quoted in the literature, making new outcome assessments difficult (Schoneveld 2017) with others arguing that these entrench simplistic and counter-productive narratives (Schoneveld 2014). Data sources such as the Land Matrix are also said to face similar challenges (Schoneveld 2014; Nolte et al. 2016). Oya (2013) report that opacity and unreliable publicly accessible information and subsequent reliance on media blogs/reports raise selection biases, with others reporting that these face disaggregation challenges which relate to where planned deals, under negotiations, unknown or failed are insufficiently distinguished (Schoneveld 2014).

One outcome has been that claims are premised on partial analyses which either narrowly define what land-grabbing is or assumes holistic approaches that point to global shifts in economic and geographical relations. Many studies have been based on self-reported quantitative data analyses, which raises questions about what is being measured with limited potential to provide insights into the nature and dynamics of LaSAIs. To Edelman (2013), the use of area-based aggregation is even problematic in that it conceals essential elements such as capital investments, supply-chain control, land and labour relations. Frequently, evidence from national and project inventories, interviews with third-party sources, and other government records online, media reports and blogs continue to be quoted in academia (Table 2.1). Reliable inferences such as on size of land deals, investment volume and social-economic impacts remain missing (Arezki et al. 2013). Continued negative publicity and counter-movements against LaSAIs means national data tend to be conservative. Divergences in what is being reported from past studies have revealed more about the methodological challenges of researching a complex phenomenon shaped by diverse multi-level actors (Oya 2013; Edelman 2013). This study explores national trends and patterns in LaSAIs within the national context, with an analytical focus on much marginalised land and labour dynamics.

2.4.2.2 Investment Scope, Trends and Patterns

Little remains known about actual scope, trends and patterns of farmland investments in sub-Saharan Africa. The analytic focus in many studies has been on social-economic impact and less often environmental implications of LaSAIs than on wider dynamics in trends and status of investments (Borras et al. 2011a). Furthermore, little scholarly attention is placed on how value-chain commodities interplay with LaSAIs in different social contexts. Over-reliance on media, NGO and government reports as well as incomplete global database such as the global observatory Land Matrix has led to limited insights on actual scope and trends of LaSAIs in

Africa (Table 2.1). More widely and as Baglioni and Gibbon (2013) observe, there appears a tendency to equate investment scale merely to land size as opposed to the level of investments and farm sophistication.

Studies have reported on land-based investments in extractive industries, tourism including national parks but these have been subordinated to investments in farmlands. Land-based investments whether long-term leases or outright purchases generate different pressures and raise varying issues from those happening elsewhere. For instance, investments in farmland targets land itself as opposed to sub-soil resources (e.g. mining) which partly explains the intensified LaSAI focus in literature (Schoneveld 2014; World Bank 2011). This study builds on and contributes to work in land-based investments within the national context. Knowledge on investment practices in production spaces is vital to avoid marginalisation of various social groups and account for the various socio-economic trajectories of investment outcomes.

Table 2.1: Land acquisition claims in sub-Saharan Africa (Author’s compilation).

<i>Source</i>	<i>Period</i>	<i>Scope (million hectares)</i>	<i>Data source</i>
The Economist (2011)	2001-2011	41	External data sources from the World Bank and internet sources
IFPRI	2006-2009	9.1	Media reports
Land Matrix (2012)	2007-2012	56.2	Global Observatory
Friis and Reeberg (2010)	2008-2010	51-63	International Land Coalition (ILC) media reports and blogs
World Bank (2010)	2008-2009	39.2	Country project inventories, media reports on GRAIN blogs
Cotula et al. (2009)	2004-2009	2.5	Media reports and stakeholder interviews

Schoneveld (2014)	2005-2014	22.73	Government records, media reports and research publications
Nolte et al. (2016)	Snapshot of the Land Matrix database taken on 25.4.16	10.0	Media reports, company sources, research papers, policy reports, government sources and personal information (concluded deals)

Many studies on LaSAIs and related local tenure dynamics face numerous challenges including legibility problems. Differences have emerged between studies that consider deals over 1000ha (Cotula et al. 2009), over 2000ha (Schoneveld 2014); and those interested in land demanded (Georgen et al. 2009) and land allocations (Deininger et al. 2011). More widely and to Cotula (2012), investments outside agriculture continue to receive low media and scholarly attention, with possible under-reporting. He suggests that the much-touted regional distribution and focus on Africa might actually stem from this media and scholarly interest. Most studies however agree that an accelerated process of land acquisition is evidently in motion as Nolte (2014) asserts: “[e]ven if we assume that figures are blown up and that the implementation of these deals is slow, we can assert that we are talking about a real phenomenon” (p.698). A wider agreement in literature however is that sub-Saharan Africa, including Zambia, is a key investment destination (World Bank 2011). LaSAIs in Zambian sugar sub-sector represents an important case for a study for a number of reasons. As it is across some of the sugar producing countries in southern Africa such as Malawi, Tanzania, Mozambique, South Africa, including Swaziland – as footprints of Illovo Sugar Plc – sugarcane has particularly gained policy and investor attention as a successful and profitable NTAE crop for smallholders. Massive investments into the region dubbed ‘Big Sugar’ have generated a somewhat of a regional concentration of foreign capital (Richardson 2010), sometimes even for unpopular reasons (ActionAid 2011). Dubbed land abundant and an important investment destination, Zambia is fittingly relevant for a study interested in asking what is happening on the world of LaSAIs and global value chain commodities such as sugarcane.

2.4.2.3 Drivers to the Contemporary Land Rush

Literature on land grabbing frequently cites changes in global supply and demand growth for agricultural commodities (market forces) as key drivers to LaSAIs (World Bank 2011a). A

wide-range of studies report the heightening demand for agricultural land and surge in agro-investments stems from the recent 2007-2008 global fuel-feed-food crises (Borras et al. 2011; World Bank 2011). Emerging prospects in global food and energy markets is further reported to have driven investors to seek alternative cheap fertile land for industrial food and biofuel feedstock plantations (Schoneveld 2017). Whilst government concerns about long-term food and energy security (supply constraints) has seen investments aimed at securing land and water resources in the event of global commodity crises, corporate actors arguably perceive profitability potential (World Bank 2011). The latter is seen to relate to financialisation of agriculture as actors respond to transformations in global supply and demand of agricultural commodities (FAO 2010).

Demographic changes, growth in incomes, changing diets as well as price volatilities associated with food and energy commodities have presented land as a desirable asset for investment whilst acting as stressors (Deininger 2013; Barret 2013). Studies such as those by Scheidel and Sorman (2012) point to declining fossil fuel stocks and a global transition towards renewable energies as key driver to land acquisition (Scheidel and Sorman 2012). In response, national as well as diverse international actors (e.g. agribusinesses, investment funds, and government agencies) have targeted investments in the so-called ‘empty,’ ‘underutilised,’ or ‘unproductive’ land as alternative agricultural production zones (Deininger 2011). Prospects for capital formation that can possibly support national agricultural modernisation and rural poverty reduction have created a prospective optimism among national governments. According to Wolford et al. (2013) ‘the state’ is a key player on LaSAIs but never operates with one voice. However, missing strong and clear industrial policies in most host economies adds to the wider challenges of LaSAIs (Fukinish 2015). This case study develops an approach that focuses on national institutional and stakeholder interaction with LaSAIs and related coordination as well as implications on sectoral practices and local experiences.

2.4.2.4 Who is Investing in African Farmlands and in what?

Literature on land-grabbing draws attention to international government-backed entities such as those from the Gulf, Asia and western investment funds. Reports also include private actors (e.g. agribusinesses, agri-food companies), sovereign wealth funds, and private institutional investors (e.g. banks, pension, hedge and private equity funds) (Baglioni and Gibbon 2013; Zoomers 2010; OECD 2010). A study by Schoneveld (2014) finds that of 520 projects, 102 (13.9%) of the total area acquired had a local operator which he says is “*highlighting the*

critical enabling role of international capital in driving large-scale farmland investments” (p.40). other investors are said to emerge from traditional investor countries such as those from Europe, Asia and North America. Despite clear international imperatives to who is investing in sub-Saharan Africa, a number focusing on intra-regional dynamics have reported interesting trends (Hall 2011; Cotual et al. 2009; World Bank 2011), providing a foundation for this study.

The nature and complexity of land transactions and a lack of readily available public data have made it difficult to accurately understand who really is involved in LaSAIs in sub-Saharan Africa. To Cotula (2009, p.659), *“implementation of large land deals typically involves a range of players (e.g. possibly lenders, insurers, contractors and suppliers) who may be located elsewhere or headquartered in one country but receiving capital from other countries.”* Studies such as those by the World Bank (2011) and Cotual et al. (2009) report the predominance of private agribusiness deals, but go further to say that the difference from state and non-state enterprises may be blurred. Continued lack of data on equity structures makes it difficult to provide evidence of ownership structures. In Zambia, the Land Matrix (2016) notes significant differences in the scope of land acquisition where domestic investors participated as opposed to international (Section 1.2).

While investment focus in LaSAIs varies but broadly falling into production, investments, speculation or preservation, many studies focus on investments (Wolford 2012). Some of these relate to establishment of agricultural production in diverse value-chain commodities (Baglioni and Gibbon 2013). Driven by corporate agro-export industry and complex global value and supply chains, the focus has largely been on the production of food and biofuels and less of forestry (Schoneveld 2014). This PhD focuses on large-scale land-based investments in agriculture and within an industry setting, the latter linked to the ‘Big Sugar’ investment waves that underpinned sugarcane expansion in sub-Saharan Africa in the past decade.

2.5 Debates in Contemporary Land-based Agricultural Investments

2.5.1 LaSAIs, Views and Unifying Narratives

Narratives on LaSAIs are largely contested between the social justice (protecting localised livelihood/food systems and sustainable resource exploitation) and private sector perspectives (advancing yield expansion and opportunities associated with agricultural modernisation) with diverse intermediary positions. Land tenure and how national governance systems interplay to safeguard against negative consequences of LaSAIs feature prominently in the ‘resource-grab’

literature. Some of these examine customary property regimes as they relate to legal status (Amanor 2012; German et al. 2013); the role of the state (Lavers 2012) and domestic elites and power dynamics (Fairbairn 2013; Boamah 2014); and local counter movements (Moreda 2015) and outcome determinants (Schoneveld 2017).

Value-chain development and market approaches seeking to overcome barriers and exclusion of smallholders in agriculture is probably one key development shift in the past few decades. The dominant perspectives about LaSAIs point to opportunities for increased yield growth under enduring technological advancements, reflective of the neo-classical/growth models (Harris 2000). Emphasis has been placed on agro-expansion, growth and smallholder integration into supply chains believed to lead to poverty reduction (Schminhuber et al. 2009; Veltmeyer 2011). This view justifies itself in persistent poor agricultural yields in sub-Saharan Africa alongside food security concerns (World Bank 2010). A key concern among researchers and policy actors however is that LaSAIs rarely engage into food crops and where they do the focus has been on export markets (Schoneveld 2014). However, given sustainability challenges, studies within this perspective have highlighted implications of entropic limits of economic systems (Gerogescu-Roegen 1971), and the impracticality of unlimited growth (Daly 1991; 1996). An ecological-economics perspective has thus been adapted to agricultural production and biophysical elements of agro-expansions which presents a less ambitious approach to agricultural expansion and resource exploitation.

Contrasting perspectives such as the ecological perspective argue that anthropogenic production and consumption are bounded, and agricultural expansion subject to biophysical principles. LaSAIs arguably strains eco-systems through widespread soil degradation, water depletion, and bio-diversity loss *etcetera* (Hobbs and Harris 2001). Of concern is the sustainability of LaSAIs and impacts on future development and livelihood prospects. However, researchers have challenged the feasibility of an ecologically sustainable agriculture and how it can be made to support a growing population such as in sub-Saharan Africa (Harris 2000).

Crucial in resource-dependent communities such as those in sub-Saharan Africa is how natural capital feeds into commodity production with international value rather than local, sparking displacements, resource dispossessions and sustainability concerns (Alden-Wily 2012). Exploitation of natural capital affects sustainable claims of social justice. The way assets are combined or interchanged as well as relationships between different capitals is a candidate for

multiple explanatory angles in the literature on sustainable livelihoods (Bebbington 1999; Scoones 2009). Studies such as Bebbington (1999, p.2012) emphasise livelihood assets as “*vehicles for instrumental action (making a living), hermeneutic actions (making living meaningful) and emancipatory action (challenging structures under which one makes a living).*” However, the argument is that natural capital cannot be substituted for any increase in other forms of capital with LaSAIs often reported as negatively affecting biodiversity and ecosystem services including depletion of freshwater and soil nutrients which affects livelihoods and development (Voget-Kleschin 2013).

Furthermore, LaSAIs reportedly destroy local livelihood systems and affect adaptive capacity. Suggestions are that LaSAIs necessitate opening-up of marginal and new dwelling and production lands for subsistence, which raises potential for social tensions (Guttal et al. 2011). Comprehensive understanding of the impacts of LaSAIs requires going beyond simply classifying diverse livelihood strategies, assets and portfolios at household disposal, seen as weaknesses at the centre of livelihood discussions. As Scoones (2009) notes, it requires engagement with markets, political and power processes; climate change as well as long-term shifts in rural economies, including macro-processes which bear on land and labour processes for rural livelihoods (Scoones 2009). While responses such as the social justice and food sovereignty agenda (e.g. La Via Campesina) promulgate small-scale production as sustainable agricultural systems, dealing with livelihood impacts of LaSAIs requires not only a conceptual bridge that can inform macro-theoretical analyses – some sort of a middle ground (Doward et al. 2009) but also an understanding of the institutional environment within which they play out (Bolwig et al. 2010). In Section 2.6 I discuss the importance and novelty of this cross-scale analysis, which I further assess in Section 8.4.

The centrality of the land-grabbing debate thus points to land as a right, a productive, and rights fulfilling asset whose exploitation arguably unlocks other rights. It also points to how land is worked to improve the well-being of the majority poor connected to natural resources (De Schutter 2011). This necessitates a departure from the instrumentalist view of LaSAIs in favour of small-scale production. Food sovereignty is thus considered a right, and access to land is core (Murphy 2012). LaSAIs reportedly threaten land rights and hampering social welfare particularly where governance systems are weak and welfare schemes inexistent (Golay and Biglino 2013). This perspective considers the importance of a legal institutional framework in upholding the rights, under the assumption that there are clear bearers of rights that can pursue

their fulfilment and the need to respect and protect these rights. In sub-Saharan Africa where institutions are characterised as weak, an understanding of the way national frameworks play out becomes crucial to grasp and predict investment outcomes. Drawing on this background, this PhD considers terms and conditions under which growers participate in sugarcane production and how agribusiness power and influence within the same industry setting shapes sector and local practices including gains to local participants. A focus on land and labour relations necessitates power analyses on how they shape production and distribution of value.

There are arguments that LaSAIs and associated development outcomes largely depend on domestic institutional and legal frameworks that shape outcomes (Wolford et al. 2013a; World Bank 2010; Kirsten and Sartorius 2002), including models within which foreign capital unfolds (Hall et al. 2017a). Thus, where state capacity is weak and property rights ill-defined, LaSAIs are more likely to lead to negative environmental and livelihood outcomes. Weak legal and institutional frameworks have been identified as one of the key explanations why land grabbing concentrates in poor countries such as in sub-Saharan Africa (Arezki and Byree 2011). As such, recent studies such as those by Hules and Singh (2017) echo the need for institutional analysis, as provided in this study to illuminate the way LaSAIs play out. Institutional processes consider how prospects for rural livelihoods depend on relations of participation and indeed non-participation in value-chains at local level (Kaplinsky 2000; Challies and Murray 2011). Chains deliver risks and opportunities whilst participants tend to be caught differently. The way participants are incorporated and integrated greatly influences labour relations and livelihood outcomes but vary greatly. This PhD offers holistic insights into these elements by examining interdependences between national policy developments and institutional processes, industry practices as they relate to the sectoral configurations, inclusion and exclusion, livelihoods and welfare as they relate to land and labour dynamics. The way these reflect wider policy and institutional dynamics relate to the role of the state, and how the ‘agriculture for development’ agenda has been articulated within the national context. The following section begins to describe how agriculture has been folded back into national development agenda to shape approaches and narratives of agriculture.

2.5.2 Reinserting Agriculture Back on the Development Agenda

Since the mid-2000, agriculture has been promoted in international development (World Bank 2008). Driven under the auspices of “Agriculture for Development” and from a “land development” perspective, international financial institutions such the World Bank including

institutional and philanthropic organisations (e.g. Gates Foundation’s Alliance for a Green Revolution in Africa/AGRA) variously support agribusinesses. The leading argument is that more agro-FDI present African states possibilities to ‘modernise’ agriculture and empower smallholders through diverse value-chain opportunities (World Bank 2008).

In the dominant agriculture for development discourse, “[t]he emerging new agriculture is led by private entrepreneurs in extensive value-chains linking producers to consumers and including many entrepreneurial smallholders supported by their organizations” (World Bank 2007, p8). National states are urged to promote “competitiveness in the agribusiness sector and support the greater inclusion of smallholders” (p8). A key concern in agribusiness expansion has been land concentration into larger land-holdings, driving industrial actors. The argument for smallholders is that powerful agribusinesses can be exclusionary rather than inclusive (Akram-Lodhi 2013). Whilst value-chain participation shows some positive contributions for a few (Bolwig et al. 2009), evidence remains mixed with some studies highlighting social security concerns (Pegler 2015). Studies such as those by Sexsmith and McMichael (2015) argue that incorporating smallholders into agribusiness supply chains as contract labour or where they are compelled to migrate out of farming reflect enduring legacies of depeasantisation (see Section 2.2 for classic formulations of peasants and capital development). Agribusiness power and influence that shape micro-level agriculture and development dynamics remains a key concern in critical agrarian literature (Bernstein 2006; 2010; Franco and Kay 2010; Rutten et al. 2017; Hall et al. 2015; Gingembre 2015). And how agribusinesses influence, and shape sectoral and industry practices and local-level experiences thus requires urgent attention.

Insufficient integration of smallholders into global markets has been problematised and increasingly tied persistent rural poverty in poor countries (Kirsten and Sartorius 2010; World Bank 2008). This Private Sector Development perspective emphasises an agriculture and rural poverty reduction agenda directed by private entrepreneurs in extensive value-chains that link poor producers to GVC markets (World Bank 2008). Organisational arrangements such as contract farming in general and out-grower schemes are thus becoming familiar features in sub-Saharan Africa (Dubb 2016). In these development accounts, smallholder inclusion is presented as desirable, and realities on the *global-local value-chain* intersection somewhat inconsequential (Deininger 2011). While efforts are now being made to explore grower experiences, evidence remains mixed (Reardon et al. 2009; Barret et al. 2012). A major

weakness in many past studies on value-chain expansion has been the treatment of participants as homogenous. An emphasis on macro-expansion compounded by a crucial disconnect between sectors in national policy means micro-level smallholder experiences in agriculture remain largely ignored. Existing literature suffers from its focus on resource access and utilisation under broader narratives of ‘resource-grabbing’ (Hess et al. 2016; Matavel et al. 2016) and transforming political-economy of the industry (Dubb 2016). Industry organisation and practices, which affect production resources and forms of smallholder inclusion remain less understood. Complexity in production systems, outgrower arrangements including diversity in national contexts challenges generalisations about prospects and experiences for smallholder inclusion or exclusion including potential outcomes.

While there are some exceptions, specific country policy and institutional dynamics which might have profound effect on the outcomes of LaSAIs remain insufficiently accounted for in literature (see Schoneveld 2017). Studies are either disjointed and/or narrowly premised on partial analyses of LaSAIs which again insufficiently account for diverse multi-level factors that shape investments outcomes. Some of these relate to legal/institutional governance of land access in local areas (Burnod et al. 2013); employment potential (World Bank 2011); impacts of land acquisition on indigenous communities in the context of livelihoods and environment (Kusiluka et al. 2011); and in rare occasions implications on gender/inequalities (Behrman et al. 2012). Once again, for the global majority smallholders whose ‘commercial viability’ and orientation is selling surplus produce in local geographies, these channels are said to have exclusionary effects (Spann 2017). However, micro-level processes cannot be understood in isolation of meso and macro dynamics.

Past studies have reported that chain requirements (e.g. quality standards) are not always beneficial. There are challenges associated with smallholder participation (Maertens and Swinnen 2009; Gibbon 2003), suggesting a need for more commodity-specific research to examine the nature and dynamics of chain participation as well as implications on livelihoods. Although much is theorised about market mechanisms/institutions (Kruger et al. 1991) and coordinating mechanisms at macro-level (World Bank 2009), research connecting how national/sectoral policy processes and institutions influence chain dynamics and implications for smallholder livelihoods remains thin. Whilst emphasis has been placed on commitment to corporate social responsibility (van Lieshout et al. 2010), little empirical evidence exists on how firm practices (e.g. quality standards, buying arrangements) shape welfare gains and

distribution. For example, there are few qualified examples of the nature and processes that shape not only non-participation but also terms of smallholder chain participation (Bolwig et al. 2010; Hickey and du Toit 2007). In rural livelihoods and production spaces, the connection between integration, commodities and benefits of inclusion can be strong. The materiality of commodities and their compatibility with pre-existing livelihood activities (e.g. across labour, investment and production requirements) greatly affects any benefits of inclusion (e.g. see Favretto et al. 2014 with reference to *Jatropha*). Thus, market conditions and structure of rewards associated with specific crops and the way they shape livelihoods, chain interaction including influence on resource use for participants in local spaces requires urgent attention. This study considers these elements by exploring patterns of smallholder inclusion and exclusion in sugarcane value-chains and implications for land and labour processes, and smallholder gains.

Previous studies reveal how participation in value-chains can be dominated by powerful and economically advantaged groups, raising risks of elite capture (Adams et al. 2018; Phillips 2014). Yet, little is known why this is the case and the processes that shape such outcomes. Efforts aimed at integrating livelihood elements in value-chain development literature are now emerging (e.g. Bolwig et al. 2010), but poverty implications of LaSAIs and chain participation for poor smallholders remain difficult to predict. Poverty outcomes remain inconsistent, with reported local exclusions and elite capture (Tobin et al. 2016; Phillips 2014) or reversals/pull-outs and fearful concerns that integration exposed smallholders to even greater livelihood risks (White 1997; Sivrankrishna and Jyotish 2008; Barret et al. 2012). Although past studies within value-chain perspective have reported on household income (Bolwig et al. 2009; Maertens and Swinnen 2009), gendered perspective in relation to ethical trading (Tallontire et al. 2005) as well as environmental labels, certification and implications (Ponte 2008); and fair trade (Raynolds et al. 2007; Dalgaard et al. 2007), livelihood changes as they relate to LaSAIs and integration remain under-researched. Related socio-economic processes and relations remain unaccounted.

Whilst certain sections of literature see favourable public policy and spending on smallholders as central to reducing rural poverty and enhance livelihoods (Lipton 2006), others believe LaSAIs in commercial farming are better placed to transform agricultural and rural sectors in developing countries (Collier and Dercon 2013). In sub-Saharan Africa, patterns of agricultural expansion are mixed, with national states placing varying emphasis on different approaches

which makes predictions complex and difficult. LaSAIs arguably increase smallholder productivity (e.g. incomes, employment, access to inputs and markets) (World Bank 2010), but their association with livelihood disruptions (e.g. displacements, dispossessions and environmental degradation) continues to attract criticisms (Anseeuw et al. 2012; Schoneveld 2017). This study offers insights into how these investments impact pre-existing resource and land-based relations by bringing together locally held forms of knowledge and experiences of LaSAIs from their own natural settings. In so doing, it illuminates national policy and institutional processes that govern these processes and their socio-economic impacts in production spaces.

Similarly, other studies are concerned nevertheless that LaSAIs tend to displace local people leaving them worse-off without rights to land and natural resources leading to loss of livelihoods (Anseeuw et al. 2012; D’Odorical and Rulli 2013). Drawing on the World Bank’s own data, Li (2011) shows that LaSAIs produce only a fraction of the promised employment opportunities (World Bank 2011). Other studies such as those by Davis et al. (2014) find minimal employment creation potential of LaSAIs representing income losses for local communities arguing: “*since communities in these areas rely on agriculture for income, loss of access to land and water resources because of land deals represent an inability to produce household income*” (p181). Elsewhere Cotula (2011) bemoans vagueness in local employment contracts rendering participants to casualisation. It seems that even where LaSAIs incentives exist (e.g. employment), loss of land often led to greater livelihood struggles among smallholders than anticipated. This study builds on this background but goes beyond narrow employment and income perspectives to provide micro-evidence on livelihood impacts across differentiated groups and how smallholders change with expansion in commodity value-chains. It addresses these issues by demonstrating how agribusiness expansion and dominance shapes land and labour dynamics, determine gains and distribution for participants.

In response to somewhat regulatory vacuum in most poor countries, market-based governance mechanisms have emerged, what Schoneveld describes as “*representing a global governance shift involving the privatisation of corporate regulation*” (2017, p.121). Some of this relates to 3rd party voluntary certification systems, international social and environmental performance standards *etcetera*. In practice, however, these have advanced corporate self-regulation and possibilities of “win-win” situations which according to Schoneveld (2017, p.121) “*facilitate land-grabbing and help greenwash unsustainable business practices.*” Literature reveals poor

adherence to voluntary guidelines by investors, suggesting limitations in shaping corporate behaviour (Cotula 2012). As Schoneveld (2017, p.121) notes, “*host country policies, regulations and institutions remain the primary mechanisms through which investment sustainability can be achieved.*” Interestingly, critical reflections on regulatory regimes/institutions in host countries remains absent in analyses of global governance processes. The analytic focus on national institutions advanced in this PhD enables a contribution towards filling this gap.

There seems a wide acknowledgement among policy actors that the widely-touted development contributions of LaSAIs are complex than previously thought. Some scholars believe that “*the economic, political and bureaucratic complexity of establishing appropriate governance arrangements has frustrated efforts to enhance investment sustainability*” (Schoneveld 2017, p.119). To date, however, much of the scholarly debate around the governance of LaSAIs says more about global (land and investment) governance processes (e.g. non-state mechanisms, voluntary codes and certifications) whilst host country governance dynamics have in contrast remained an unexplored theme, despite lying centrally in facilitating and legitimising farmland investments (Schoneveld 2017, p.119). At an intermediate level, consequences of LaSAIs are presented pre-eminently as a governance and investment rather than a resource issue (Table 2.2). By emphasising global governance options and guidelines, a mutually beneficial position of LaSAIs is advanced, buoyed by guidelines, principles and Codes of Conduct (CoC) as guiding frameworks but these have met scepticisms (Borras and Franco 2010).¹

¹ Guidelines broadly touch on Human Rights, voluntary international guidelines, international investment treaties, international water governance regimes, voluntary private standards (See Bruntrup et al. 2014).

Table 2.2 Global and regional LaSAIs related frameworks

Framework	Key actors	Selected principles/focus
<i>Global initiatives</i>		
Principles for responsible contracts integrating the management of Human Rights risks into state—Investor contract negotiations (2015)	UN Human Rights Commission	General guidelines for negotiators
Principles for responsible investments in agriculture and food systems (2014)	Committee on World Food Security (CFS)	Promote and guide investments in agriculture in relation to food security and nutrition
Principles for Responsible Investments in Farmland (PRI) (2014)	Private-sector initiative – pensions and hedge funds	<ol style="list-style-type: none"> 1. Promote environmental sustainability 2. Respect existing land/resource rights 3. Uphold high business/ethical standards
Policy Framework for investment in Agriculture (2013)	Organisation for Economic Cooperation and Development (OECD)	<ol style="list-style-type: none"> 1. Investment and trade policy 2. Sustainable use of natural resources and environmental management
Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (2012)	Committee on World Food Security (CFS)	<ol style="list-style-type: none"> 1. Improve tenure governance 2. Contribute to the improvement/development of frameworks for regulating tenure rights
Principles for Responsible Agriculture Investments (PRAI) (2009)	World Bank, UN Conference on Trade and Development (UNCTAD), FAO, International Fund for Agriculture Development (IFAD)	<ol style="list-style-type: none"> 1. Recognising/respecting existing rights to land/natural resources 2. Processes relating to investment in agriculture are transparent, monitored, and ensure accountability by all stakeholders, within a proper business/legal/regulatory environment. 3. Investors ensure that projects respect the rule of law, reflect industry best practice, are viable economically, and result in durable shared value. 4. Environmental impacts of a project are quantified, and measures taken to encourage sustainable resource use, while minimizing the risk/magnitude of negative impacts and mitigating them.
Large-scale Land Acquisitions and Leases: A set of minimum principles and measures to address the human rights challenge (2009)	UN Human Rights Council	<ol style="list-style-type: none"> 1. Transparency in negotiations that involve local communities 2. States should adopt legislation protecting local communities, specifying conditions according to which shifts in land use, or evictions, may take place

		3. Host states and investors should ensure that agricultural production does not accelerate climate change, soil depletion, or exhaust fresh water reserves
<i>Regional initiatives</i>		
Guiding principles on large-scale land-based investments in Africa (2014)	African Union, UN Economic Commission for Africa, Africa Development Bank	Guidelines for African countries on LaSAIs and how to deal with land issues, ensuring improved land governance, and framework for investor engagement with national and local actors
Framework and Guidelines on Land Policy in Africa: A Framework to Strengthen Land Rights, Enhance Productivity and Secure Livelihoods (2010)		Promotes Africa's socioeconomic development, through inter alia, agricultural transformation and modernisation, strengthens land rights, enhance productivity and improve livelihoods.

One of the prominent generic guidelines is the ‘Principles of Responsible Agricultural Investments’ (RAI) (see Table 2.2). The RAI arguably presents an opportunity to distribute and balance risks with gains but the Code of Conduct has been criticised for its presupposition that agro-investments generally present development opportunities for poor countries and smallholders (Voget-Kleschin and Stephan 2013). Introducing social and environmental safeguards as advanced in generic guidelines arguably necessitate structural reforms to national land, environmental and investment regulations (De Schutter 2011; German et al. 2013; Schoneveld 2017). However, this contrasts with state formation in Africa in that the wave of liberalisation of investment regimes including land markets that eroded sector intervention capacity forged “*new dependence structures that are incentivised to accommodate rather than excessively regulate private sector investment inflows*” (Schoneveld 2017, p.119). How these frameworks trickle-down to national spaces and how they are deployed at local level remains a key challenge. Less explored is how agribusinesses as new agro-actors deploy their power to shape and influence policy developments, industry dynamics and prospects for rural development.

It is within this broader context that power analyses have been introduced but with variations in analytical positions. While studies incorporate power analysis in their approaches, these either focus on the power dimensions in bargaining processes (Rutten et al. 2017); power inequalities that underpin land acquisitions (Fairbairn 2013); and power dynamics as they relate to domestic entities and relationships in land governance (Burnod et al. 2013). The losers and/or winners from agriculture cannot be understood in isolation from the way local industries are structured and organised and how different actors deploy their power and influence. Yet, power analyses remain less applied to the agribusiness practices and agriculture for development discourses. Diversity in groups affected by LaSAIs and their rights as they relate to power relations in rural areas suggest that there are variations in outcomes between and within participating farmer groups (Bruntrup et al. 2014). A preliminary critique of this response to LaSAIs by Borras and Franco (2010, p.510) notes that the proposed guidelines are: “*not essentially pro-poor in the sense of proceeding from a social-justice driven analysis of the causes of (rural) poverty and the need to protect and advance (rural) poor people’s land access and property interest.*” Defended as useful in weakly governed economies, the voluntary nature of the principles present challenges of enforcement whilst veering away from fundamental resource-based questions (see critical perspectives by Voget-Kleschin and Stephan 2013; and Borras and Saturnino 2014). The central criticism is the advancement of the

idea that the problem facing poor countries today is the investment rather than the land and resource question, implicitly arguing as De Shutter (2010) asserted that the destruction of the smallholder economy can be accomplished responsibly. Apart from being vague on land, various frameworks have been criticised for subordinating water, and for treating it as a subsidiary component of land rights (Bruntland et al. 2014). It is less surprising that an institutional and governance perspective is advanced within a neoliberal framework and as best alternative for reconciling dynamics of resource access and utilisation in poor countries. The equivocal nature of studies and findings in the dominant narratives say more about agriculture as the ‘magic-bullet- to development than about what sets land-grabbers apart: varying intentions driven by the bottom-line in view of the external community which at another level only serves to exacerbate economic and social inequalities in host communities (Wolford 2013).

Overall, a focus on global (land) governance systems and the reformulations of the agrarian question (often around agrarian political economy or political ecology, conceptual and paradigmatic) has tended to provide limited insights and practical relevance to national state actors as hosts, governance dynamics and how they can better align agricultural investment strategies to sector objectives.

2.5.3 Reinserting National States in the LaSAIs Debate

LaSAIs and resource scarcity concerns have made visible the role of national states and relationships to investors and the local population, raising the need for an analytic focus on legal and bureaucratic mechanisms, formal and informal bundles of power exerted by different actors (Wolford et al. 2013). Transparent and effective land rights and good governance cannot be secured in isolation. This requires that we explore and understand the nature and motivations of state and non-state actors themselves, their interactions as well as power and influence they exert in LaSAIs (Burnod et a. 2013; Fairbain 2013). Rather than being passive, state actors are active, shaping key LaSAIs decision-making. For analysis of LaSAIs within the national context to be accurate, analysis must highlight legal extensions of state power on the ground – *territory*; rulers and their control of the conditions of their own reproduction(e.g. formal bodies) – *sovereignty*; actors, multiple scale governance and relationships within outlined principles and rules in political hierarchy and legal practices – *authority*; and participants in the state making, changing property relationships and how they make claims on the state – *subjects and subjectivities* (Wolford et al. 2013, p.194).

National and sub-national actors interact in multifaceted forms of relationships, shaping state discourses of LaSAIs, the materiality of production and social reproduction in relation to local producers (see Fairbain 2013 with reference to Mozambique). The state never operates with a collective voice as agencies articulate different kinds of power to shape access to land, driving ‘ideological legitimation’ (Wolford et al. 2013, p.196). LaSAIs depend on competences of state bureaucracies, their embeddedness in society and their territorial area – *state capacity* (Lavers and Boamah 2016). Effective governance of land entails state capacity, projected in bureaucratic competences, state authority and how it links to land and water (Lavers and Boamah 2016). State capacity is a product of state-societal relationships as well as relationships within state agencies, and state territorial reach reflects capacity and choice.

Integrating macro-level practices and interactions with micro-level experiences through power and politics makes visible the constitution of territories for LaSAIs and elements of sovereignty, authority and subjects. However, the way in which states channel market forces, authority, and influence vary, more so in relation to majority social groups such as smallholders. Host countries are thus sites where various expressions of power and authority, sovereignty rights and hegemonies face “*new enclosures, property regimes, and territorialisations, producing ...new actors, subjects, and networks connecting them and new legal... and practical investments means of challenging previous land control*” (Peluso and Lund 2011, p.667-668). Land control highlights how state and non-state actors can hold on to land and institutional and political extensions on access, claims and exclusions (ibidi.). This links to territoriality which draws boundaries around “*objects*” (resources) and people (subjects). However, these claims are not always related to claims made on the state, raising competition between state and non-state actors (Peluso and Lund 2011). Relationships between state and non-state actors are important in shaping land access and control particularly on contexts of legal plurality such as in sub-Saharan Africa (German et al. 2011). These processes are context-specific, contingent upon historical patterns and processes of state formation, the changing balance of power between competing sources of authority and strategies of negotiations and conflict employed by social actors to enhance their positions of power (Lavers and Boamah 2016, p.102). Thus, a national level analysis of actors, their interaction and expressions of power, authority and influence in the creation of new frontiers of land control is crucial in highlighting national experiences of LaSAIs. This PhD draws from an understanding of state dynamics to illuminate policy developments and institutional frameworks shaping LaSAIs in Zambia.

2.6 Large-scale Agricultural Investments and Cross-scale Analysis

2.6.1 Globalisation, Value-Chain Development, and Agricultural Transformation

Investments, trade exchanges and individual or enterprise contracts provide the basis on which Africa integrates into the world economy, underpinned by agri-food commodities (Gibbon and Ponte 2005). Exchanges stemming from global developments such as LaSAIs on the one hand and national dynamics on the other have shaped scholarly interests in global value-chain analyses and what this means for smallholder producers (Lee et al. 2012). These research efforts are informed by the fact that different value-chain structures generate divergent outcomes in the well-being of smallholders (ibidi.).

The GVC perspective can be traced to Global Commodity Chains (GCC). As a paradigm for thinking about how global industries work, the GCC is one among several popular networks or chain-based approaches to the study of economic globalisation (Coe et al. 2004). A lot can be said here but suffice to say that other constructs include international production networks (Borras et al. 2000); and the Global production networks (Ernst 1999; Henderson et al. 2002); Global production systems (Milberg 2003); and French Filiere (Raikes et al. 2000). Diverse frameworks make theorising, researching and framing of global processes in relation to local land and labour processes particularly difficult. The concept of a commodity chain dates to 1977 and to Hopkins and Wallerstein whose argument departed from the sequential views of the global economy and development where national markets evolve in the direction of expanded trade geared to an international market.

“Let us conceive of something...commodity chains...take an ultimate consumable item and trace back the set of inputs that culminated in this item – the prior transformations, the raw materials, the transportation mechanisms, the labour input into each of the material processes, the food inputs into the labour...” (Hopkins and Wallerstein 1977, p.128).

This view shaped the understanding of the capitalist expansion as an historical social system defined by commodification in production, distribution and investment processes that had previously been conducted aside markets (Bair 2005). A commodity chain thus refers to a *“network of labour and production processes whose result is a finished commodity”* (Hopkins and Wallerstein 1986, p.159). The framework focuses on inter-firm networks connecting manufacturers, suppliers and sub-contractors in global industries and international markets, asking how participation in the commodity chains can facilitate industrial upgrading for

developing country exporters (Bair 2005). The global commodity chains (GCC) approach is useful in exploring international division of labour, organisational forms related to economic integration more broadly – as producer-driven and buyer-driven commodity chains (Gereffi 1996). The GCC is a historically-focused framework which considers patterns of global trade and analyses “*production systems explicitly outside of the realm of national economic boundaries*” (Nelson and Pritchard 2009, p.38). One key feature about the GCC analysis that differentiates it from the GVC is its lack of focus on national economies as arenas for analysis which limits the range of subjects and scope for investigation. The GCC approach faces limitations of how to capture a wide range of products, some of which lack commodity features. Studies oriented towards firm practices at meso and micro levels and national institutional dynamics can greatly benefit from alternative approaches such as the GVC, as discussed below (Nelson and Pritchard 2009).

As earlier noted, over the course of 1980s and 1990s, the shift from the so-called “development project” to “globalisation project” induced export-oriented development strategies across the global south (Nelson and Pritchard 2009). Accelerated by technology change, enhanced capital mobility, and inter-regional competition for investment (Coe et al. 2004), processes of globalisation highlighted in the increasing degree of fragmentation of global trade enhanced the significance of regions as sub-national spaces and locations of economic activities (Bair 2005). The way these activities touch down and enable smallholders to tap into global markets require national-focused approaches more so with respect to individual sectors.

The GVC approach brings together scholars on global networks, capturing a wide variety of products including those that lack commodity features (Gereffi 1994). To Gibbon and Ponte (2005, p.77), GVCs are a “*configuration of coordinated activities that are divided among firms and that have a global geographical scale.*” The GVCs’ focus on meso-level organisational forms across sectors is considered inclusive of a full range of possible chain activities and end products in the study of international production networks than is provided by the GCCs (Nelson and Pritchard 2009; Bair 2005). The framework permits questions about contemporary development issues that are not handled by previous paradigms, adequately forging macro-micro links between processes in global, national, and local units of analysis (Gereffi et al. 1994). Its pronounced interest in institutional and policy implications of chain research adds to the strengths (Bair 2005). Its compelling characteristics point to the possibilities of

understanding industry systems, opportunities and constraints for different actors and geographies.

In the GVC literature, four key dimensions of value-chains are emphasised. First is spatial dispersion of production and distribution networks including enterprises (territoriality/geography). Second, is the sequence of value-adding activities and how they link to product, services and resources (input-output structure). Combined, the two descriptively map what is produced, consumed and where (Nelson and Pritchard 2009). Third, is power dynamics shaping financial, material and resource allocation and flow within a chain (governance). Fourth is multi-level norms, policies and regulatory practices that shape inter-firm relationships, and how these influence firm configurations and outcomes (institutional context). Together, these two arguably causal and abstract ask: how is production and consumption organised and in what context? (Nelson and Pritchard 2009; Challies 2010). Depending on functional positions within value-chains, firms can shape who does what, at what price, based on which standards, and to which specifications, defining inter-firm relationships and institutional mechanisms for smallholder inclusion in supply chains (Gibbon and Ponte 2005; Lee et al. 2012). This PhD draws on governance and institutional dynamics of the GVC by examining patterns of smallholder participation and how market channels impact local distribution of gains. It also considers how firms exert power and influence on industry structures, production requirements, terms and conditions for grower integration.

The GVC's major contribution lies in understanding how global processes interact with local dynamics within wider context of agriculture globalisation. Recent literature has begun to delve into the importance of local processes (horizontal networks), cultural and institutional dimensions (Bolwig et al. 2010). This PhD focuses on elements surrounding governance and institutional context as they relate to LaSAIs and expansion in NTAE commodities such as sugar at national level. Studies to date say little about how firms within LaSAIs set, measure and enforce parameters under which those on the primary production end operate (Lee et al. 2012; Barret et al. 2012). This PhD considers power relationships within GVCs as they apply to national industry and local processes and how these shape rural development and welfare. Studies such as Bolwig et al. (2010) which have related history, social relations and environmental factors to value-chain restructuring, and to impacts on poverty are some of the studies that provide an important foundation to this study. However, the following section highlights how the vertical GVC framework can benefit from horizontal sustainable livelihood

approach, and how the latter might be combined with somewhat micro-level constructs (as middle ground) in order to enhance understanding on local livelihood changes.

2.6.2 Negotiating macro and micro frameworks for analysing rural livelihoods in the era of LaSAIs

Section 2.5 has shown that the connections between land and rural livelihoods are strong in the contemporary land-grabbing debate. It has shown how recent scholarly efforts have grappled to explain these processes by attempting to reformulate the Agrarian Question (Bernstein 2010, 2006; McMichael 2009). As noted earlier, in the original proposal, Kautsky ([1899]1988) argues about how the peasantry under capitalism would become increasingly occupied with market dynamics, leading to a deepening social differentiation and intensified process of class formation. The politics of how incursion of capital into agrarian areas would produce capitalist social relations of new class relations and land is the central thrust of Kautsky's articulation (Kautsky [1899]1988; Akram-Lodhi and Kay 2009; McMichael 2013). In resolving this problem, the argument is that the agrarian household class (the peasantry) would be disintegrated and differentiated, with emerging social arrangements recomposed to fittingly reflect the imperatives of capitalism. Whilst some peasants would become efficient producers, using land to upscale into capitalist farmers, others would be drawn into emerging capitalist agricultural sectors as wage labour (Akram-Lodhi and Kay 2009).

Crucially, some of these relate to unequal access to agricultural land. However, as Pritchard et al. (2017) shows, the reality is more complex than this especially in the advent of LaSAIs and extensive livelihood diversification. Central to these shifts has been how the politics of land and politics of labour play out within the local context as vital livelihood assets, shaping who benefits or not (Bernstein 2006). The foregoing connects debates associated with the Agrarian Question as it relates to capitalist social relations, more broadly, and the household-scale framework of sustainable livelihoods analysis (SLA). Drawing from Bernstein (2010), the Agrarian Question lurches into four key dimensions:

1. *Who owns what*, which points to social relations of property and ownership of livelihood assets and resources;
2. *Who does what*, which relates to social divisions of labour such as those across gender. This also makes distinctions between those employing and employed;

3. *Who gets what*, which relates to social distribution of the product of labour. This points to questions of income and assets, patterns of accumulation over time which leads to processes of social and economic differentiation, and;
4. *What do they do with it*, which relates to reproduction of producers and non-producers – livelihood strategies and their consequences as patterns of consumption, social reproduction, savings and investments.

In addition to these four dimensions, Scoones (2015) extends and adds another: how do social classes and groups in society and within the state interact with each other? To Scoones, this focuses on the “*social relations, institutions and forms of domination in society and between citizens and the state as they affect livelihoods (p.82).*” Combined, these questions provide not only the starting point for any livelihood study linked to the agrarian political economy but also provides an opportunity for critical analysis of wider agrarian change dynamics.

Contemporary debates have tended to explore the nature and character of these dynamics and interpretations in the face of intensified LaSAIs, asking how these processes operate in reality. Increasingly, broad agrarian questions around land and labour have been connected to household dynamics such as decision making through new approaches that seek to bridge macro-SLA-type analyses and micro approaches characterised as middle-ground.

Recent developments in the field of critical agrarian studies have challenged these original formulations of the agrarian question and its application. Rather than being on the decline, evidence shows persistent smallholder farming despite reported disintegration and differentiation within rural landholding communities (Brookfield 2008). Studies allude this to how capitalism operates in uneven and indirect manner – the so-called subsumption thesis. Citing Bananji (1990), Prichard et al. (2017, p.43) argue that “*the incursion of capitalist relations tends to occur via processes of formal subsumption, which is the provisioning of landholders with rural credit, farm supplies, etc., via contractual means that are nominally arm’s length from credit farm ownership.*” This means intensified capitalist relations in rural economies will continue to make land as a physical livelihood asset central to rural communities. Thus, as McMichael (2012; 2013) and van der Ploeg (2010) note, the politics of the global south as they relate to globalisation and land-grabbing should be viewed in the context of land and labour dynamics. This view however is problematic in that it assumes widespread and outright dispossession of the peasantry across the global south. And as Bernstein (2006) notes, a focus on land has tended to divert attention away from political and

social struggles over labour, what he considers important asset for rural dwellers. Interesting, this view asserts rural dwellers are dynamic, and have varying engagements and reliance on agricultural production, with some suggestions rural livelihoods are becoming delinked from agriculture, and hence land – deagrarianisation as proposed by Bryceson (1996; 2000); Rigg (2006); and Ellis (2000). Recent debates have focused on social differentiation, class formation and rural livelihoods, with land remaining central to these processes (Hall et al. 2017; Pritchard et al. 2017).

These broad brushstroke efforts can conceal emergent dynamics of rural social differentiation and class formation, and how they link to the politics of labour. As Pritchard et al. (2017, p.44) notes, *“how do we unpack the problem of why some households can devise upward livelihood trajectories, while others remain mired in disadvantage and/or descend into more intense poverty?”* A central concern of SLA is what comprises rural livelihood assets and how they matter for different households and circumstances (Pritchard et al. 2017). Rather than frame rural livelihood circumstances and activities in terms of the dynamics of capitalism – top-down formulaic of viewing rural development – the SLA presents the subjectivities of rural social life as embedded and context-dependent realities about how poor people sustain their lives. This is important in this PhD in order to unveil rich knowledge about not only assets but also livelihood pathways for specific social groups, as opposed to concentrating on livelihood processes within the broad lens of the agrarian question.

It is this view that opens possibilities for a middle ground conceptualisation: *“the construction of frameworks in which dense and detailed narrative accounts of livelihood pathways are inductively worked into classifications that speak to microanalytical explanatory models”* (Pritchard et al. 2017, p.45). Andrew Dorward’s simple tripartite schema of ‘hanging in,’ ‘stepping up’ and ‘stepping out’ arguably offers an opportunity to classify the livelihood pathways of rural households into specific categories relevant in informing debates around deagrarianisation – bridging somewhat macroanalytical explanatory SLA-type models framed in terms of the dynamics of capitalism and microanalytical middle-ground approaches foregrounding processes of rural social differentiation. To Pritchard et al. (2017):

“This is achieved through the analytical tactic of viewing households as possessing an initial bundles of assets, which households are assumed to deploy in particular ways in light of present circumstances and in preparation for future exigencies, and then, depending on the outcomes from these actions and events, households end up with a

differently shape asset bundle that in turn, positions them differently with regard to future livelihood landscapes” (p.45).

This thesis delves into the role of land and labour under intensified LaSAI conditions in rural Zambia. It explores social categories and livelihood pathways as expressions of social differentiation. This horizontal integration of theoretical frameworks is important in this thesis in order to show how rural actors conceive future events, how they think these may turn out and what they in reality do – somewhat departing from the instrumentalist imperatives in traditional sustainable livelihood analyses. Here land is rendered fluid as a crucial part in rural livelihood transformation (Pritchard et al. 2017). I deploy these horizontal frameworks to illuminate vertical constructs, the GVC approach.

2.7 Conclusion

Addressing current debates on LaSAIs and understanding the national context within which investments play out and their association to local livelihoods requires holistic and multi-disciplinary approaches that departs from a global focus. This is important in generating narratives that reflect, more fittingly, local smallholder land and labour relations, circumstances and experiences of LaSAIs. This background chapter revealed key research needs around investments, value-chain and development narratives important to inform debates on agricultural expansion and local development. It showed that perspectives on LaSAIs and smallholders are diverse and unpacking policy processes and institutions that drive national and sectoral chain configurations is difficult but crucial in understanding development and livelihood changes in local communities. Attention has particularly been drawn to the need to explore national policy and institutional processes that govern LaSAIs. This includes industry configurations and practices that determine inclusion and exclusion. Attention has also been drawn to the need to consider how interdependencies at macro and meso levels shape local livelihood dynamics across land and labour and welfare across structurally different outgrower arrangements. Recognition of how LaSAI and agribusiness power and influence shapes practices in national and industry context and their impacts on local outcomes has also been highlighted to inform smallholder-firm interactions, and sustainable local development. A multi-level and holistic understanding of LaSAIs and the way they play out within the same setting is thus important in providing empirical evidence that can inform and strengthen policies, institutions and investments for enhancing resource governance, local welfare, and a

more successful use of agriculture for development. A conceptual framework for this analysis is set out in the following chapter.

Chapter 3 Research Design and Frameworks

3.1 Introduction

The overall objective and sub-research objectives of this research requires a research design and methodological framework that can: explore how key policies and institutions shape LaSAIs within the national context, and what this means for industry governance processes and local development prospects; industry dynamics shaping stallholder integration in sugar value-chains; local livelihoods as they relate to how land and labour relations are implicated in sugar values chains and what this means for livelihood strategies, pathways, and rural social differentiation; and industry politics, power and institutions that govern and shape these processes. The previous chapter outlined the wider literature within which this analysis situates, pointing to theoretical and methodological elements, fittingly relevant to this study. This suggests multi-level and cross-scale integration of theoretical frameworks within a participatory perspective.

This approach requires data to be collected at national level (in relation to policies and institutional processes governing LaSAIs); industry level (industry actors and processes shaping smallholder participation); at local level (in relation to livelihood dynamics); and across these levels combined (to explore agribusiness power dynamics). In this research design and framework chapter, the methodological approach of the research is explained, and justification given. The chapter introduces the design and methods employed to address the research aim, questions and objectives (Table 3.1). A description of the case study area and sites, participant selection, including data collection processes are also provided. The final part reflects on the composition of the research team, data organisation and analysis including aspects of positionality, ethical considerations, and limitations.

Table 3. 1: Summary of research objectives, questions, sample population and methods

<i>Objectives</i>	<i>Guiding Questions</i>	<i>Level/Population</i>	<i>Methods</i>
1. To identify drivers and actors shaping large-scale agricultural investments in Zambia and the policy developments and institutional processes that govern them	1.1 Who are the key actors shaping LaSAIs in Zambia? 1.2 What are the specific trends, patterns and dynamics surrounding LaSAIs in Zambia? 1.3 What are the specific policy developments and institutional processes driving LaSAIs in Zambia?	National-level: 1.1 National policy experts 1.2 Bilateral and multilateral institutions 1.1 Academics and NGOs	1.1 Policy/document analysis 1.2 Semi-structured interviews
2. To identify and explore industry and local factors affecting smallholder participation in sugar value-chain as a livelihood enhancement strategy in rural Zambia	2.1 How and under what terms do farmers participate in sugar production as a livelihood enhancement strategy in rural Zambia? 2.2 What are the factors affecting smallholder engagement in sugar production in rural Zambia? 2.3 How inclusive are sugar value-chains in Zambia?	District/Community-level: a. District/sub-district (e.g. government departments, NGOs, private-sector players) b. Community (e.g. farmer groups) c. Smallholders (e.g. cane and non-cane growing)	<ul style="list-style-type: none"> ▪ Semi-structured interviews ▪ Household surveys ▪ Household case study interviews
3. To explore how large-scale agricultural investments and value-chain in sugarcane contributes to and affect rural livelihoods in Zambia	3.1 What are the household and community livelihood impacts associated with LaSAIs and participation in sugar value-chains in rural Zambia? 3.2 What are the specific opportunities and barriers towards enhanced household and community livelihoods in sugar producing areas of rural Zambia? 3.3 What response pathways do households pursue as a result of sugarcane uptake and expansion?	District/Community-level: 4.1 District/sub-district (e.g. government departments, NGOs, private-sector players) 4.2 Community (e.g. farmer groups) 4.3 Smallholders (e.g. cane and non-cane growing)	<ul style="list-style-type: none"> ▪ Focus Group Discussions
4. To explore the current configuration of the sugar value-chain and how LaSAIs shape and influence governing processes in Zambia	4.1 How has the agricultural sugar sub-sector developed and how are value-chains currently organised? 4.2 Who are the key actors in sugar value-chains in Zambia? 4.3 In what ways do LaSAIs shape and influence industry and local dynamics in Zambia?	Sub-national level: 4.1 National-level actors 4.2 Sugar Sub-sector experts 4.3 Sugar companies and players etc.	4.1 Policy/document analysis 4.2 Semi-structured interviews

3.2 Conceptual Framework Development

3.2.1 Global Value-Chain Framework and Sustainable Livelihoods Approach

The GVC is an important framework for understanding national institutions, industry and firm-level dynamics (Section 2.3). Although criticised for insufficiently considering micro-level processes that shape livelihoods, its ability to provide a meso construct, institutional and organisational structure important in understanding terms and conditions under which smallholders integrated in the chains operate adds to its relevance for a study of this nature. In this research, national and industry institutions and practices and the input and production chain-side analysis were considered relevant in a multi-level analysis of links within Zambia. This allowed exploration of smallholder livelihood experiences, including national policy processes and institutions that shape sectoral/commodity dynamics. By recognising the importance of national and industry dynamics, the GVC illuminates livelihood possibilities and constraints at local level. The way value-chains are organised nationally, configured at industry level, coordinated and touch down to local levels has important consequences on opportunities and livelihood outcomes for smallholders (Lee et al. 2012; World Bank 2010). Livelihood outcomes for smallholders cannot comprehensively be understood through an exclusive focus on institutional and organisational structures and interplay at national and industry levels. The livelihood approach is a micro-level constructs which brings *horizontality* to the study often lacking in the *firm-centric GVC approach* which is contrastingly enshrined in top-down analyses of lead firms (Hughes et al. 2008) and around interstices and struggles of labour.

A livelihood can be defined as “*the capabilities, assets (material or social) and activities required for a means of living*” (Scoones 1998, p.5). It is much more than just a set of activities undertaken to subsist or gain an income, and therefore multidimensional. A livelihood is sustainable when “*it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, while not undermining natural base*” (ibidi.). Livelihood assets promote choices, but households combine assets in diverse activities (livelihood strategies) that shape outcomes (outputs of livelihood strategies). LaSAIs and related potential changes in natural resource access which might restrict livelihood activities can be considered a ‘shock’ for smallholders. As advanced in this study, SLA enabled analysis of how diverse factors

influence farmer's strategies (Scoones 2000). Asking what, given context (e.g. policy, agro-ecological), combination of assets leads to what outcomes is important in understanding how asset availability, claims, access and utilisation are defined. Farmer responses to LaSAIs help assess investment overall impacts at local level. The assumption is that livelihood response pathways due to LaSAIs and sugarcane expansion highlight narrowing or diversifying livelihoods, the latter being desirable and resilient.

The SLA has been criticised for being static with little ability to explain macro-processes and structural shifts which bear on rural livelihoods (Scoones 2009; Challies and Murray 2011; O'Laughlin 2008). Driven by the need to add theoretical depth, and to depart from traditional application of the sustainable livelihood analyses that focus on rural assets and how they matter for different households and circumstances, this study incorporates elements of livelihood response pathways understood to arise from a combination of factors including: what a person/household has; what they can do with what they have; and how they think about what they have and can do. It includes resources they can command, what they think they can achieve with that (goals, needs), and the meaning they give to these goals (McGregor 2007).

Driven by the proposition that people aspire to maintain their current welfare and advance it, the latter leading to efforts to expand existing activities or move into new ones, Dorward et al. (2009) introduced the concepts of "hanging in" (when assets are held and activities are engaged in order to maintain livelihood levels), "stepping up" (when current activities are engaged in, with investments in assets to expand these activities, in order to increase production and income), and "stepping out" (when existing activities are engaged in accumulating assets which can then provide a 'launch pad' for moving into different activities leading to higher and/or more stable returns). Thus, as Pritchard et al. (2017) allude to, I aim to build a framework that categorises households in terms of their classes/social positions and livelihood strategies/pathways – therefore expressing social differentiation via politics of land and labour and institutions – and explore the ways in which different assets are insinuated within these dynamics. In revealing diverse livelihood circumstances, aspirations and strategies related to household categories, this framework necessitates bridging micro and macro approaches, foregrounding processes of rural differentiation. With reference to LaSAIs

in sugarcane, examining temporal trajectories of livelihoods and outcomes allows a better understanding of assets as dynamic and as part of wider livelihood transformation (Pritchard et al. 2017).

This study asks how LaSAIs and sugarcane contributes to local patterns of livelihoods, response pathways that consequently arise, and what new risks and vulnerabilities emerge for growers. Dynamic and diverse possibilities of household strategies related to social and institutional context also require empirical understanding of the wider factors – trends, hazards and seasonal aspects – beyond production spaces (Zoomers and Otsuki 2017). This study draws on household strategies to illuminate livelihood pathways for different farmer categories as well as consider factors that shape vulnerabilities (i.e. trends, seasonality and trends) within a broader transforming structures and processes (i.e. institutions, policies) (Ellis 2000). In so doing, outcomes of LaSAIs and livelihoods are presented as dependent upon ability to benefit from resources, helping unpack relations between global investment commodity markets and local development – only from an actor perspective (De Haan and Zoomers 2003; Zoomers and Otsuki 2017). Smallholder’s roles, how they explore opportunities and cope with stress is important in understanding globalisation and local development realities, including challenges and vulnerabilities that come alongside sugarcane and configurations around resource control.

Integrating livelihoods in the LaSAI debate permits dialogue into intra-household decisions and how they shape livelihood prospects (Zoomers and Otsuki 2017). The middle-ground perspective used in this study is relevant for incorporating individual, household and community lessons, and experiences, elements insufficiently covered in SLA-type microanalytical frameworks.

3.2.2 Conceptual Application

This study advances an understanding that livelihood assets can enhance livelihoods and present pathways through which households or communities cope with impacts of LaSAIs. At one level, households require assets to cope with impacts of LaSAIs. At another level, LaSAIs and VCD for sugarcane can enhance household asset endowment, affecting what a household can do – which in turn is shaped by value-chain organisation, institutional processes and dynamics of industry participation. However, where livelihood assets are available, they may not be accessible; where they are

accessible they might not be utilised; and where they are utilised, they may not lead to intra-household wellbeing and meaningful livelihood pathways. This affects what people think they can do with what they have within their market positioning (Murphy 2012).

As Figure 3.1 shows, whilst GVC adds verticality (e.g., value-chain opportunities, market dynamics, smallholder terms for participation as they relate to intermediaries, industry and institutional processes), the SLA (e.g., asset dynamics and responses) and the middle-ground perspectives enriches horizontal depth responses. While outcomes for LaSAIs are in part shaped by institutional and governance structures, i.e. chain dynamics, and livelihoods as they relate to asset availability, access and utilisation by firm practices (SLA), actual intra-household dynamics on diversification can greatly benefit from the middle-ground perspective (response pathways).

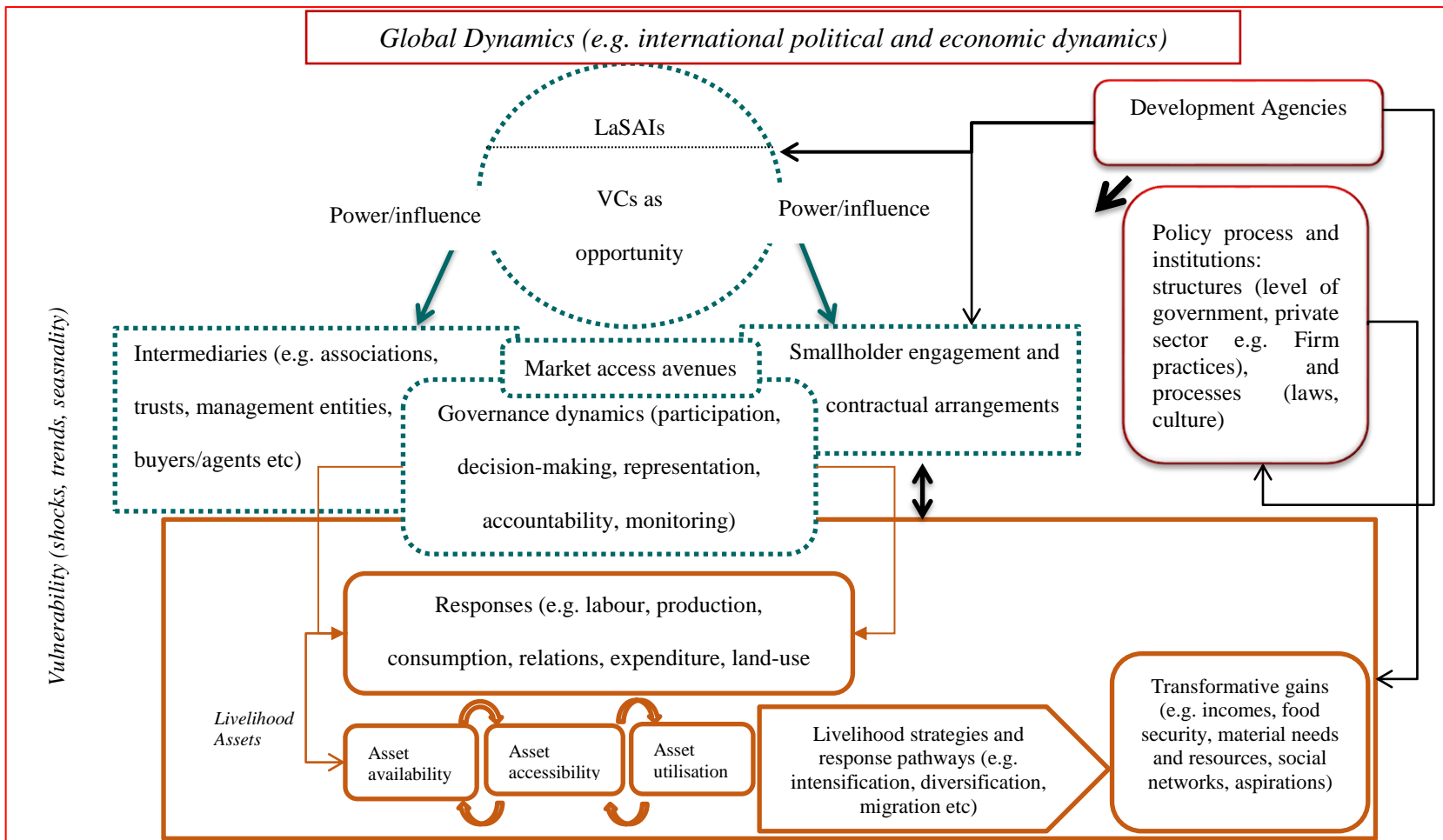


Figure 3.1: A conceptual framework for understanding rural livelihoods among smallholders.

Whilst chain analysis adds to the processes of integration at meso-level, the use of SLA helps add the horizontality that lacks in GVC analyses (Challies and Murray 2011). From this focus and in poverty analysis, social exclusion and adverse inclusion straddle in overlapping territories, which can be understood in relation to integration and market processes (Bernstein et al. 1992; Hickey and du Toit 2007). While ‘inclusion’ is important, the local context that shapes terms of localised producer participation or ‘exclusion’ are crucial in influencing opportunities and risks delivered via value-chains. These binaries can however limit analyses, raising the need to understand and explain the role played by intermediate chain governance structures that shape relations with growers. However, this conceptualisation is important in understanding intermediate chain governance structures, varied sets of behavioural responses (e.g. labour, consumption, production, and land-use patterns) and local people’s priorities and reasons why they choose to follow certain livelihood pathways.

Research that looks at livelihood impacts of LaSAIs can greatly benefit from detailed empirical investigations that point to structural, commodity, institutional and organisational arrangements. While the GVC framework is employed for its usefulness in conceptualising sectoral governance dynamics, institutions and organisational arrangements that tend to integrate smallholders into sugar production in Zambia, the SLA on the other hand is employed to understand household implications of LaSAIs and value-chain development for sugar. By combining national policy and institutional processes, sub-sectoral farmer organisation and processes shaping participation and community livelihood dynamics, this study can be considered novel and emerges as one of the first studies to conceptually integrate disparate elements in empirical analysis of livelihood implications of LaSAIs.

3.3 Case Study Research Design

Livelihood impacts of LaSAIs can comprehensively be understood in their own setting and within their real-world context – a fitting feature for case study research (Yin 2014; Gerring 2004). A case study is “a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its life context using multiple sources of evidence” (Robson 1993, p.146). Case studies are useful in asking the ‘what’ ‘how’ and ‘why’ questions pragmatically compatible with the investigatory framework (Yin 2009) (Section 3.2). A case study recognises that the phenomenon under investigation and the context might have unclear boundaries (Yin 2013). Negotiating this continuum to access real-time data on the way LaSAIs play-out is difficult. In this case, support from national level actors, interest in the

findings from sugar corporations and their intermediaries and local people’s availability and willingness to participate played an important role in gathering real-time and valuable data.

One critique of case study approaches is that they cannot be deployed to generate generalisable results (Gerring 2007). This has been an issue in livelihood studies, with a resulting promotion of large sample, quantitative methods as alternatives (Tsang 2015). However, large-scale data on the impacts of LaSAIs such as advanced by Davis et al. (2014) often conceal essential elements such as the way certain impacts emerge, and the socio-economic, cultural and political processes that underpin them. In this study, the case study approach enables in-depth understanding of how LaSAIs play out at national level, and local perceptions of agribusiness expansion, experiences and impacts on local development and livelihoods – allowing comparisons between and within communities. Data validity is crucial in scientific investigations. This connects both to the extent to which observations should be generalised to other settings (facilitating external validity); and local representations of various groups – a feature for qualitative data approaches – (facilitating internal validity) (Gibbert et al. 2008). This study adopted a four-stage case study strategy, allowing consideration of multiple elements and deep analysis. Study methods overlapped and cut across multiple research objectives as summarised in Figure 3.2.

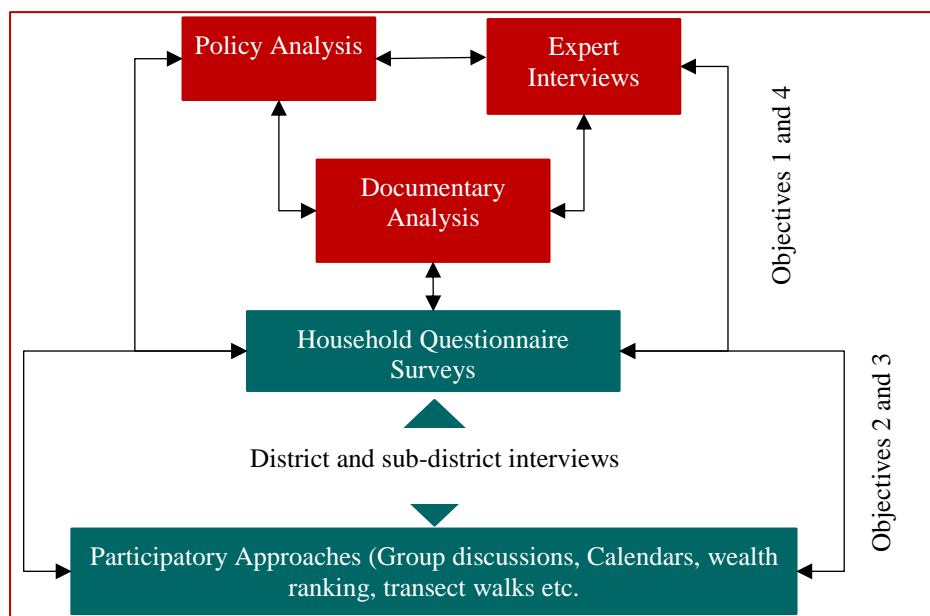


Figure 3.2: Data collection processes and linkages

The study concentrated on Mazabuka district as the area for fieldwork and two sugarcane communities as sites for data collection (Figure 3.3). Southern province and Mazabuka have

been targeted for LaSAIs and have emerged top investment destination in Zambia (Sipangule and Lay 2015). Whilst placing value on participatory approaches and historical analyses, this design presented an opportunity for in depth investigation that produced rich and detailed information about lived livelihood experiences, justified through multi-level analyses and mixed methods.

This design was based on the need for a quantifiable household asset profile and qualitative national, industry and local level experiences of LaSAIs and rural livelihoods (Johnson and Onwugbuzie 2004). Case studies provide flexibility of combining different data collection techniques and collection of deeper insights and evidence than can be achieved in a single methodological approach (Tsang 2014). The mixed method strategy involved collecting, analysing and interpreting quantitative and qualitative forms of data within the single study (Creswell 2003). Triangulating data sources was important in departing from mono-sided quantitative assessments of livelihood impacts of LaSAIs (Davis et al. 2014), allowing for an intense and rigorous analysis at local level. This four-stage mixed method data collection strategy collected qualitative data on one stage, and quantitative data at another and then reflecting on the former sequentially, allowing one form of data collection to feed into the other (Driscoll et al. 2007).

3.3.1 Case Study Selection

The past decade saw rapid expansion in sugarcane LaSAIs and in southern province of Mazabuka district (Figure 3.3).

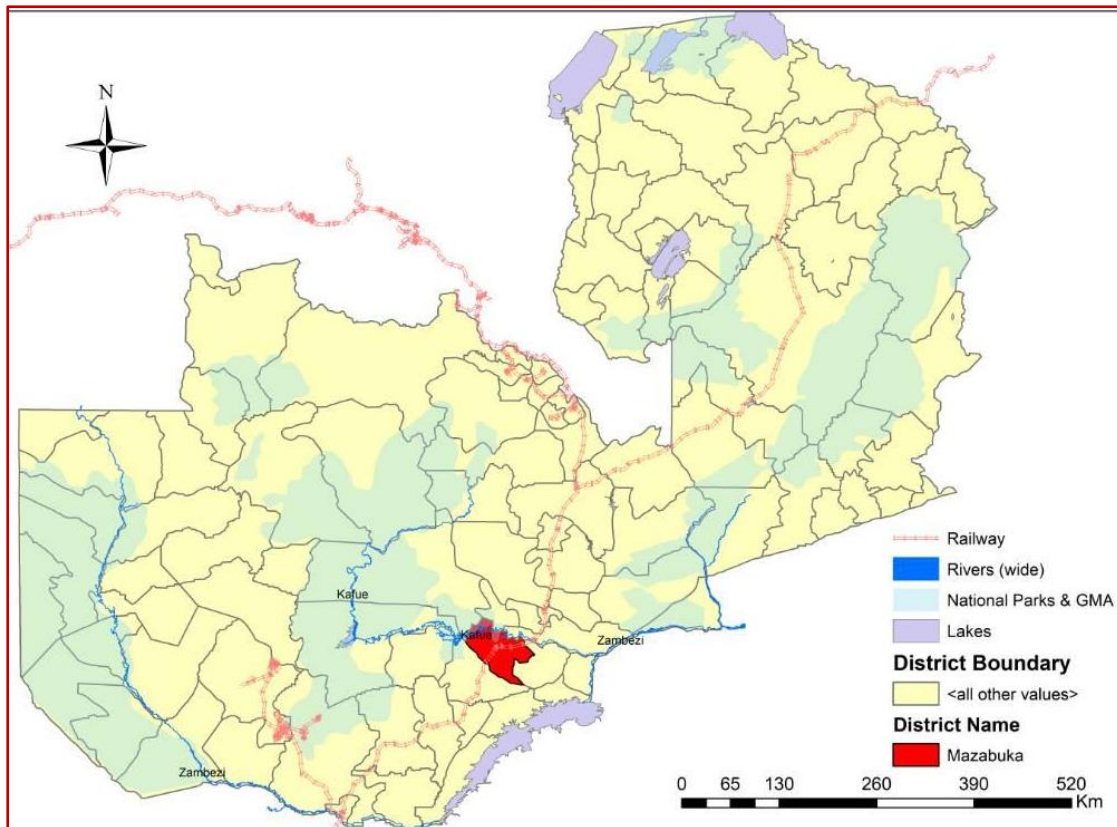


Figure 3.3: Zambia and main regions (Arc GIS 10.1).

Specifically, the sugar industry is one important destination for foreign investments in the country particularly with the entry of Illovo Sugar Plc in 2001 which has led to an intensified financialisation and agribusiness expansion in Mazabuka, entrenching outgrower arrangements (Figure 3.4). The industry has at least doubled in (physical) sugar production within the last decade and continues to be relentless (Richardson et al. 2010). Sugar area increased from 15,000ha in 2000 to 33,000ha in 2010 through to 41,695ha in 2016 (178% increase in area harvested for sugarcane) (FAOSTAT 2018). This has ignited debates about the merits of LaSAIs and outgrower schemes in Zambia. Mazabuka thus presents an opportunity to explore how an agribusiness with outgrower schemes shapes policy developments and influence industry governance as well as how livelihood dynamics play out.

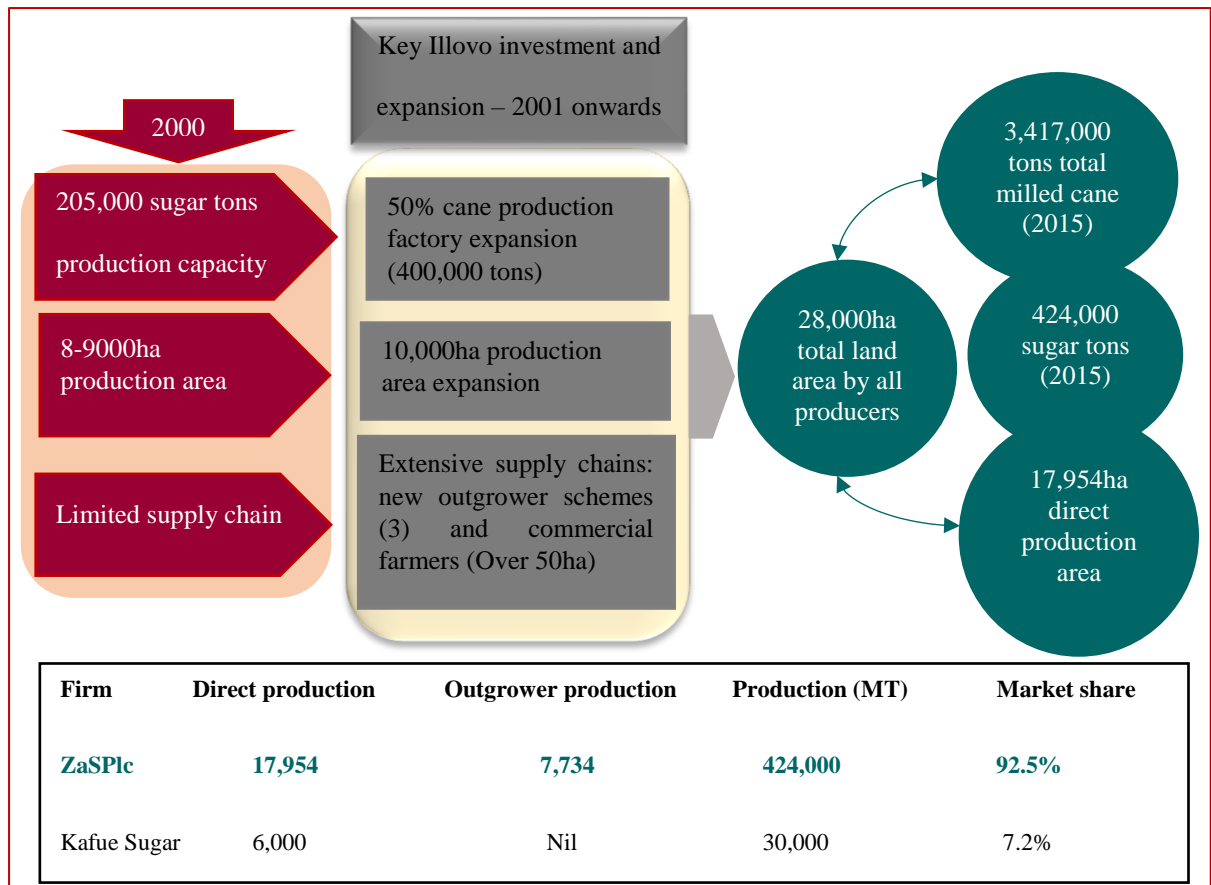


Figure 3. 4: LaSAIs and sugarcane expansion in Zambia (interview data and ZaSPIC Annual Reports 2016; 2010)

New powerful actors further necessitated the potential for sugarcane and bioethanol expansion. Three key characteristics of LaSAIs are true to the sugar industry in Zambia: 1) the emergence of new types of investors, 2) large-scale and long-term land acquisitions, and 3) increasing land-use towards mono-culture farming for fungible crops used for biofuels such as biofuels (e.g. sugarcane) (Richardson et al. 2012; Richardson 2010). Institutional, legal and market opportunities for investments including plentiful land and water availability adds to this context (Watson 2011; Nolte 2014). Integration of smallholders as sugarcane producers permits growers to tap into value-chain markets thereby necessitating a micro-level analysis of livelihood impacts and possible response pathways (Section 3.2).

Study areas and sites were selected based on their integration into sugarcane value-chain through different outgrower arrangements. This considered the presence of smallholder production within the same social-economic and environmental as well as local institutional and market context, highlighting *smallholder-firm-industry*

interactions. Thus, LaSAIs with outgrower schemes is the focus of this country-specific study.

Most fieldwork concentrated in Mazabuka district in Southern province of Zambia (Figure 3.5). Mazabuka lies about 135 km from capital city Lusaka, with a population of about 261,907 (CSO 2010). The district is one of the poorest in Zambia (74%) whilst subsistence agriculture dominates (LCM 2012). Land-holding mixes private and customary land, the latter being dominant among rural dwellers and sugarcane growers.

Mazabuka is dominated by the people of the Tonga tribe. Sugarcane schemes however exhibit a mixture of different tribes reflective of migration and past government policies on resettlement. Within the rural setting and in the sugarcane communities, dwellers are closely attached to traditions, customs and beliefs which affects production relations and asset ownership by gender. Land and property ownership is linked to marriage and the man. Female land and property holding is thus uncommon (Mizinga 1990) but with some exceptions in areas such as cattle production (Lubungu et al. 2015).

Livestock production, dairy farming, alongside subsistence production in maize play an important role in rural livelihoods. Driven in part by cultural motivations, southern province holds the largest share of livestock in the country. According to Lubungu et al. (2015), over 50% of households in the province own cattle with the region ranking second highest percentage cattle share of productive assets by province among cattle owners of 60.8% (p.13). The share of the national distribution of cattle stood at 28.8% and 39.7% in 2001 and 2012 respectively, the highest in Zambia (Lubungu et al. 2015, p.12). Crucially, in matrilineal societies such as the Tongas, women frequently own cattle independently of their husbands. As a bulk crop which requires vast tracts of land, sugarcane expansion potentially affects herd sizes which discourages smallholders from converting livestock to cash as fall-back strategy. Sugarcane production also potentially affect household participation in subsistence production (e.g. maize) and cash crops (e.g. cotton and sunflower). Thus, the way LaSAIs and sugarcane production plays out within the regional setting is crucial in understanding livelihood dynamics and responses among rural dwellers.

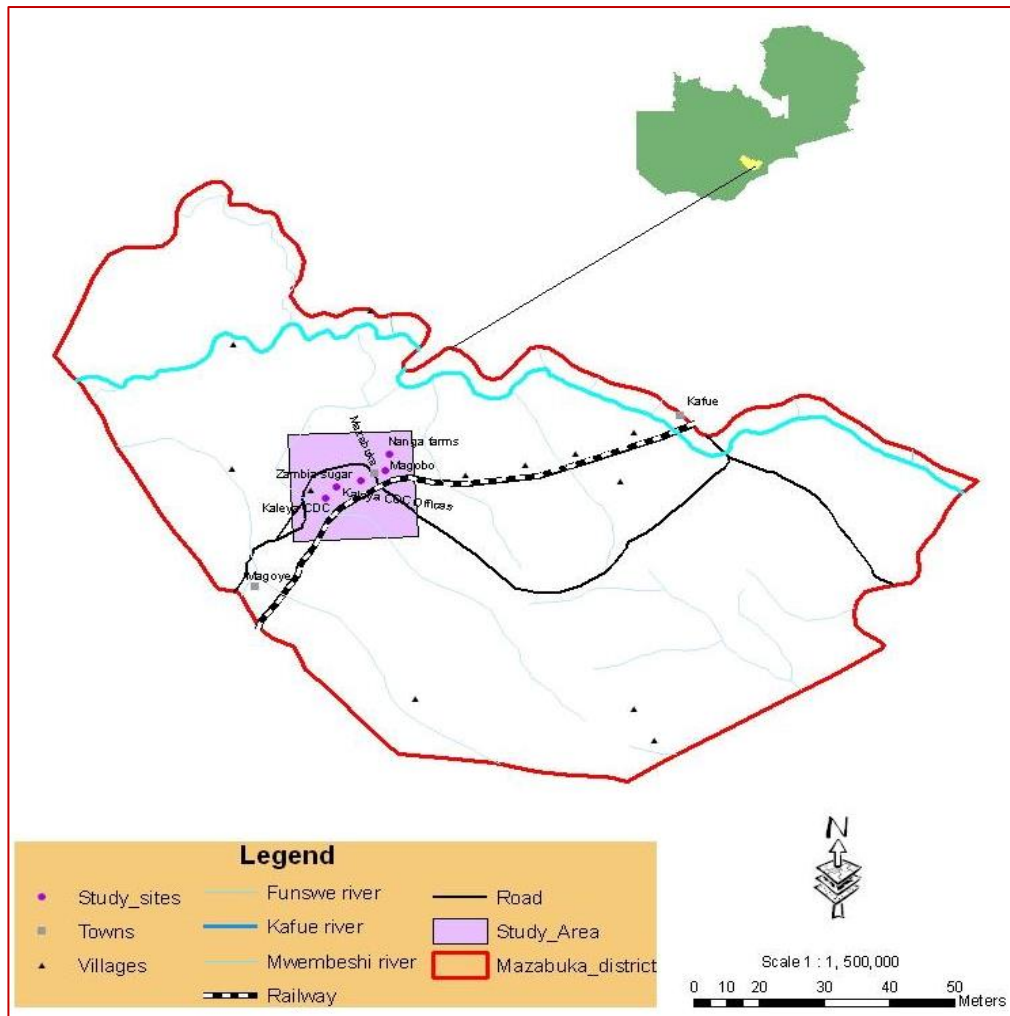


Figure 3.5: Map showing location of the study area and the case study communities (ArcMap).

The neoliberal reforms of the 1990s, uncertainties in the post-apartheid South Africa and regional politics such as the land reforms of Zimbabwe saw Zambia witness massive investments in the post-2000. Dubbed the ‘Sweetest Town’ for being the largest sugar producing district in the country, Mazabuka produces about 93% of total national output (Table 3.2), under varying arrangements: estates (the largest proportion under one agricultural estate), independent commercial farmers, outgrower companies, and collectively by smallholders in outgrower schemes. This concentration of agriculture, sugar and value-chain activities in the district presents a fittingly relevant setting for exploring livelihood transformation because of LaSAIs among smallholders.

Table 3.2: Sugar processors in Zambia (Scoping interviews 2015; see also Figure 3.3)

Company	Direct production	Outgrower production	Production (MT)	Market share	Region
Zambia Sugar	17,025	7,734	424,000	92.5%	Southern
Kafue Sugar	6,000	Nil	30,000	7.2%	Lusaka
Kalungwishi Sugar	400	Nil	1,400	0.3%	Northern

To ensure throughput and shaped by institutional arrangements, ZaSPlc connects to two key intermediary companies in the district – Kaleya Smallholder Company Limited and Nanga Farms. Control over intermediaries ensures transmission of production, markets and quality standards, while maintaining different outgrowing arrangements (Figure 3.6).

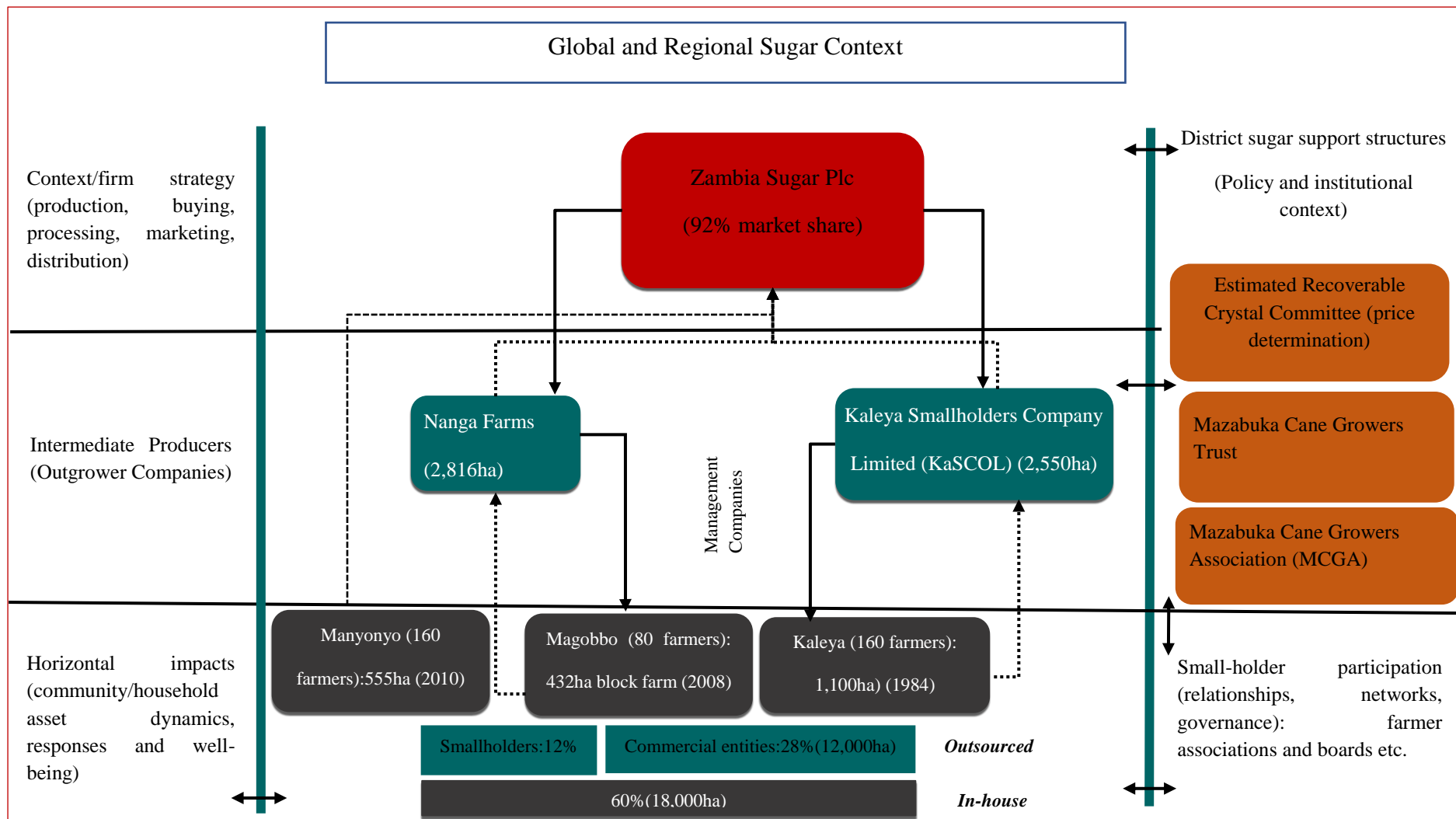


Figure 3. 6 Institutional and organisation structure of sugar production in Mazabuka. *Dotted upward arrows*: product flow. *Solid downward arrows*: market signals, buyer/production specifications. *Double arrows*: influence and representation.

Key features instigating sugar expansion in Zambia include government’s objective to empower rural communities and transform agriculture. In addition, donors have been keen on sugar value-chain development for rural development. These processes have driven expansion in production and area harvested for sugarcane (Figure 3.7).

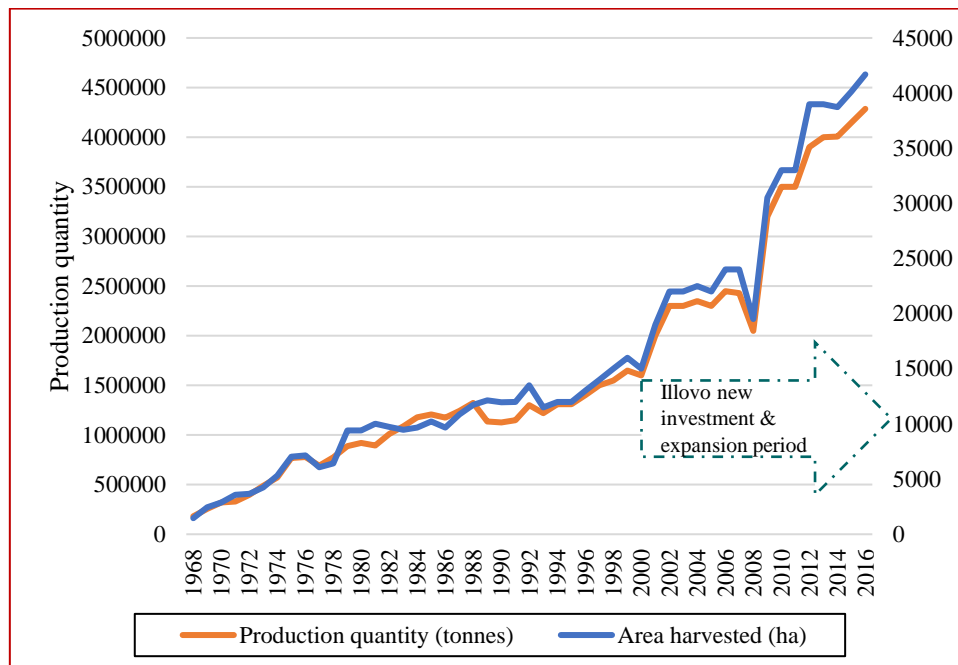


Figure 3. 7 Sugarcane expansion in Zambia (FAOSTAT 2017).

As Figure 3.7 shows, there has been limited spread of sugar value-chains in Zambia. Outgrower models have not been replicated elsewhere in other sugar-producing districts such as in Kafue and Kasama, presenting Mazabuka as the only site for analysing LaSAIs, sugar expansion and local livelihood experiences among smallholders (Table 3.3).

3.4 Study Sites

Table 3.3 shows that Mazabuka has three smallholder outgrower schemes: Kaleya, Magobbo and Manyonyo. To appreciate the institutional and production dynamics in the schemes, preliminary field assessment was undertaken during which a decision to focus on two projects was made. Manyonyo scheme was excluded because sugarcane production had only just commenced (2014 as its inaugural cane harvest) despite the scheme being initiated in 2009. However, I draw on the experiences of Manyonyo specifically to illuminate regional agribusiness ‘*power of presence*’ (Chapter 7).

Table 3. 3: Outgrower schemes in Mazabuka linked to ZaSPlc.

Scheme	Characteristics/Outgrower arrangements	Hectares	Smallholders	Average hectares per household
Kaleya (1983)	Operates via an integrated limited company (KaSCOL), which provides extension services to smallholders (e.g. inputs, managerial, marketing, commercial services etc). Farmers directly cultivate sugarcane on household plots whilst using an additional half-hectare for subsistence crop production. Farmers focus land preparation, irrigation, weeding, fertiliser application, etc. All land belongs to KaSCOL, and as tenants, farmers run a 14-year renewable lease.	1,040	160	6.5
Magobbo (2009)	Operating as Trust, Magobbo is a a block-farm which amalgamates individual farmer plots of land. Magobbo leases the block-farm to ZaSPlc's subsidiary Nanga Farms Plc. Its formation responds to the European Commission's 60% financing agreement, with the balance being covered by ZaSPlc as farmer loans. Nanga Farms runs a centralised system that allows parties to conduct joint activities such as bulk supply of production materials. Production and commercial aspects are all controlled by Nanga Farms and farmers receive a share of profits made on their plots as dividends.	380	80	7
Manyonyo (2010)	Manyonyo is considered a state project co-funded by the Finnish government and the African Development Bank. Manyonyo is a clustered scheme with multiple crops under consideration such as maize, bananas and other horticultural crops, but only sugarcane is currently grown. Here, farmers formed a farmer-based company (Manyonyo Irrigation Company), but all production/management operations fall directly under ZaSPlc. Smallholders receive a share of the profits.	555	164	4

This study focuses largely on Kaleya and Magobbo outgrower schemes under KaSCOL and Nanga Farms as management entities/intermediaries respectively (Figure 3.8). Diversity in production systems and tenure relations makes Kaleya and Magobbo interesting cases of inquiry. These two projects represent two main sugarcane growing communities in Mazabuka/Zambia, emerging under two-time periods and both in the rural setting. They offered organisationally different schemes: scheme management and lengths of operation, permitting generation of rich comparable data and insights from varying experiences. Given heterogeneity of rural households and farmers in Zambia and that being rural-based is not synonymous with being small-scale, the focus on outgrower schemes – that cultivate 4-6 ha on average – closely links to the definition of small-scale farmers (i.e. land aggregation) in Zambia, permitting the use of government representative data. Smallholders in Zambia broadly combine small-scale farmers – defined as cultivating less than 5 ha of land and emergent farmers cultivating 5-20 hectares (Sitko and Jayne 2014). Selection of the two schemes necessitated investigations of livelihood experiences under varying institutional set-ups and production systems, allowing analyses of processes and dynamics under which livelihoods change and how they change in a more comprehensive manner.

Kaleya and Magobbo share similar geographic, demographic and agricultural environment and are associated with similar traditional and cultural settings (as predominately Tonga), including policy processes and institutional influences. They are also linked *albeit* variously to one buyer/processor, allowing for an enriched scope and experiences from the varying scheme management structures.

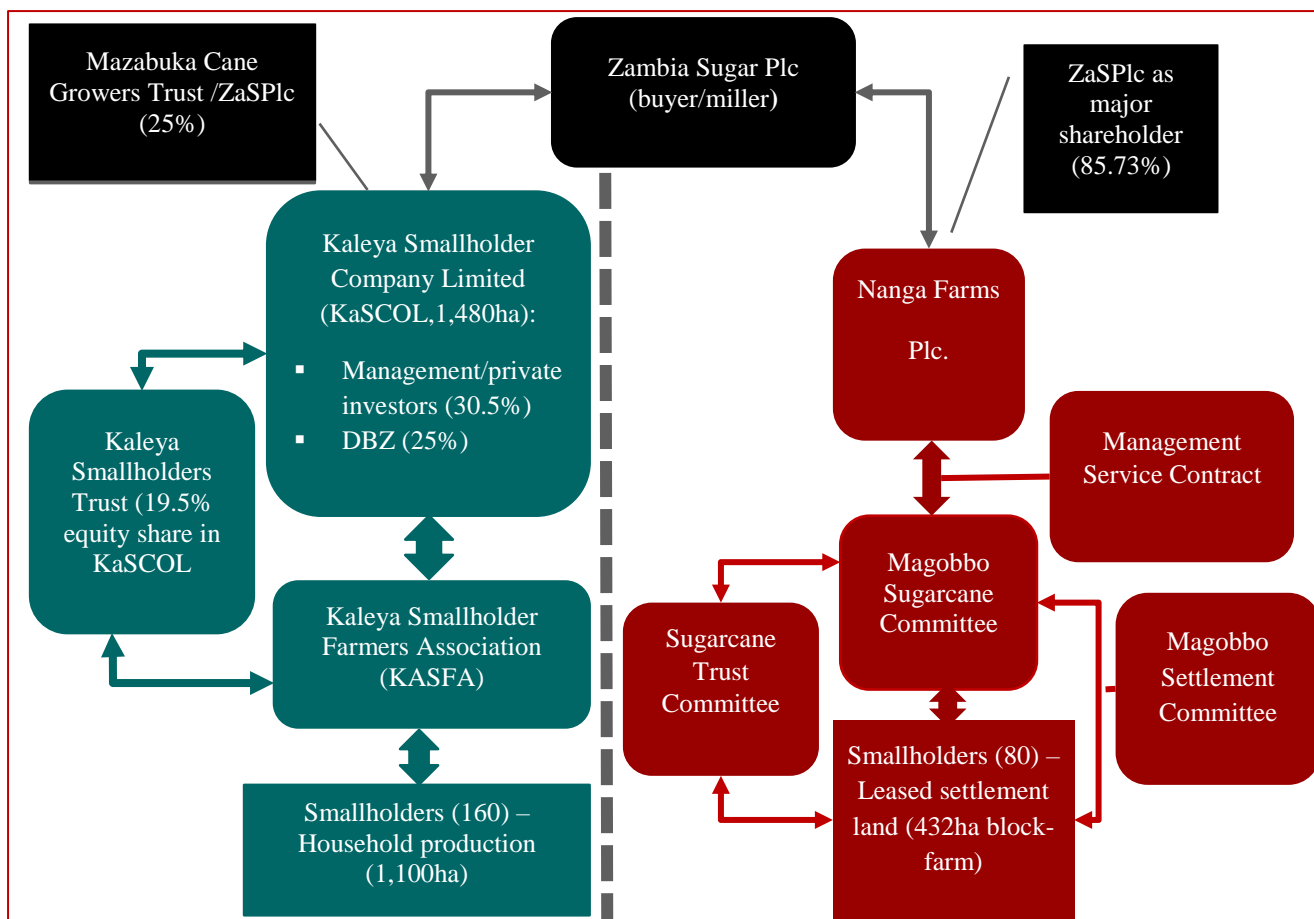


Figure 3.8: Institutional structure and organisation of Kaleya and Magobbo sugar projects

One key issue in smallholder outgrower schemes surrounds land ownership, access and utilisation arrangements and how it links to wider production system. The case study communities presented two sets of land ownerships. As highlighted in Table with 3.3, in Magobbo, the land for sugarcane production is communal – a contiguous block-farm of land title leased out to Nanga Farms. Farmers here are lessors, leasing land to ZaSPic through Nanga Farms and receiving a share of proceeds. In Kaleya, the management company owns all the cane and dwelling land areas. As tenants, smallholders also pay a small fee as rent strictly under the cane farmers agreement with the scheme growing from 8 farmers in 1984 to 147 in 1987 and 160 farmers currently. I return to specific outgrower arrangements in Chapter 5.

KaSCOL is widely considered a pioneering example of smallholder engagement in sugarcane as a non-traditional agricultural export crop and smallholder empowerment in Zambia. The scheme had an international seal of approval as a Fairtrade Certified organisation till its suspension in 2014, making it interesting to understand how livelihoods are built on ‘best

practices’ and how this compares with emerging schemes such as Maggobo. KaSCOL’s long establishment provided a rich context for analysing livelihood transformation from an organisation that emerged in a somewhat different policy and institutional context. Magobbo on the other hand provided an opportunity to explore livelihood transformation in a scheme that emerged in the era of land-grabbing, driven by the corporation and shaped by an unrelated scheme management structure and strategy.

Sugarcane growers in Mazabuka are vertically integrated, centrally located between upstream and downstream nodes in the value-chain. The former relates to the “vertical” interaction between growers, intermediaries and the processor while the latter points to interactions and relationships “horizontally” within grower associations and committees (Figure 3.6).

The Selection of Magobbo allowed access to non-sugarcane cane growers within a 3-5-kilometre radius, in and around the scheme. Non-cane growers were important in exploring varying poverty dynamics, livelihood pathways and actual barriers to entry in sugar value-chains, and particularly that there can necessarily be no ‘goodness in inclusion’ where the terms for participation are disempowering (McCarthy 2010). By contrasting views, opinions and experiences of cane and non-cane growers, the study provides a comprehensive analysis of livelihoods and poverty pathways facing rural households. A key claim here is that not all community members necessarily benefit from expansion of sugar, both amongst those households integrated in the sugar chain and those who are not (Vicol 2017; McCarthy 2010).

3.4.1 Research Team

The need to oscillate between national level interviews on the one hand and district and community data collection on the other required that I engage research assistants. Availability and access to additional funding for fieldwork from the University of Zambia allowed me to employ five assistants, combining national and district level assistants. To recruit assistants, I drew on contacts at University of Zambia – where I previously worked – to recommend potential researchers, and my own contacts from previous work with Rural-net Associates (a local NGO) and Institute of Development Studies (IDS). I was able to select from a pool of potential assistants with previous knowledge in research and within our case study province and district, which allowed me to immediately obviate cultural and language barriers.

A combination of 2 males and 3 females were engaged. One female and two male recruits were national research assistants from Lusaka and of the Tonga tribe. These were recruited from the

University of Zambia having completed their undergraduate programs in education, humanities and social sciences with one an MA student. Theoretical background in research enabled assistants to participate in national interviews alongside the principal investigator as well as being involved in multi-level data collection that requires a balanced team with varying research strengths. These were familiar with complex and dynamic nature of interview processes that require quick judgement and probing skills on the part of researchers. The balance two assistants were female district assistants from southern province. One had background in Social Work (Diploma) and had worked with me on a RuralNet and IDS project. The other was a Masters student at UNZA with education background and based in Mazabuka. These were familiar with the local language, culture and traditional values and knowledge about research in rural settings. They were important in negotiating access to district stakeholders including chiefs. Training was conducted to generate a common understanding of aims of the research, ensure consistency as well as cover ethical consideration.

3.4.2 Identification of Participants

Selection of participants was largely purposive with an aim of incorporating as many stakeholders as possible at nodes closer to the production space – where impacts of sugarcane expansion are felt most (Richardson 2010). Given the materiality of sugarcane which leads to concentration of production and processing activities within local geographical areas, it was expected that important nodes for analysis would be located either in the capital city Lusaka or Mazabuka district.

First, a comprehensive review of literature was conducted around LaSAIs, value-chains and livelihoods in Zambia. This helped define axes and background to the study as well as draw an initial stakeholder list. An internet search was also important for selecting policy and strategic documents. The preliminary stakeholder list enabled a visit to Zambia between June and July 2015 for scoping (Section 3.4.1). Scoping activities strengthened data collection tools as well as helped appreciate the context under which LaSAIs and sugarcane expansion took place. Preliminary interviews were conducted with national-level actors including government departments, NGOs, donors and research think-tanks. Interviews also involved sugar industry experts and consultants including sugar companies.

District level activities on the other hand focused on development issues among government, NGOs and private sector actors, including relationships with the sugar agribusiness. At sub-

district level, interviews with sugar companies, and key local people such as scheme leaders, initial interviews and group discussions were conducted in selected communities (Section 3.4). Qualitative household interviews and surveys were also conducted to appreciate the quality and sort of data the study tools were capturing in relation to the research aims and purpose.

In conducting these activities, other relevant stakeholders were identified through snowballing. This enabled identification of previously unknown actors. In some cases, some stakeholders appeared less relevant and were immediately dropped/replaced. While the snowball technique was important, such recommendations helped build trust with potential interviewees thereby enhancing quality responses (Chohen and Ariali 2011). This feature particularly proved helpful in sugarcane communities where farmers operating under an intermediary company and under tight sugarcane agreements (Section 5.5.5) became more willing to participate in the study due to prior communication from the company or scheme leaders. Recommendations from intermediary officers helped farmers to be at ease with the researchers, enabling cooperation. This enabled the study to draw on diverse and multi-level actors thereby enriching the quality of data.

3.5 Data Collection and Methods

Collection of empirical data started with preliminary assessments (June-July 2015) followed by the main fieldwork (November 2015 to March 2016). However, beyond this period, data collection extended with phone interviews and emails where the need for clarification and additional insights was required. Semi-structured interviews and policy analysis were conducted at national and industry level in relation to research objectives 1 and 4 while district and sub-district approaches pointed to household surveys, interviews and participatory methods in relation to objectives 2 and 3. In what follows, processes of data collection are detailed.

3.5.1 Stage I: Preliminary Assessments

a. Policy analysis and Expert Interviews

Preliminary analysis of over 20 policy documents and expert interviews were conducted to appreciate the broader study context. Selection of policy documents and preliminary analysis emerged from a scoping exercise to identify key stakeholders, ascertain priority areas as well as elicit stakeholder views on the key policies and strategies shaping LaSAIs and sugarcane expansion. Stakeholders helped filter the preliminary list of documents to 12 on which policy

analysis was conducted. Expert interviews considered opinions and insights on the influence of policies on LaSAIs, coordination and collaborations among state institutions. Different opinions from different experts enabled an initial understanding of policy dynamics around LaSAIs, relevant actors as well as practices (Objective 1).

b. Social and Resource Mapping

Social and resource mapping drew on an understanding that local people possess rich knowledge about their surrounding and ways of life as opposed to outsiders. Social and resource maps were created with selected community and scheme leaders familiar with sugarcane growing areas (Rocheleau 1995). These considered social structures and institutions local people drew on in support of their livelihoods, highlighting whether these were new or had changed with LaSAIs. Maps presented initial community conceptualisation of livelihood resources (e.g. natural capital), spatial locations, availability, distribution, access and utilisation within communities; and existing relationships (e.g. how different groups exert power influences and implications). Social and resource maps also provided understanding into the study area, participants, priorities and thought processes (Mascarenhas and Kumar 1991).

c. Exploratory Household Questionnaires

To check timing, clarity of questions and their relevance to research objectives 2 and 3, exploratory questionnaires were piloted in 6 purposively selected households – 2 non-cane growers and 2 sugarcane growers in Magobbo and 2 in sugarcane growing households in Kaleya. Exploratory questionnaires helped establish initial asset and livelihood profiles for households as well as refine the list of assets. The questionnaire was designed to ensure that data were collected on household characteristics, composition and knowledge and experiences in sugarcane production or otherwise. Questionnaires covered food and income sources as well as challenges and coping strategies for households. Combining open and closed questions enabled a balance between statistical data on livelihood assets and household experiences in sugarcane businesses. The latter allowed for inclusion of previously less but relevant issues (Robinson 2014).

Piloting questionnaires between June and July 2015 – a period when farmers were harvesting sugarcane – guaranteed their availability. Any adult member of the family could complete the questionnaire together with the research team although this was always the head of the household with any other person present, ensuring reliability of the responses. The research team was introduced by either a farmer association representative (as was the case in Kaleya)

or a committee representative (as was the case in Magobbo) providing initial entry into farmer's households. Questionnaires were introduced to respondents by explaining in local language that the study involved asking questions about their way of life as sugarcane producers. Respondents were informed that the study was interested in understanding how sugarcane production and agribusiness expansion in the area contributed to the household well-being.

Questionnaires were for various reasons not translated to Tonga. Some of this related to the research team's familiarity with local culture and language (Section 3.7), resource and time constraints. Pre-study training and daily de-briefings allowed for consistency in probes and capturing of the data. Daily de-briefings reduced discrepancies and interpretations in data collection, enhancing coherence and consistence in the field. District research assistants had good knowledge of sugarcane communities and production allowing for an understanding of complex issues within the field. Proximity to two communities allowed the principal investigator to fluctuate between the two communities, ensuring control and quality in data collection particularly on household questionnaires.

Interviews were held anywhere the respondent felt comfortable, e.g., sitting on the floor, on chairs offered by households, farmer offices (in Kaleya) or whilst respondents proceeded with their daily chores (Field Photo 3.1).



Figure 3.9: Research assistant conducting household interviews in Kaleya (2016).

3.5.2 Stage II Data Collection

Objective 1: To identify drivers and actors surrounding large-scale agricultural investments in Zambia and the policy and institutional processes that govern them.

Objective 4: To explore the current configuration of the sugar value-chain and how LaSAIs shape and influence governing processes in Zambia.

Collection of data at national level focused on broader drivers, institutional governance and co-ordination issues surrounding LaSAIs on the other one hand, and the current configuration of the sugar value-chain on the other. Objective 1 required data to be gathered on broader policy and institutional processes that drive LaSAIs in Zambia. Objective 4 required data on perceptions of how LaSAIs deploy their power to shape and influence governance processes and industry practices in Zambia. It further required data on key actors shaping LaSAIs, sector, firm practices and how these are defined and their influence on local livelihoods and rural development. Assessment of these elements combined policy analysis and multi-level semi-structured key informant interviews as outlined in the following sections.

a. Policy Analysis

This study analysed selected policy and strategic documents, considering how LaSAIs were covered in government documents. A total of 12 national policies and strategies were purposively selected and analysed for content including national economic development plans as outlined in Table 3.4. National economic development plans helped understand the country's

current and future direction and how these implicate LaSAIs, land and water resources for agricultural expansion. Next, qualitative coding, manually and then using NVivo, enabled examination of dominant narratives in each document and the identification and categorisation of key drivers of LaSAIs in Zambia (Bazeley 2007). This involved drawing a comprehensive list of key themes and headings during reading stage, collapsing similar/overlapping headings into tight categories (Hsieh and Shannon 2005). Analysis involved examining dominant narratives in the documents, highlighting emphasised, less emphasised or missing aspects. Analysis paid attention to content, isolating enhancing or constraining factors to LaSAIs (Cresswell 1998). Through an inductive grounded theory, stressors and policy shifts and implications for LaSAIs were examined within the national context (Strauss and Corbin 1990). Identification of emphasised, less emphasised or side-stepped aspects, by whom and why formed the core part of policy analysis.

Table 3.4: Key policy documentation

<i>Document</i>	<i>Description</i>
Vision 2030 (V2030)	Long-term development plan
National Agricultural Policy (NAP)	Agricultural policy
National Agricultural Investment Plan (NAIP) – 2014-2018	Investment plan
Strategy for Industrialisation and Job Creation (IS)	Industrialisation strategy
National Irrigation Policy and Strategy (NIPS)	Irrigation policy/strategy
Fifth National Development Plan (5 th NDP)	Development plan
National Energy Policy (NEP)	Energy policy
National Water Policy (NWP)	Water policy
Sixth National Development Plan (6 th NDP)	Development plan
Revised Sixth National Development Plan (R6 th NDP)	Development plan
National Resettlement Policy (NRP)	Resettlement policy
Seventh National Development Plan (7 th NDP)	Development plan

b. Semi-structured Interviews

Interviews across different sectors and governance scales were conducted with policy and development actors ($n=57$) (Table 3.5). As expert source of information, interviews helped contextualise the study and answer questions related to LaSAI drivers, patterns and processes that govern these elements. Interviews considered sugar value-chain expansion, industry practices, agribusiness power and influence and how they shape prospects for national and local development (Marshall 1996). An initial comprehensive review of public and NGO documents and preliminary interviews allowed for selection of key stakeholders. Based on this initial list

and combined with a snowballing technique, the study deployed purposive sampling, allowing for identification of “cases of interest from people who know people who know people who know what cases are information-rich” (Patton 1990, p.175). In practice, an interview guide was used, enabling flexibility and coverage of wide-ranging topics taking the form of discussions. The interviewer guided the direction of the topics within wider research objectives 1 and 4 (Babbie and Mouton 2001).

Table 3.5: Summary of semi-structured expert interviews

Category	Description of participants	Number of participants
Government departments	Various government departments and agencies (e.g. Ministry of Agriculture, Energy, Lands and Natural Resources and investment promotion agencies)	12
Multilateral and bilateral donor agencies	Multilateral agencies such as the World Bank and Africa Development Bank and bilateral agencies such as the Finnish Mission	4
Academics, research think tanks and industry experts	Researchers from local research organisations (e.g. IAPRI and Musika) and universities (e.g. UNZA) in agriculture, energy and sugar including industry consultants.	5
Local and international NGOs	Local and international NGOs working agriculture, sugar sub-sector and other broad issues such as natural resource use, poverty reduction and taxation	5
Farmer-based organisations	National and industry farmer membership organisations	2
District and sub-district interviews	Various government departments, including NGOs, commercial banks, suppliers to the sugar companies and producers	25
Sugarcane corporations, companies and service providers	Sugarcane producers, service providers and sugar processors	4

Interviews further investigated policy implementation and practice to understand actors, policies and potential implications, including which policy levers were in place, prioritized or, neglected and why. Interviews considered actors involved in LaSAIs, national drivers, trends and patterns as well as coordination and governance elements in foreign investments. Interviews were also relevant in scene setting and locating key actors with initial probes

developed around: policy processes and institutional coordination of LaSAIs, key players and firm practices and how these are defined to influence local development. At the meso-level, interviews concentrated on how the dominant agribusiness deployed its power and influence to shape national policies, industry practices and local development including smallholder-firm interaction.

Interviews were conducted in English except for sub-district level interviews, which used Tonga and Nyanja. Given unwillingness to have discussions recorded, interviews were mainly documented using handwritten notes except on a few occasions in which these were recorded and transcribed.

3.5.3: Stage III Data Collection

Objective 2: To identify and explore industry and local factors affecting smallholder participation in sugar value-chain as a livelihood enhancement strategy in rural Zambia

Objective 3: To explore how large-scale agricultural investments and value-chain expansion in sugarcane contributes and affect rural livelihoods in Zambia

a. Household Questionnaire Surveys

Objectives 2 and 3 required quantifiable household data on asset and livelihood profile as well as insights on smallholder-firm interaction and integration into sugar value-chains. The sampling frame was all sugarcane growing households in Kaleya (160) and Magobbo (80). Questionnaires also considered farmer livelihood experiences and possibilities. Questions considered crop production, diversification, asset acquisition, farming patterns and marketing including land access and utilisation. Apart from historical aspects of farmer experiences, specific data as they relate to net incomes, land access and utilisation as well as production dynamics as reported by households focused on the past three seasons (2014-2016). This related to availability of farmer records (e.g. tonnes of sugarcane output) and recall period for elements such as commodity prices, hazards, shocks and trends (Objective 3). Flexibility in the questionnaire allowed for probes around smallholder-firm interactions, factors affecting grower integration in sugar value-chains as well as terms and condition for this participation (Objective 2). Within wider experiences, these processes involved exploring which processes of participation were emphasised, by whom, how and why.

Questionnaires provided an effective approach to tease out household asset and wealth endowment. Questionnaires collected quantifiable demographic, crop and land-use as well as

farming pattern data. This included crop diversity, income sources, coping strategies as well as food and labour availability. Understanding the meaning of questions in questionnaire surveys is difficult especially for the rural population (Bourai et al. 1997). Some of the challenges related to low levels of education making it difficult to converse or read in English. However, all questionnaires were administered by the researchers in face-to-face interviews. This provided opportunities for probes, cross-checks and validation of survey responses (Denscombe 2010; Bourai et al. 1997).

Questionnaires were also administered to non-cane growers in Magobbo ($n=30$) to understand dynamics of exclusion as well as livelihood patterns among those excluded from sugar value-chains. Magobbo was the only community where non-cane growers were accessible within 3-5-kilometre radius deployed in this study. Non-cane growers were further away in Kaleya of distances between 8-10 kilometres, raising logistics and resource challenges. Questions for instance included livelihood portfolio and impacts of agribusiness presence in the area on livelihood activities, opportunities and challenges related to sugarcane expansion in the region.

After completing all the questionnaires ($n=80$ in Kaleya; $n=70$ in Magobbo; and $n=30$ non-cane growers in Magobbo), a preliminary analysis was undertaken to feed into household interviews and community participatory approaches. Research probing and a focus on accurate responses meant that some questionnaires went beyond planned 50 minutes averaging 60 minutes. Preliminary survey analysis during fieldwork meant that household questionnaires provided a crucial launch pad for subsequent national level round two interviews and most importantly sub-district participatory data collection. It allowed initial insights from the questionnaires to build into subsequent qualitative data collection processes. Preliminary analyses considered households' views and experiences of LaSAIs, markets and purchasing arrangements, governance elements, and participation in sugar value-chains – key elements for focus group discussions.

b. Qualitative Household Interviews

The second main district and sub-district field visit focused on qualitative data collection. To capture various categories of households for the qualitative household interviews, households were stratified by locally defined wealth categories. A participatory wealth ranking was conducted with community and association/committee leaders and key persons to generate a deeper understanding of farmer livelihood characteristics as well as to contribute to the selection of household interview participants. Entrusting local people to categorise and assign

households this way ensured accuracy in the local descriptions of wealth and what it means to live well or to be poor (Hill 1986).

Three household categories emerged from the participatory wealth ranking: '*poor*,' '*medium*,' and '*better-off*', forming the basis for cluster analyses. The procedure for selecting 12 households for household interviews was guided by the desire to use the sample as a vehicle to purposively select a range of households that exhibit diverse livelihood circumstances and potential strategies/pathways. In both sugarcane communities, scheme leaders and key local people identified during preliminary assessment ($n=6-8$), were asked to categorise households in the scheme, and then assign these to locally acceptable codes and descriptions of wealth. During scoping, I asked respondents (in group discussions) what it meant to live well and then noting key characteristics for wellbeing. Based on this preliminary list, the research team together with local participants developed criteria for assigning households into wealth categories, which included asset ownership, access to schools and health services, livestock, land and ownership of businesses, perceived levels of debt and savings (Appendix 6.6). These further formed the basis for analysing livelihood pathways for different category households. Two households were randomly selected from each cluster, with more being added where the need for collaborative evidence and clarity on certain issues became necessary. This ensured collection of precise and statistically robust descriptions of the wider population (Babbie 2005). Interviews followed oral histories which delved into livelihood decisions and opportunities, interrogating references to land and labour relations and other assets as they relate to a household means of earning a living.

One outcome was collection of rich and comparable household data not only around livelihoods and livelihood response pathways but also sensitive elements such as expenditure decisions on acquisition of assets, offering a greater understanding in Objectives 3 and 4. At least 14 households were incorporated in household interviews: Kaleya ($n=6$); Magobbo ($n=6$); including purposively selected non-cane growing households in Magobbo ($n=2$). Preliminary analyses of household interviews built into participatory approaches, allowing room for debate and clarification of emerging narratives.

c. Participatory Approaches

Participatory discussions aimed to present as much as possible how many respondents referred to what issue to add to the local importance and consideration of issues. This allowed the discussion to remain in the qualitative domain, maintaining local interpretations and narratives

of events and experiences. As outlined below, this considered focus group meetings and transect walks.

❖ Focus Group Meetings

A focus group involves the “*use of in-depth group interviews in which participants are selected because they are a purposive, although not necessarily representative, sampling of a specific population, this group being ‘focused’ on a given topic*” (Rabiee 2004, p655). Focus group discussions explored wide-ranging issues around inclusion and exclusion in sugarcane production (Objective 2), livelihoods and pathways (Objective 3). Using topic guides, focus groups discussed historical perspectives (e.g. instigating factors), drivers to sugarcane adoption and experiences on livelihood as well as scheme governance and management (Appendix 5). Discussions focused on wider community issues and most importantly on oral histories, constructing timelines of events which led to the adoption of sugarcane and the sort of crops and livelihood practices before sugarcane. Facilitation and probes ensured that all participants were encouraged to speak during discussions. Discussions also acted as ice-breakers, helping to deal with power and cultural barriers among participants and with the research team (Binns et al. 1997). Giving participants ($n=6-8$) an opportunity to discuss issues among themselves in their local language ensured clarity and collaboration of evidence (Kitzinger and Barbour 1999). Group meetings enabled clarification on issues raised in household questionnaire surveys and interviews, permitting collection of rich background data. Whereas non-cane growing farmers explored factors behind non-participation (barriers to entry) and wider impacts of LaSAIs and sugarcane expansion, cane growers focused on experiences of sugarcane production, including patterns and gains of participation. Dynamics of participation included production dynamics, market and price mechanisms as they relate to smallholder-firm interaction.

The use of FGDs as a follow-up to surveys generated understanding of emerging issues from surveys, highlighting underlying local explanations on specific livelihood elements, inclusion and exclusion. In answering the ‘how’ and ‘what’ questions, FGDs presented value for triangulation (Lambert and Loiselle 2007). Discussions started out with a question and answer session and then breaking into participatory activities. Questions for discussion focused on factors affecting smallholder engagement in sugar production, actors and relationships. Questions also focused on livelihood impacts of LaSAIs as well as views and opinions on opportunities and barriers towards enhanced livelihoods and smallholder participation in sugar

production. Group meetings further explored local organisational forms and what this meant for smallholder participation such as scheme management styles, patterns of incorporation and market arrangements. This included smallholder motivations and what growers had to do or enter to gain participation (e.g. eligibility, requirements) including determination spaces (e.g. grievance mechanisms). Participants were purposively selected based on participation or non-participation in sugarcane production, gender, age, social standing etc. (Table 3.6).

Table 3.6: Summary focus group meetings

Participants	Community	Community
<i>Group discussion</i>	Kaleya	Magobbo
Combined key community leaders/persons	1	1
Scheme representatives	1	1
Women	1	1
Youths	1	1
Non-cane growers	0	1
<i>Total</i>	<i>n=4</i>	<i>n=5</i>

Separating group meetings as shown in Table 3.6 proved effective in collecting sensitive cluster specific data, difficult to obtain in combined group discussions. This presented an opportunity to discuss varying group perceptions and views around inclusion/exclusion and livelihoods, enabling clarity and tapping into local insights and knowledge. However, power relations in participatory approaches are complex. An absence of a coherent theory of participation that seeks to explain and articulate the role of agency within development processes means that participation maybe be deployed to achieve the objectives of the project, as opposed to strengthening and building consciousness of participants thereby being mechanistic (Penderis 2012). Integrating and harnessing local knowledge into policy may not be widespread (Stringer and Reed 2006). Methodological and conceptual concerns by various commentators point to dangers of unquestioningly accepting local knowledge leading to failure to appreciate the multi-faceted nature of challenges (Reed et al. 2007). In some instances, this has been cited to reinforce “*existing privileges and group dynamics which discourages minority perspectives from being expressed,*” leading to unverified local assumptions (Reed et al. 2007, p250). Where powerful participants dominated discussions, the research team encouraged the passive members to make contributions by soliciting their opinions directly thereby widening perspectives and collaboration in evidence (Kothari and Cooke 2001). Participants frequently diverted from the topic, mostly focusing on sugarcane markets, challenges of pricing and costs

of production. The research team reminded the participants about the key issues under discussions and promised to return to what they felt was pressing towards the end of the discussions where time allowed. Group discussions were recorded through note taking and were textual. Recorded discussions were transcribed and typed for analysis.

❖ **Transect Walks**

Focus groups were preceded by transect walks through sugarcane fields and wider community. Transect walks were conducted with scheme leaders together with key local persons in communities as participants to group discussions and having prior understanding of the nature of the research project. The walks helped develop an understanding of local communities as sugarcane production areas on one hand and as spaces where smallholder livelihoods (farming, access to natural capital) are negotiated. Rather than being passively observational (Ahmed et al. 2008), walks were deployed to generate discussions around observations with local persons and talking to whoever we met and had time to talk to us (Chambers 1997). In household interviews, this included exploring the land surrounding participating households and its use (e.g. presence of fruit trees, gardens or major land investments). Walks allowed the researchers to tour wider community areas whilst observing, listening to local explanations and asking key questions about anything of interest including issues surrounding land, water and local ways of life (Figure 3.10).



Figure 3.10: A sugarcane grower explains how land was converted to sugarcane and how farmers dealt with memories of graveyards (Magobbo 2015).

The walks were important in understanding community location and distribution of resources, features and land-uses in relation to different social groups (Chambers 1997). Transect walks

provided a quick way of gaining insights into sugarcane communities, local livelihood situation and socioeconomic conditions for smallholders (Figure 3.11).



Figure 3.11: A young boy from cutting grass to feed cattle. Sugarcane fields restricts livestock movements (Magobbo 2015).

Regarding sugarcane, transect walks enabled understanding of production dynamics (e.g. water sources, land, input supply etc.). In relation to livelihoods, walks enabled insights into crop diversity, access to natural capital, areas and spatial locations of sugarcane fields in relation to households and their production. Combined, walks were useful in gaining understanding of the wider livelihoods and vulnerability context whilst acting as icebreaker (Chambers 1997).



Figure 3.12: Checking harvested sugarcane in Magobbo (2015).

That sugarcane is a bulk crop and high land user, it was expected that knowing the complete study area would involve covering long distances. An open van was used to traverse a cross section of the study communities, stopping whenever a discussion ensued whilst some areas were covered on foot (Figure 3.11). Walks raised key issues around sugarcane production and local livelihoods particularly that they were conducted during sugarcane harvest period (June-July). The group walks also reflected on the ease of local way of life in relation to sugarcane expansion, enabling corroborative evidence with other sources. For instance, this allowed cross-checks such as on land and land-use emerging from questionnaires whilst providing valuable topics of further group discussions.

d. District and sub-District Interviews

At district level, interviews considered wider development opportunities and challenges as they relate to regional planning. Participants included government departments, NGOs, businesses actors, input suppliers to sugarcane companies including district sugar related associations (Table 3.2). The study focused on district and regional development impacts of LaSAIs and wider business relationships. Some of these included regional planning, resource dynamics (land and water) and wider poverty reduction impacts. Interviews also considered how the presence of an agribusiness, its power and influence shaped capacity in local authorities and impacted prospects for local and regional development. At sub-district level, interviews considered the way sugarcane expansion plays out at local scales, pointing to resource use and management, livelihoods and pathways. These included wider social impacts in health, education, infrastructure and market mechanisms. Participants included local teachers, traditional leaders and key community persons (Table 3.2).

3.6 Data Organisation and Analysis

Choices of data organisation and analysis were mainly influenced by the desire to retain depth in the original data, permitting themes to emerge from the data itself in a more grounded manner (Thomas 2006; Starks and Trinidad 2007). Various approaches were used in data collection, organisation and analyses (Figure 3.13).

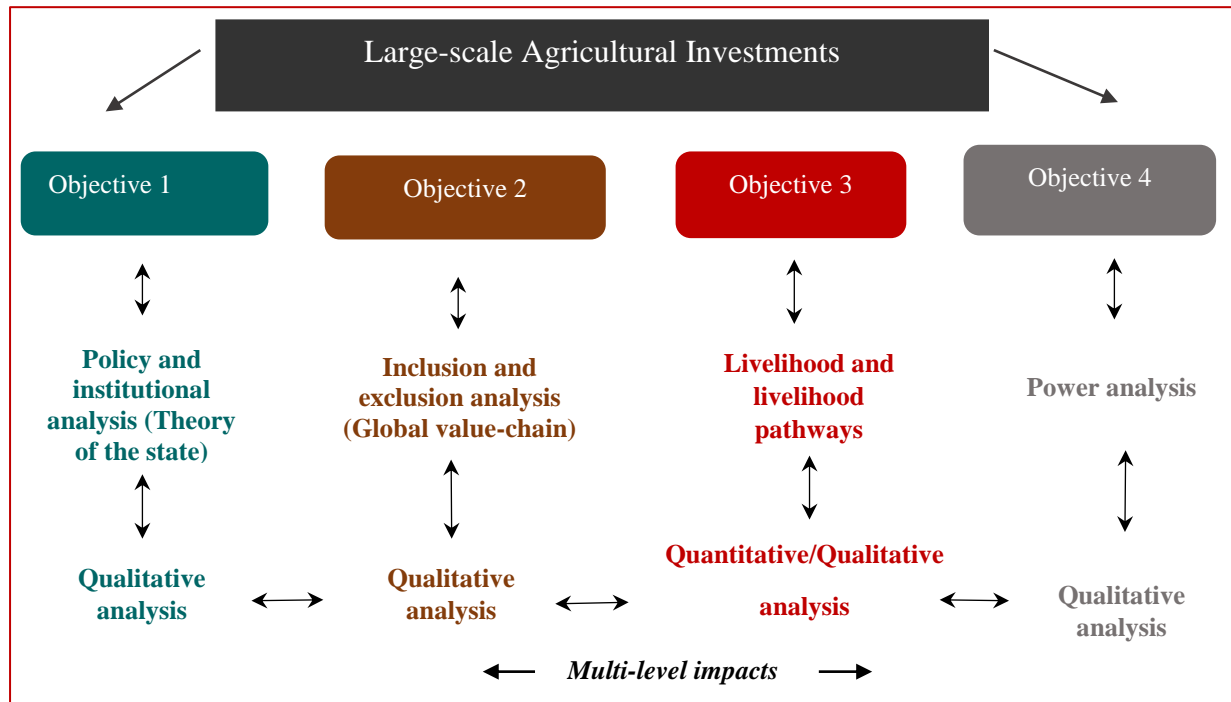


Figure 3.13: Data organisation and approaches to analysis

The approach to data organisation and thematic analyses was hierarchical, connecting national LaSAIs trends and patterns to sugarcane industry practices and to district and sub-district agro-industry transformation and livelihoods (Saunders et al. 2012). Organising data and connecting themes this way allowed new themes to emerge whilst collapsing less relevant ones but adapting to the broader research objectives. One key motivation about this approach to organising data was flexibility, permitting concepts grounded within the data to speak for themselves (Bowen 2006). A focus on specific set of questions within the study design (Section 3.2) meant making a crucial decision about what sort of data was applicable and relevant to the study. Multi-level themes were not self-contained. Findings at one level were deployed elsewhere to enhance findings and conclusions. The study focused on local constructions of knowledge, what the respondents said they do, how and why, drawing on quotes as much as possible. The centrality of this approach pointed to “*how do people make sense of what happened*” (Bryman 2004, p.412).

Qualitative data analysis started during fieldwork, documenting recurring elements and why. An important feature for consideration in qualitative analysis was how to present local constructs of social processes and accounts of livelihood changes and experiences within their local grounded setting. Debriefings allowed the research team to reflect on the texts, narratives and field observations. Initial data analyses did not only inform further data collection but also reduced duplications, inconsistencies and misinterpretations (Chiovitti and Piran 2003).

Qualitative data was organised and analysed manually and then entered into the qualitative data analysis Software NVivo 10 for additional scrutiny, interrogation, links and comparative patterns (Wash 2003; Welsh 2002). Interview and FGD notes were manually cleaned, reviewed and thematically coded, paying attention to links to study questions, and emerging meaningful categories. In identifying specific textual links and meanings emerging in relation to each question, analysis ensured that accounts of themes and their constructs reflected diverse local narratives and settings. Attempts were made to ground analysis in community and household perspectives on participation or non-participation, livelihood responses, asset dynamics and how changes in these domains affected relationships.

Group discussions, calendars (e.g. food, income, labour and cropping), rankings and other community data were manipulated manually and through NVivo where possible to create summaries and matrices, allowing comparisons and relationships. Household surveys on the other hand were analysed using SPSS 16 but focusing largely on asset profile, crop and land-use dynamics. A focus on quantifiable household attributes such as income, land-use, coping strategies and asset profiles meant that responses (both closed and open) were coded in such a way as to limit sets of attributes around a variable (Babbie and Mouton 2001). Frequency and descriptive data analysis were the main statistical analyses in the manipulation of the data. Data analysis and display thus reflected an on-going dialogue between qualitative and quantitative data integration.

3.7 Positionality

Positionality is about where one stands in relation to the other, the social stand a researcher takes in relation to the researched, shaped by various factors including education, gender and class (Merriam et al. 2001). Conducting research in a contextual, relational and politicised environment demands that attention be given to the *“reflexivity, positionality and power relations in the field in order ensure an ethical and participatory research”* (Sultana 2007, p.374). Through their interaction, researchers and the researched shape the quality and

reliability of data collected. Positionality of the research shapes and influences participant's responses, raising questions about reliability of the data collected (Mather 1996).

For the rural settings where complex interactions and relationships, cultural and traditions interplay, recognising one's positionality becomes very important (Twyman et al. 1999). In this study, one concern was determining how and in what ways these elements mattered for the research (Rose 1997).

Having grown up in Zambia and being familiar with the general culture and traditions, building trust and relationships with local communities was easier. However, being a Chewa, born and bred from the eastern region of the country enabled me to ask critical questions whilst maintaining relative cultural distance and being non-aligned (Merriam et al. 2001). I realized that I needed constant awareness of this fluctuation within myself.

During fieldwork, I introduced myself as a member of staff at the University of Zambia and that I was, at that time, pursuing PhD studies at the University of Leeds. At various levels of data collection, association with the two Universities gave participants an idea about the potential use of the data and findings (academic purposes and knowledge generation), a feature that seemed important to some sensitive participants including ZaSPIC which still was recovering from recent negative publicity (ActionAid 2011). At district level, a courtesy call on the District Commissioner enabled access to state departments who were always willing to talk to me. At sub-district level, permission was sought from ZaSPIC and their intermediaries verbally. I constantly iterated that I was independent despite gaining access to sugarcane communities and households through ZaSPIC, intermediaries and local leaders. Consent was sought from ZaSPIC's Smallholder Development Office as well as smallholder management companies – KaSCOL and Nanga Farms. The research team also talked to Chiefs and community leaders about the research as well as elicit their perspectives. In the rural field site, the absence of company officials and other key figures during actual data collection gave a sense of comfort to farmers and other respondents. In building trust and honest responses, the research team aimed at creating a rapport with respondents such as those that were afraid of losing sugarcane farms for speaking to us or those that feared victimisation. Some of these were talked to privately in the comfort of their homes.

The selection of the research team ensured that each member was familiar with the language and culture of the Tongas including other languages such as Chewa. Thus, interviews, group

discussions and questionnaires were conducted in either Tonga or Chewa as widely spoken languages in the sugarcane communities. This was important in the translation and interpretation of questions. Training of research assistants prior to data collection ensured familiarity and awareness issues of positionality. Constant and daily de-briefings enabled me to immediately deal with emerging issues. Issues of literacy and a sense of gender inequality presented barriers for farmers particularly women and youths. However, separate and gender balanced group discussions helped capture views and perspectives of one gender or class different from the other.

3.8 Ethical Considerations

Ethical review and approval was obtained both from the University of Leeds and at the University at a local University of Zambia (Appendix 1). These guided in the wider conduct of the research, treatment of participants, informed consent, anonymity, confidentiality and disclosure (Denscombe 2010). A key feature in the conduct of the study was an emphasis on the options of withdrawing. Through informed consent (mainly verbal), potential respondents were free to decide on their participation (Guillemin and Gillam 2004) (Appendix 2). The study also emphasised confidentiality. For brevity, I show only the interview code and date (e.g. P1.05.01.16) (See appendix for detailed list of participants).

3.9 Limitations

The methodological approach deployed in this study enabled collection and analyses of rich data, but several limitations can be noted.

3.9.1 Perceptions, Views and Perspectives as Evidence

This research operated largely in the qualitative domain which means respondents' narratives, experiences, perceptions, views and perspectives were crucial in drawing conclusions. However, this approach also meant that respondents might be biased due their own agenda or might not always be driven by the need to give appropriate/right responses (See Bennett 2016 in relation to conservation and environmental management). Drawing on narratives, perceptions, views and experiences was important to my study to better understand how local people experience LaSAIs and globally-linked value-chains, their governance and institutional environment.

3.9.2 Snapshot versus Longitudinal Study

As outlined in Section 3.3.3, rural livelihoods are dynamic, yet findings in this study provide only a snapshot of the evolving livelihoods. Although it would be interesting to evaluate how rural livelihoods evolve alongside LaSAIs overtime, this was beyond the scope of this PhD. A focus on older and pioneering projects such as Kaleya, and by asking respondents about perceived livelihood changes over time helped generate general views and perspectives of livelihood changes over a considerable period. These local experiences – subjective as they might be – were important in drawing insights and useful conclusions about livelihood changes in local areas.

3.9.3 Political Climate

Zambia had a general election in 2016. As with previous elections, political developments in the country and in Mazabuka in particular – as an opposition dominated area – led to a lack of trust from potential respondents. Whilst the research team was never at any time turned away by any potential respondent or experience any participant drop-out, I still noticed that some respondents needed assurances that my research was associated with the University of Leeds and University of Zambia. Ability to explain in local languages, emphasis on my student status, potential use of the data/results and promises of anonymity helped deal with any anxieties and turned out to be the best possible approach to dealing with such a problem.

3.10 Conclusion

Understanding how LaSAIs play out within the national context and their outcomes requires a comprehensive approach that captures diverse dynamics. Yet, exploring a global phenomenon such as LaSAIs and governance processes at national level as they relate to meso-micro-level practices is not easy. There are obviously limits to the extent to which a single framework can help capture dynamics at different levels. The approach taken in this research explores national policy and institutional dynamics, industry dynamics as they relate to local participation and governance processes, local livelihoods, and agribusiness practices and how they shape national, industry and local processes engaging with power, politics and institutions across different levels. A discussion on power, politics and institutions justifies a focus on state actors to capture national narratives being advanced and why. However, an analysis of industry dynamics and agribusiness practices as they relate to inclusion and exclusion of smallholders suggest a need for an industry-specific framework. The need to maintain local narratives, views and perspectives of LaSAIs within the same national context creates value for a theoretical integration.

The role of state politics, policy and institutional dynamics, assumptions and narratives around LaSAIs are central to the following chapter, which demonstrates that whilst possibilities for LaSAIs have been created by state institutions, the state agencies seeking to administer land-based resources also limit their potential through competing authority and agendas.

Chapter 4 Large-scale Agricultural Investments and Institutions: Patterns, Influence and Barriers in Zambia

4.1 Introduction

In this first of four empirical chapters, the governance dynamics of LaSAIs and competing authority and power relations between national actors mediating land access for the case of Zambia are described. The chapter particularly concentrates on drivers and actors shaping LaSAIs, potential tensions between policy and development actors involved in LaSAIs, and the implications for institutional cooperation and collaboration. It provides an overview of patterns and trends in LaSAIs and how these play out within the national state and governing frameworks, creating a fittingly relevant context for subsequent chapters. The first objective of the research is addressed here by revealing the policy and governance dynamics with state politics, power and institutional processes. It is argued that corporate interest, donor and regional support converge in driving LaSAIs, but national factors predominate. Whilst possibilities for LaSAIs are created by state institutions, the state agencies seeking to administer land-based resources also limit their potential through competing authority and agendas. The demand on land and water, accompanied by government and donor resources, heighten tensions among state entities over decision-making and creation of new frontiers of resource control. By focusing on state and non-state actors and their articulation in LaSAIs, this chapter shows that the top-down nature of governance of land, labour and water resources is problematic for long-term sustainable agriculture and rural development. The chapter highlights the importance of state entities, authority and influence in delivering LaSAIs and facilitating the emergence of a more locally-rooted agro-vision for agriculture and more sustainable and socially-just rural development.

LaSAIs have been a common feature of neoliberal transformation in which state entities facilitate foreign investments; yet the related governance dynamics remain less understood (Chapter 2). Much has been written about LaSAIs in the past decade (Fairhead et al. 2012; White et al. et al. 2012), but perspectives on how investments draw upon, restructure and/or challenge national state governance processes and relationships are limited (Wolford et al. 2013). The politics within state institutions, extensions of political power and relationships remain peripheral to the 'land-grabbing' debate. These debates have particularly focused on states in relation to governance of the land sector and tenure security (Arezki et al. 2011). Of concern is that LaSAIs coincide with poor governance (German et al. 2013), unclear property

rights (Deininger and Byerlee 2012) and heightened competition in determining land access (Burnod et al. 2013). Negative aspects of LaSAIs such as disposessions, corruption and lack of transparency require improved governance systems, with much support in multilateral organisations focused on strengthening of legal and bureaucratic frameworks within which LaSAIs take place (Stephens 2011). For analysis of LaSAIs to be accurate, there is need to explore and understand the nature and motivations of state and non-state actors themselves, their interactions as well as power and influence they exert (Burnod et a. 2013; Fairbain 2013) (Chapter 2). In countries such as Zambia where promotion of LaSAIs advances in the absence of a clear national land policy, state entities draw on different sorts of authority and practices in converging capital and land, creating new frontiers of land control (Chapter 1). In the following section, the nature of LaSAIs in Zambia is briefly provided with the aim of revisiting some theoretical elements at the centre of LaSAIs.

4.2 Large-scale Land Acquisitions in the National Context

LaSAIs and resource scarcity concerns have both made visible the role of the states and its relationships to investors and the local population. Detailed analysis of LaSAIs requires that we explore motivations and interactions of state and non-state actors, and how they shape governance dynamics. This requires understanding of: legal extensions of state power on the ground – *territory*; rulers (e.g. formal bodies) and their control of the conditions of their own reproduction – *sovereignty*; actors, multi-scale governance and legal practices – *authority*; and participants in the state changing property relationships and making claims on the state – *subjects and subjectivities* (Wolford et al. 2013, p.194). National and sub-national actors interact in multiple relationships, shaping state discourses concerning LaSAIs, the materiality of production, and the role of local producers (Fairbain 2013). The state never operates with a collective voice, as agencies articulate different kinds of power to shape access to land, driving ‘ideological legitimisation’ (Wolford et al. 2013, p.196). LaSAIs depend on the competencies of state bureaucracies, their embeddedness in society and their territorial reach and capacity (German et al. 2011).

Integrating macro-level practices and interactions with micro-level experiences make visible the constitution of territories for LaSAIs, and the associated elements of sovereignty, authority and subjects. In Zambia, the government legitimises its own facilitating role – as development-oriented land broker – through investment promotion institutions, as outlined in Section 1.2. Through ideological and political narratives, the drive for LaSAIs is perpetuated, reproducing

itself through state authority. However, new power and property relations created in host communities, raise questions about sovereignty and autonomy in resource access and decision-making (Rutten et al. 2017). Section 1.2 shows that the idea that only 7% of the country's total arable land is currently cultivated alongside an estimated 423,000ha (88%) deficit in irrigation potential has increased state expectations of LaSAIs, and its authority and claims on certain territories (GRZ 2016, p.16). It has also heightened the role of the state, and competing agendas within state agencies seeking to administer land resources for various motivations (Nolte 2014). There is low threshold under which state institutions can alienate land, which means that the scope for expropriation has somewhat widened in the presence LaSAIs. The state variously channels neoliberal market forces to deliver land deals to different clients, often foreign (Nolte 2014). Given that a majority of the population (60%) is rural, characterised by acute poverty levels (77% of the rural population), and heavily dependent on agriculture in Zambia (GRZ 2013a), LaSAIs legitimizes the state's territorial reach. New institutions all identified as linking foreign investments to priority areas (e.g. agriculture) have emerged, including the Zambia Development Agency which provides One-Stop services to investors. State entities can draw on different kinds of actors and authorities to facilitate deals (Chapter 1).

Much research in Zambia has until now narrowly focused on impacts of LaSAIs: local participation in LaSAIs (Hichaambwa and Jayne 2012), economic impacts (Ahlerup and Tengstam 2015), and smallholder productivity (Sipangule and Lay 2015). However, overreliance on micro-level analyses has led to limited insights into the wider governance dynamics, and how state agencies actively shape new frontiers of land control and make LaSAIs visible. This necessitates a departure from conventional descriptions of the national state as weak, fragile, corrupt and non-transparent (Arezki et al. 2011) to considerations of the state as a *stage* on which key decisions about LaSAIs are made and contested. Institutional cooperation and coordination reflects the extent to which institutions work or act together for the common purpose of enhancing the likelihood of LaSAIs taking place, and decision-making surrounding resource use and local participation (Osabuohien 2014). LaSAIs relate to state capacities specifically to the nature and quality of its institutional frameworks, since land deals and land governance depend on the prevailing institutional context (ibid.). Institutions that make land available and determine access/utilisation thus influence social and economic development.

As noted in Chapter 1 and 2 there is no necessary character to LaSAIs, which are investments framed ‘more broadly as embedded in complex multi-scale webs of relationships shaped by power, property, and production’ (Wolford et al. 2013, 199). Recent studies have shown the dangers of advancing an inevitable agro-industrial future for sub-Saharan Africa or indeed an idea that governance and accountability are the silver bullets for LaSAIs (Peters 2013; Ruth et al. 2015). The broader significance in the framing emphasises the importance of place, time and context and how they shape practices, and discourses of territory, sovereignty, authority, and subjects. The chapter acknowledges that the profitability of investments depends on the nature of the ‘choice set’ presented by institutional and policy provisions (North 1990). Within bureaucratic tendencies, institutional provisions integrate in the formulation of policies in an economy, relevant for shaping property rights and relationships among actors. This chapter explores governance dynamics of LaSAIs and competing authority and power relations between national actors mediating land access in Zambia.

4.3 Methodology

This chapter combined policy analyses and multi-level interviews with diverse actors at national, district and community levels. Policies and strategic documents were analysed qualitatively for content (Table 4.1) (Section 3.5.2) (Elo and Kyngas 2008). Thirteen categories related to agricultural expansion and research purpose were developed (Table 4.3) (Appendix 2). Knowledge fragmentation about LaSAIs in Zambia mean that manifest content categories were derived inductively, enabling us to link policy provisions to practice as highlighted by interviews (Cole 1998). Content analysis provided insights into policy levers and domestic enablers of investments and agro-expansion.

Table 4. 1 Key policy documentation

<i>Document</i>	<i>Description</i>
Vision 2030 (V2030)	Long-term development plan
National Agricultural Policy (NAP)	Agricultural policy
National Agricultural Investment Plan (NAIP) – 2014-2018	Investment plan
Strategy for Industrialisation and Job Creation (IS)	Industrialisation strategy
National Irrigation Policy and Strategy (NIPS)	Irrigation policy/strategy
Fifth National Development Plan (5 th NDP)	Development plan
National Energy Policy (NEP)	Energy policy
National Water Policy (NWP)	Water policy
Sixth National Development Plan (6 th NDP)	Development plan
Revised Sixth National Development Plan (R6 th NDP)	Development plan

National Resettlement Policy (NRP)	Resettlement policy
Seventh National Development Plan (7 th NDP)	Development plan

Policy analysis was followed by wide-ranging interviews with multi-level actors. These were selected first by conducting a literature search and filtered and enhanced during scoping exercise. A sector-based review of secondary sources (Bowen 2009) as described in section 3.4.3 led to a total of thirty-four interviews with multi-level actors. These actors were then categorized as national, regional, district and sub-district level actors to capture a range of perspectives as well as ensure broad representation (Figure 4.1). National-level interviews with state institutions, donor and NGO actors, private consultants, academic and research institutions focused on drivers/trends, experiences of and governance/coordination of investments. This was complemented with district and sub-district interviews which concentrated on regional development and natural resource issues as they relate to LaSAIs in sugarcane in Mazabuka (Section 3.5.3). This permitted analysis of macro-institutional and policy processes to local outcomes and measure drivers and challenges to investments. Core themes which emerged from interviews related to international, regional and domestic investments drivers, as well as trends and patterns and cooperation and coordination efforts. Qualitative data were organised as interview and field notes. Data were coded manually and using NVivo to produce varying themes and categories in relation to research objectives (Bazeley 2007). Specific relationships between and among key national and local actors were mapped out drawing on stakeholder narratives and experiences (Welsh 2002). These were analysed to make visible coordination of LaSAIs and the role of different state agencies, their authority and influence at play.

4.4 Results

4.4.1 Trends and Patterns

Interviews with investment promotion officers and the national farmers union confirmed an increase trends in LaSAIs since 2000, reporting acquisition of existing companies as well as resource, market and efficiency-seeking practices among foreign companies. Significant agro-investments in primary production and output markets (e.g. transport and storage), inducing growth in export commodities such as wheat and soybeans, were also reported. Analysis of interviews identified five key trends in LaSAIs:

- (i) diversification by existing, and entry of new companies into agriculture;

- (ii) increased demand for land, water and electricity;
- (iii) increased tax receipts;
- (iv) growth in soy and other food crops shaped by wider private-enterprise growth; and
- (v) growth in agro-processing.

However, state departments made contradictory claims about sources of investment, agreeing on Zimbabwe and South Africa as key drivers rather than China and Brazil. Lack of readily available data alongside poor monitoring systems make it difficult to synthesise actual investments (Land Matrix 2016). Despite entry of new foreign investors, relatively few large companies were engaging in agriculture at significant scale, highlighting the centrality of domestic actors. However, NGOs and donor actors argued foreign LaSAIs were creating a new dynamic of land control and access that reconfigures smallholder engagement in agriculture. Limited rural infrastructure development means investments align to main roads and rail networks, where favourable agro-ecological conditions are traditionally associated with commercial farming.

State and political power frequently emerged in interviews as driving investment commodity focus by advancing diversification as a departure from maize cultivation. This includes promotion of non-traditional agricultural products (e.g. sugar, wheat, citrus and barley) and biofuels, which were also viewed as *“presenting empowerment opportunity for growers and for rural economies”* (P1:05.01.16). However, empowerment framed as rural employment and linked to larger agribusinesses has had variable outcomes. In the sugarcane outgrower schemes, this includes heavy reliance on low paying casual/temporal work and exclusion of youths and women. Meanwhile, despite massive promotion of biofuels, hesitation from state agencies has led to disappointing results (see Giles 2017). A senior official in the MoA alluded this to public fears of having to convert huge tracks of land to non-food commodities such as *Jatropha curcas*, which can lead to a ‘land-grabbing’ (Z1:29.06.15). However, national institutions and actors continue to place higher expectations on LaSAIs.

4.4.2 Institutions and actors

Analysis of institutions and actors shaping LaSAIs starts with the multi-level list of institutions summarised in Figure 4.1, drawn to contextualise actor interests, roles and influence in LaSAIs. The broader significance of this analysis lies in its attempt to ‘unbundle’ national actors, their motivations and capacity in shaping LaSAIs.

State agencies are generally agreeable to LaSAIs, motivated by prospects of rural development. Agencies articulate models through which investments unfold, and policies in agriculture and related sectors (energy, water, and land) permit the government to exploit abundant resources. Policy and legal frameworks allows power to alienate customary land and draw territorial zones for LaSAIs, with changes in customary law widening scope for appropriation. These define investment guidelines (e.g. minimum requirements) and influence decision-making in land availability, access and utilisation.

Multilateral/bilateral donor agencies provide funding and technical assistance in value-chain development, whilst improving mechanisms through which LaSAIs take place. Donors fund irrigation agricultural schemes, infrastructure development involving private-public partnerships and models such as outgrower schemes (Matenga and Hichaambwa 2017). Concerned about what they describe as “*chaotic land allocation and conversion*”, multilateral organisations emphasise improving legal and bureaucratic structures shaping LaSAIs (K1:18.06.15).

NGOs are diverse, with varying areas of focus, politics and orientation. Some focus on poverty reduction specifically through land rights, tax justice and livelihoods, but their scale is limited (ActionAid 2011). Their local and sectoral concentration means their influence in LaSAIs remains low. One officer at the Zambia Land Alliance (ZLA) blamed limited NGO efforts on the regional focus of strategies for implementation of protocols around LaSAIs, accompanied by “*missing country-specific strategies*” (Q3:10.05.16).

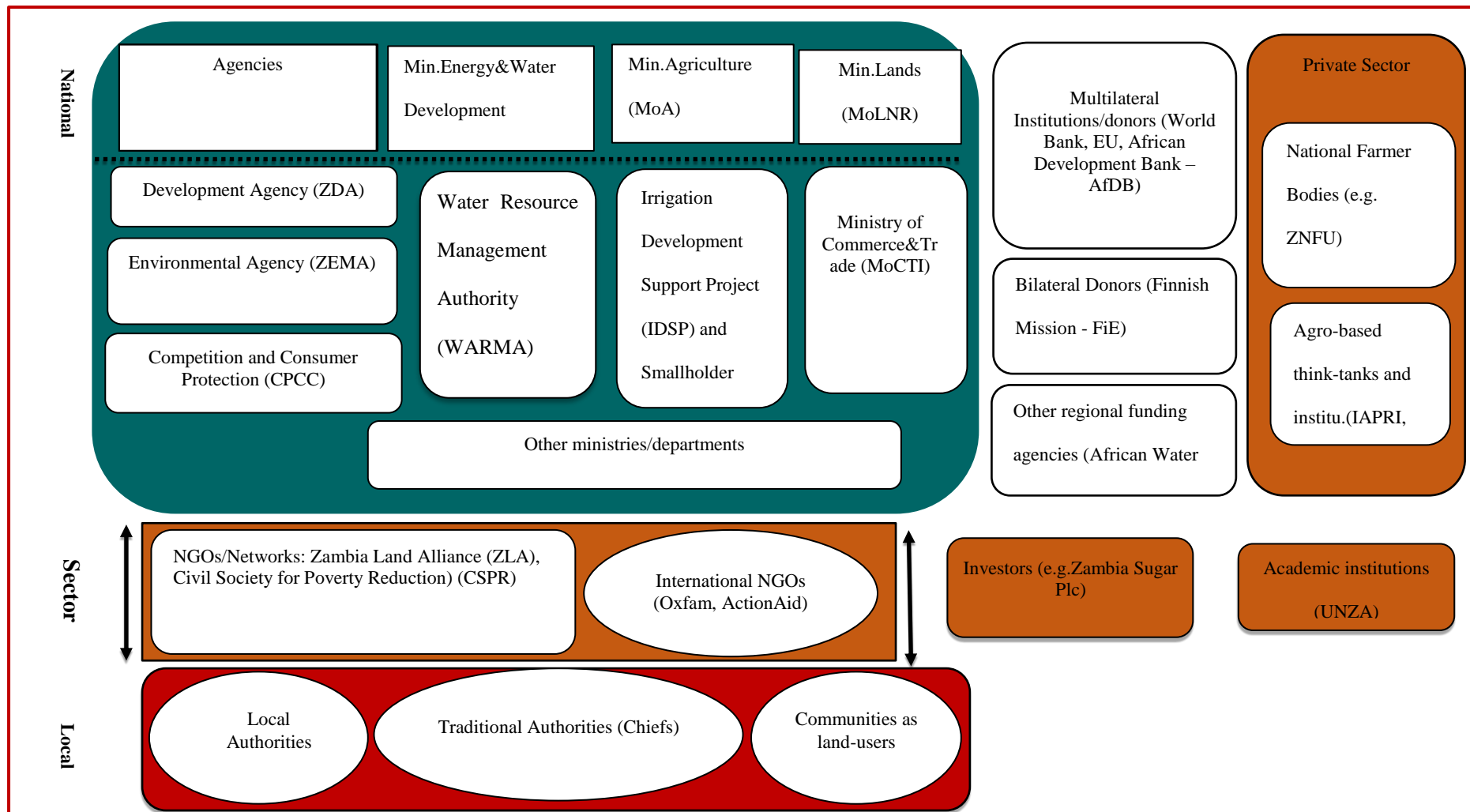


Figure 4.1: Actors in LaSAIs as they relate to study participants.

Local and traditional authorities administer land, bolstered by economic opportunities represented by increasing demand for land. However, expanding state influence alongside LaSAIs as new actors means local communities have little representation in national committees and suffer limited capacity to evaluate consequences of LaSAIs. Some of this relates to multiple pathways for land acquisition, e.g. through: 1) *state institutions*, 2) *local/traditional authorities* or 3) *private individual citizens*. Land acquisition pathways taken by investors highlight varying motivations, but the absence of strong legal and bureaucratic enforcement creates inadequacies in regulation, whilst enhancing investor and state influence in negotiations (see Nolte 2014). In practice, land acquisition often bypasses local actors, as wider community consultations are lacking. Low levels of education, and a lack of resources and power place communities in a weak negotiating position, leading to exclusion and poor commitments to rights and local livelihoods. Private-sector actors including national farmer bodies encourage LaSAIs and negotiate policy for business emphasizing the access to markets. They encourage state agencies to limit their involvement in agriculture, exerting a new industrial agro-vision.

State institutions exert enormous influence on LaSAI governance, driving erosion of community property systems. Multilateral institutions facilitate state efforts through ideological emphasis on trade and investment and their links to issues such as employment, sustainable livelihoods and rural development. Multi-level interactions between state and non-state actors show variations in capacity to influence key decisions in LaSAIs. However, these processes show how a state-level policy frame influences spaces for manoeuvre around different models through which land deals unfold.

4.4.3 Factors driving large-scale land acquisitions

Analysis of interview data identified LaSAI drivers at three levels (Figure 4.2).

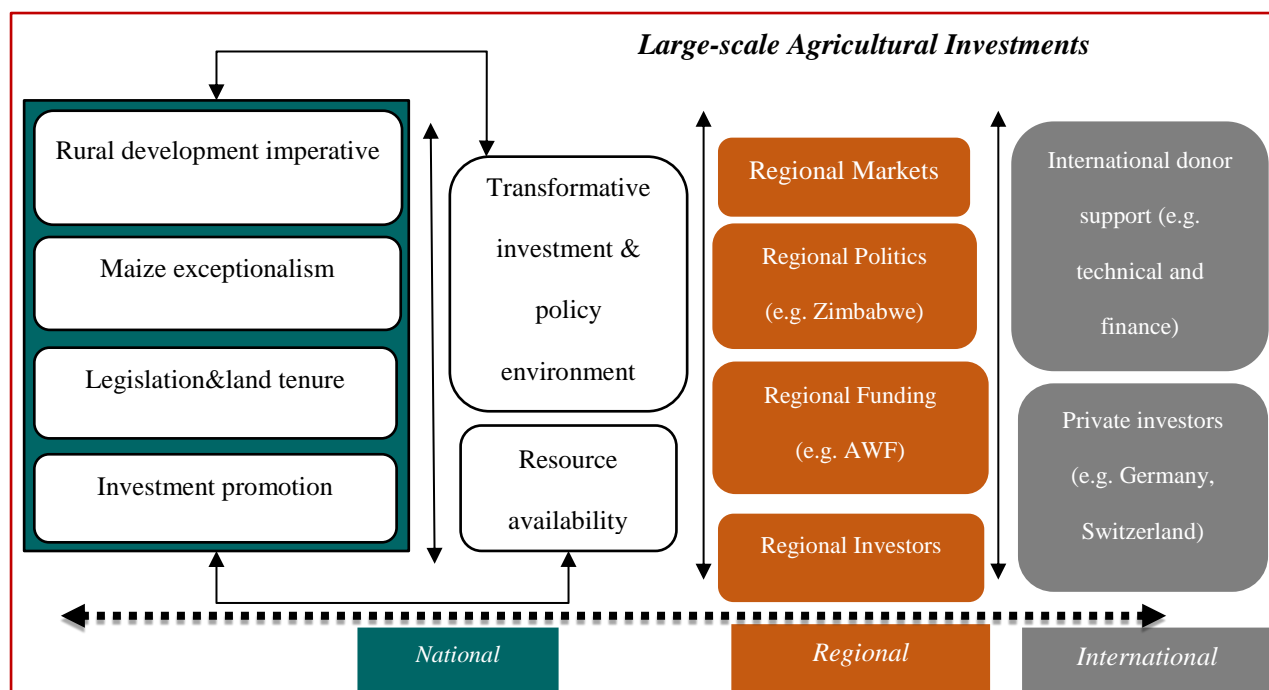


Figure 4.2: Drivers to LaSAIs in Zambia. Arrows show interacting levels (Derived from interview data).

First, interviews with donor and state actors show that multilateral and bilateral agencies boost LaSAIs through support towards agricultural irrigation schemes. Projects range from 57ha to 5000ha in area under banners such as rural development, empowerment and climate-smart agriculture (Table 4.2).

Table 4.2: Selected donor-driven projects in Zambia (Policy documents and interviews)

Scheme	Est. size (ha)	Location
Buleya-Malima	85	Southern
Sioma	57.8	Western
Zenga	100	Southern
Sinazongwe	400	Southern
Magobbo	2000	Southern
Manyonyo	3000	Southern
Nega Nega	2000	Southern
Kanakantapa	595	Lusaka
Momboshi	5000	Central
Musakashi	1432	Copperbelt
Lusitu	276	Lusaka

As part of upscaling smallholder irrigation, donors aim to open 1,300ha, including additional 5000ha and 2900ha for Global Agriculture and Food Security Programme (AWF 2016). Under the climate-smart agriculture initiative, the Africa Water Facility of the African Development

Bank reportedly lined-up 25 feasible irrigation sites by 2018 which would bring an additional 9560ha under irrigation with a broader climate-adaptation strategy targeting 200,000ha by 2030 (Z1:29.06.15) (AWF 2016). Availability and access to cheaper credit from donor agencies means public officers are buoyed by possibilities of actualising agro-programmes and rent-seeking (Z1:29.06.15).

Second, regional dynamics in markets, politics and funding opportunities frequently emerged in interviews as drivers. National interviews showed regional investments have been expanding and in regional markets such as COMESA and SADC, and a respondent from the World Bank stated that demand growth in “*regional markets is sufficient to drive investments*” (K3:16.12.15). Regional funding/support relate to irrigation and water resource development such as by the AWF which allocated “*funds for feasibility studies in over 20 irrigation sites*” (Z1:29.06.15) (AWF 2016). Meanwhile political and economic tensions in neighbouring Zimbabwe also added to the drivers as one Senior Agriculturalist at the World Bank remarked: “*Zambia has benefited from problems in Zimbabwe*” (K3:16.12.15).

However, interview data analysis revealed major drivers of LaSAIs were largely at the national level. In what follows, five key domestic factors frequently cited in interviews as conditioning LaSAIs in Zambia are discussed.

4.4.3.1 Maize exceptionalism: cause and driver of diversification

LaSAIs have been encouraged to move away from maize as a diversification strategy. Since independence in 1964, public policy defined agriculture in terms of maize. This led to a culture among smallholders that sees maize as agriculture and vice-versa. A government concern is that dependency on maize and on rain-fed agriculture could induce serious livelihood struggles, particularly with climate variability.

Political narratives often suggest LaSAIs are necessary for agriculture and economic diversification. However, NGO actors expressed opinions that agriculture/economic diversification currently excludes smallholders; focusing instead on agro-processing which prioritises commercialisation and value-added processes at a large scale. To one respondent at Oxfam, current efforts in ‘*diversification have not been prioritised at small-scale level*’ (Q2:07.01.16). Such advocacy has relegated smallholder initiatives and their role in agriculture despite forming the backbone of Zambia’s agriculture (see Colebrander and Koppen 2013). The Ministry of Agriculture is aware of these challenges and argues that whereas it seeks more

participation in LaSAIs and value-chains, smallholders should take the lead: “*we are not inviting corporations to run these schemes*” (Z1:29.06.15). In practice, however, corporations such as those in the sugarcane sector exert enormous influence in determining local participation, which is compounded by missing national strategies for smallholder value-chain inclusion and weak farmer associations at district level.

4.4.3.2 National Politics and the Rural Development Imperative

One consistent theme in national interviews was that LaSAIs reflected government policy on rural development and empowerment defined as ‘*employment creation and income distribution*’ (Z1:29.06.15). Organising smallholders in state-driven, typically “large-scale biased” outgrower schemes provides social-economic imperatives and enhances the state’s territorial reach. However, the size and quality of employment opportunities induced by LaSAIs have largely been disappointing with fewer than expected number of smallholders participating (Namutowe 2014).

Prospects for rural development relate to taxation. The so-called ‘*progressive politics*’ enable preferential treatment of certain companies and sub-sectors (see Richardson 2010 with respect to sugarcane). These practices have arguably wasted opportunities for Treasury contributions as one Inspector at the Revenue Authority remarked: ‘*much as there might be inflow of huge FDI, tax yields are not proportional*’ (Z6:22.12.15). There is a wider perception that corporations always claimed unprofitability and that any rural development and economic benefits require reconsideration (ActionAid 2011).

4.4.3.3 Legislation and Land Tenure System

Legislation and land tenure systems facilitate conversion of customary land to state land, and this is happening at an increased rate. District interviews in Mazabuka reported rapid sugarcane expansion since 2001 but also revealed land scarcities and dispossession in sugarcane communities. One Chief highlighted that ‘*expansion of smallholder fields is difficult because of being surrounded by plantations*’ (D4:27.11.16). Donors expressed opinions that ‘*resource scarcity is not fully acknowledged in policy and institutional practices*’ (K4:10.12.15). With a long-standing stakeholder deadlock on the national land policy, NGOs fear this can affect interpretation, translation and enactment of LaSAI policies and commitment to local rights (Q3:10.05.16).

Interviews also show that rural land conversion reflects state expansion of infrastructure such as roads, electrification and telecommunications (as well as irrigation structures). Since 2000, successful governments have sustained rural infrastructure expenditure, accelerating with the current Patriotic Front government since 2011. Consequently, *'unreachable pieces of land 4-5 years ago are now accessible and up for grabs'*, remarked one Officer at the MoL (Z4:15.12.15). The role of traditional authorities in facilitating LaSAIs has equally attracted attention. Seeing that chiefs are presenting customary land as a new investment frontier, public officers described traditional leaders as *'very cooperative.'* However, exploiting customary land, chiefs are seen as facilitating land-grabbing among diverse investors without clarity and transparency on rural livelihoods. With significant smallholder farmlands already trapped in land deals, an Agricultural Specialist at the World Bank believes *'chiefs have been careless in allocating land to investors and the impact of that might be evident in a few years'* (K3:16.12.15). Some senior officials in the MoLNR agree but suggested *'these deals may be illegal'* (Z4:15.12.15). However, this focus on chiefs should not exonerate other parties including, as one NGO explains, *'the government through state-house and local private land-grabbers for own and on behalf of foreigners'* (Q:10.05.16).

4.4.3.4 Transformative investment and policy environment

Place and time are important aspects in capturing policy practices and discourses shaping LaSAIs. To understand factors fostering LaSAIs fully, a policy assessment was conducted, focusing on the extent to which key themes have *emphasis* placed on them in policy documents and implications (Table 4.3).

Content analysis reveals that diverse cross-sector policies facilitate water and land access for LaSAIs. Emphasis has been placed on: 1) irrigation expansion and infrastructure development, 2) agricultural production, and 3) mechanisation of agriculture. This is followed by expansion of area under cultivation and facilitation of water access for irrigation agriculture. Nationally, irrigation expansion is viewed as a suitable strategy for agricultural expansion, commercialization, rural development and poverty reduction (GRZ 2017, p.62). For instance, V2030 seeks to triple crop-land to 900,000ha by 2030 whilst ensuring increased smallholder productivity through expansion of irrigated outgrower schemes that are linked to LaSAIs (GRZ 2006, p.62). The NRP provides for resettlement whilst facilitating agricultural land-use expansion, allowing for evictions, expropriations and dispossessions (NRP 2015, p.21). Whilst most policy documents seek to expand agriculture and attract foreign investment, there is a

striking silence on capacity-building of public institutions in policy documents that can ensure safe-guards including social-economic and environmental sustainability.

Table 4.3: Drivers to LaSAIs as identified in policy documents (Coding: *Black*=emphasized; *Grey*=not emphasized; *White*=Not mentioned).

	NWP	NIPS	V2030	5 th NDP	NEP	NAP	6 th NDP	NAIP	IS	R6 th NDP	NRP	7 th NDP
<i>Drivers to LaSAIs</i>	1994	2004	2006	2006	2007	2011	2011	2013	2013	2013	2015	2017
High-value crops/value-addition												
Economic/agricultural diversification												
Rural development, job-creation, empowerment and poverty reduction												
Irrigation expansion/infrastructure development												
Production, productivity and mechanisation												
Farm-block development/commercialisation												
Rural and investment promotion												
Investor-friendly policies												
Expanding cultivation area												
Private-sector participation/competitiveness												
Water access for irrigation/agriculture												
Agricultural land-use/utilization												
Energy diversification												

Central to this policy shift are narratives of resource endowment as a driver of LaSAIs, but inner workings of state agencies show divergences. For instance, whilst economic institutions such as the Zambia Development Agency (ZDA) under the Ministry of Commerce, Trade and Investment (MoCTI), the MoA and farmer membership bodies (e.g. ZNFU) exploit resource abundance, ministries such as those responsible for lands (MoLNR), and water (MoMEWD) point to land scarcities and water depletion in local regions. Divisions of opinion within the MoA were identified, as one representative in the Ministry, corroborated by some NGO representatives, called for an integrated approach to LaSAIs, arguing that *'diverse sectoral issues, overlapping elements and how sectors shape each other remain less understood'* (Z3:04.01.16).

4.4.3.5 Investment promotion

In the past decade, state institutions have vigorously promoted foreign investments in Zambia. While the ZDA is the main promotion hub, interviews with different state departments show multiple entry points including the Ministry of Tourism, farmer bodies (ZNFU) and recently the Investment Corporation of Zambia (an investment holding company for State-owned enterprises since 2014). Insights from interviews and policy documents reveal that investment promotion produces many unintended consequences, including defining investors in terms of foreign actors. For example, at the heart of the ZDA Bill (2006) and the Investment Act (Chapter 385) lies investment promotion and guarantees which have seen government enter into Investment Promotion and Protection Agreements with agri-businesses. In practice, these have avoided wide consultation, but have a clear foreign bias. Investment promotion through diverse fiscal incentives and tax exemptions have led to low revenue collection. Most NGOs argue that whilst FDI in agriculture is necessary, concessions have wasted opportunities to generate economic benefits, or at least *'have not helped the country achieve sector-specific objectives'* (Q2:05.01.16). Findings suggest limited follow-through in agro-investment with the agricultural sector (2007-2014), which ranks third at a 25% rate of actualised investments compared to mining (53%) and manufacturing (27%) (Namutowe 2014). An officer at ZDA agrees: *'investment in agriculture have been slow despite massive promotion'* (Z7:16.06.15).

4.5 Institutional cooperation and coordination

This final empirical section focuses on institutional cooperation and coordination practices between and among state agencies, and what this means for prospects of LaSAIs. Findings are mapped in relationships highlighted as R1-R9 in Figure 4.3.

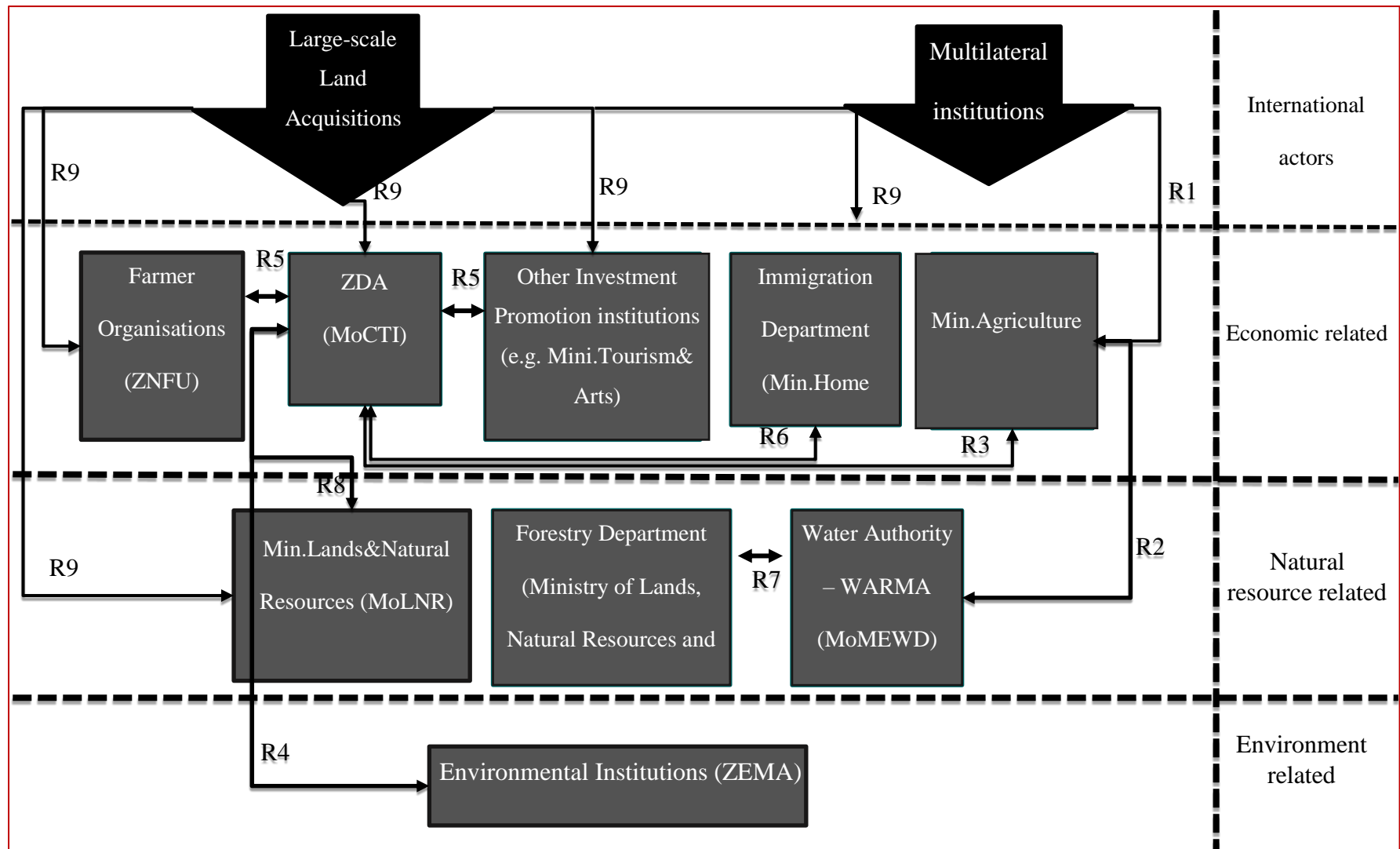


Figure 4.3: Stakeholder interaction and collaborations. Arrows shows identified cooperation and relationships (Interview data).

Analysis of state agency relationships reveals a deficit in inter-sectoral cooperation and coordination around LaSAIs. Horizontal cooperation among economically related institutions was observed to be stronger, but cooperation and interaction with natural resource and environmentally related institutions was poor. Vertical cooperation among national institutions remains less developed, affecting knowledge sharing and decision making such as those on environmental sustainability and resettlement.

Overall, key decision making around LaSAIs lies in economically related institutions that shape narratives on ‘agriculture for development.’ Whereas actors exploit unevenness in influence on land and water, and donor and government resources, evidence suggests that efforts to improve coordination and broad-based collaboration and capacity remain limited due to three main reasons.

4.5.1 Relationship between donor institutions and the Ministry of Agriculture

There appears a general convergence between donors and the MoA to promote LaSAIs for commercialisation of agriculture, rural development and employment creation (Table 2). However, donors raised concerns about weak bilateral links, low interest and ownership levels on the part of public officials, ‘*when government institutions are not holding project funds*’ (K1:18.06.15) (RI). For instance, despite government rhetoric about agricultural expansion, irrigation expansion has been advanced by a single unit in the MoA, causing project delays (e.g. Manyonyo project took over 5 years) (K1:18.06.15). This is compounded by a lack of policy guidance on investment implementation.

However, public officers in the MoA complained that while donors claimed they did not influence decisions around land allocation and LaSAIs, they supported projects in environmentally delicate areas which led to divergences. They alleged that donors advance the inevitability of LaSAIs, a vision that implies that state agencies should legitimise rather than hamper investments, alongside facilitating land and water access. They also alleged that donors stress the volume of investment and overstated potential employment opportunities which they then use to legitimise LaSAIs to the exclusion of local consultation. In contrast, respondents in the MoA believe ‘*challenges are better known and understood by local experts*’ (Z3:04.01.16). A case in Mkushi where a syndicate of six large-scale commercial farmers (supported by donors) has come against smallholders is emblematic of wider tensions. MoA sources argue that there are serious water management issues, with ‘*over-subscribed water rights*’ in this area

(Z3:04.01.16), corroborated by the Water Authority (WARMA) (Z5:12.01.16). A respondent at Oxfam believes that Mkushi has *'now become a bad example on LaSAIs and water management'* (Q2:05.01.16) (Box 4.1). Some state agencies such as ZEMA feel disempowered to act.

Box 4. 1: Mkushi Farm-block, State interventions and the New Corporates

For a long time, Mkushi district in central province of Zambia formed part of several government efforts to expand commercial farming as a farming block. The history of the Mkushi farm block highlights the role of the state in facilitating commercial farming and foreign LaSAIs (Chu 2013). Alienated as a farm-block in the 1950s, and as the last major commercial block by the colonial government (Woode et al. 1978), 176,000ha of land were converted to state land for the promotion of settler agriculture. About 94% of the area was divided into 163 farms for cattle and tobacco production.

However, by independence in 1964, only 74 farms had been taken up. Throughout this period, the role and participation of local Zambians remained peripheral with the block always witnessing *"waves of new farmers arriving and leaving, inextricably linked to the political events in the surrounding countries"* (Chu 2013, p12). Between 1964 and 1990, the block witnessed few investments and was generally considered less lucrative. The 1990s however saw new corporates from South Africa and Zimbabwe. The 2007/2008 crisis and the ensuing wave of LaSAIs built on this background augmented by donor financial support in Zambia (e.g. the World Bank).

Alongside economic liberalisation in the 1990s and prioritisation of agriculture in the post-2000, the government has sought to facilitate production by enabling land access and construction of infrastructure such as electricity connections. This necessitated expansion in irrigated agriculture in crops such as tobacco, maize, wheat, soya as large-scale. By 2009, Mkushi was the hotspot of commercial agriculture and was at the forefront of Zambian agricultural production.

However, the expansion in irrigation brought forth a new twist of commercial activities in Mkushi – water governance. NGOs and some government officials have raised concerns about the environmental impacts of large-scale water extraction, land acquisitions and most importantly chemical use in the area. To many respondents, new and expanding corporate agriculture in Mkushi highlighted the ugly side of LaSAIs.

Donors and public officials were agreed on policy challenges associated with LaSAIs. Some of these relate to unclear guidelines on commercialisation of farm-blocks (e.g. Mkushi and Mazabuka sugarcane outgrowers). One senior officer in the MoA remarked: *'when dealing with donors, I have no policy reference and am often accused of making things up'* (Z3:04.01.16). Poor policy consultation and practice is even more problematic as an officer at Oxfam said that *'an agricultural policy does not demonstrate that (architects) consulted experts elsewhere'* (Q2:05.01.16). One consequence has been an inability to perceive agriculture in an integrated manner and a lack of coherence and interlinkages between sectors.

4.5.2 Tensions within public institutions

Analysis shows that the materialisation and potential social and environmental outcomes of LaSAIs are affected and shaped by and within state institutions. For a long period, water resource development prioritised hydro-power generation under the Ministry of Energy (MoEWD). A perception in the MoA was that besides energy, WARMA prioritised commercial as opposed to smallholder farmers. However, deepening interest in agriculture raises tensions between the two ministries about control and authority over the resource (R2). To one irrigation expert, WARMA was stifling MoA projects: *"water applications from MoA to WARMA should be more than enough (for WARMA) not to interfere"* (Z3:04.01.16). Ministries have overlapping of responsibilities, as WARMA has focused on boreholes and dams whilst MoA design dams and sometimes receives water rights applications. It is unclear which institution does what, making donor resources even more challenging to obtain. In response, WARMA disagrees, insisting smallholders benefit more as abstracting below 500 m³/day is free of charge. On criticisms of poor water resource management, WARMA insists *"(their) role is to regulate usage"* but admit that it has come late with most *"activities already established in delicate locations such as Mkushi."* WARMA added that the problem of illegal water use is because actors were less keen to *"follow our channel, preferring to go through investment promotion agencies"* (Z5:12.01.16), arguing *"rampant deforestation reshapes the hydrological cycles"* (R7) compounded by *"unplanned infrastructure development by local authorities"* (Z5:12.01.16).

Whilst some of these challenges relate to mutual mistrust between Ministries, the environmental authority (ZEMA) was specifically identified as problematic. Interviewees gave examples of where appropriate investors were refused permission to operate whereas some rejected by the Environmental Impact Assessment were issued with certificates (R4)

(Z7:16.16.15; N5:10.12.15). ZEMA's response to environmental matters has been slow, with only recent donor-driven capacity to monitor agro-chemical utilisation and disposal (Njombo 2015).

Facilitation and implementation of LaSAIs present public officers with opportunities to negotiate, oversee and determine project standards. However, funding and increasing access to resources heightens contestation between various implementing entities. This can threaten the job security of some officers and causes disagreements about implementation processes (R3). For instance, one senior officer in the MoA argued that *"others state departments wanted smallholder irrigation project to be implemented by the ZDA"* (Z1:29.06.15). Multiple investment entry points present tensions for coordination and monitoring. On investment promotion, ZDA believes they *"know the investment climate better"* and should take sole responsibility, accusing other ministries/departments of *'lacking the legal mandate'* (R5) (Z7:16.16.15). However, the MoLNR reports tokenism by ZDA in monitoring investor activities and land-use dynamics (R8). Whilst agreeing that the MoLNR has no monitoring capacity, the informant maintained: *"[we] cannot allocate (land) and at the same time monitor land-use dynamics"* placing any failure of monitoring LaSAIs and their outcomes on ZDA (Z4:15.12.15). Meanwhile an anti-investor public narrative has emerged particularly against inward migration with a perception that these were displacing local businesses, exposing the role of ZDA. However, despite formulating investor guidelines, ZDA believes that the Immigration Department has not been *"serious in screening who comes into the country"* (Z8:16.06.15) (R6).

4.5.3 Investors as part of wider taxation and economic development

Disappointing experiences with foreign investors in agriculture and elsewhere means there is a lingering suspicion towards investors, who are often accused of declining to declare profits accurately (ActionAid 2011). Some of these reflect lack of capacity and robust systems to collect taxes, leading to information asymmetry about the nature and character of investments on the one hand and their impacts on the other. A senior official in the MoA believes that the presence of an investment contributes to the *"proliferation of uncontrolled and reckless construction of dams"* (Z3:04.01.16). And that this was in part because investors exploit multiple investment entry points (R9), and receive backing from donors, the latter seen as *'always defending issuance of water rights to investors'* (Z3:04.01.16).

Overall, LaSAIs in Zambia expose weaknesses in governance of LaSAIs and a serious lack of cross-sectoral collaboration in public institutions. Scale, implications and impacts of LaSAIs seem not to have been fully grasped, and the policy has not helped either. Collaboration and coordination weaknesses suggest systems are insufficient to manage LaSAIs and any further resource-use and agro-expansion will require a serious rethink.

4.6 Discussion: cooperation and coordination deficits

LaSAIs enable various institutions to express different sorts of power, authority and influence investment and resource decisions. However, the public dominance in agro-expansion comes alongside poor capacity in institutions, which results in poor coordination (Arezki et al. 2011). Donors advance an agro-industry perspective which strengthens links between LaSAIs and smallholders but neglect multi-stakeholder and multi-sector interaction that enhances institutional support and coordination. Through control of funds and direct support to investors, donors also shape policy pathways through which LaSAIs unfold, such as those on agro-models. Visible power relations among national actors illuminate whose interests are advanced, and the implications of this. However, efforts continue to be foisted on weak institutions without a clear strategy for smallholder participation, raising questions about state capacity, politics and institutions shaping LaSAIs (German et al. 2013; Borrás and Franco 2012).

The occurrence of LaSAIs create possibilities for diverse actors to influence land access, but active creation of territorial zones for investment jeopardizes rural land access. Legal and bureaucratic frameworks enable foreign ownership of land, but also allow various actors to exert their authority and influence in land allocation, access and utilisation (Burnod et al. 2013). Weak cooperation witnesses between state agencies in LaSAI implementation leads to dispossession, displacements and poor protection of local rights (Giles 2017). Supporting LaSAIs remains an important development agenda in Zambia, but state politics, institutions and power dynamics mean that rural participation in these projects remains limited. For instance, outcomes for LaSAIs in rural areas, as well as local participation, depend on how traditional authorities shape negotiations with investors as well as manage divergences with government. However, in many instances, local people have been the losers, raising questions about sovereignty and autonomy (Nolte 2014). While new governance mechanisms have been advocated for governing LaSAIs, and to guide the development of national policies aimed at improving land governance, these have insufficiently been articulated in national policies such in land, water and forestry (Kalaba et al. 2013). This raises the need to (re)anchor national

policies to the question of how state power, institutions and politics shape natural resource use, and what this means for sustainable rural development.

Analysis emphasises national and to some extent intra-regional dynamics as driving LaSAIs as opposed to international influence (Cotula 2012). Commercialisation, diversification and biofuels are some of the factors that are shaping the nature of LaSAIs in Zambia. Investment concentration on commercially dominated commodities such as sugarcane however suggests transitional challenges for smallholders in the emerging *agro-vision* (Peters 2013). Value-chain commodities such as sugar that require specialised production knowledge and respond to global dynamics means the level of smallholder interaction with these crops remains peripheral (Dubb 2015). The extent to which farmers see new crops in this vision as the basis on which to build sustainable livelihoods, as well as their willingness to work under new contractual arrangements becomes crucial (Di Matteo et al. 2016). In Zambia, such interaction and integration have occurred due to policy developments, but political rhetoric around outgrowers for instance remain oblivious to micro-level experiences such as threats of appropriation of land, water and other assets. More broadly, findings highlight limited extent to which regional and global guidelines are being articulated in Zambia's policy on land tenure and water, and elsewhere. It also speaks to the limited extent to which wider governance mechanism help address overlaps, gaps and conflicts between and within various state actors in policy and decision-making around LaSAIs (Kalaba et al. 2013). The argument is that existing frameworks do not adequately or comprehensively consider the potential diversity in narratives, politics and power dynamics shaping LaSAIs, which raise the need to analytically move beyond binaries associated with land-grabbing (Borras et al. 2012).

Interaction between and among state and non-state actors matter in the governance of LaSAIs. Increased attention to land and water by national actors, accompanied by public and donor resources, promotes tensions between and among various state institutions (Burnod et al. 2013). Strong horizontal cooperation among economically related institutions highlights a dominant discourse of agricultural growth. However, a neglect of interaction with natural resource and environmental-related institutions highlight the limited extent to which sustainability strategies are been articulated (Kalaba et al. 2013). A deficit in inter-sectoral cooperation and coordination is evident, raising the need for enhanced inter-linkages and coordination of efforts among sectors. Within sub-Saharan Africa, poor stakeholder engagement and the consequences of sectoral approaches to governing inter-linked resources have been reported (see Atela et al.

2016 with respect to Kenya). In Zambia, these elements have heightened sectoral politics and resource control, degenerating into path dependencies. Claims that the MoA is better suited to control water resources than MoEWD reflect resource-based tensions and could be interpreted as desire to monopolise government/donor resources, raising fears that resulting power struggles and stakes in control of resources might prevent progressive reforms (Faye 2016). Sectors monopolise decision-making in resource access as they attempt to consolidate their respective mandates, but to the exclusion of key stakeholders in LaSAIs, signaling negative implications for local development.

In sum, analysis suggests that outcomes of LaSAIs will depend on how national institutional and policy actors organise and coordinate investments to maximise outcomes. Given multiple stakeholder voices within the national context, harmonising policy and institutional processes is difficult. The lack of cooperation and collaboration witnessed between and among state institutions makes it even more difficult to clarify mandates, remove overlaps and enhance decision making around resources and investments. It also shows that greater multi-stakeholder partnership working would allow the integration of knowledge across various institutions and actors. This requires changing the top-down nature of LaSAIs to encourage cooperation and inclusiveness, ensuring integrated actions across multiple sectors. It also requires a clear focus on national politics, power and institutional dynamics, and how these interact to shape local development outcomes.

4.7 Conclusion

The possibilities of LaSAIs have been shown to be limited by national institutions and policy developments in coordinating LaSAIs and state capacity in Zambia. Various factors drive investments but ensuing demand for land and water accompanied by government and donor resources heighten tensions among economic, natural resource and environment-related institutions over resources and decision-making. Economic related institutions exert considerable influence on the emergence and consolidation of the national policy on LaSAIs, but there is poor cooperation and collaboration with natural resource and environmentally related institutions, which challenges sustainable resource use. The associated top-down nature of governance of land, labour and water resources is problematic for long-term sustainable agriculture and rural development, which reflects politics, power and institutional processes prevailing in Zambia.

This chapter offers important lessons for informing and improving sectoral and cross-sectoral cooperation and coordination of LaSAIs. It connects the debate about LaSAIs and rural development to state politics, power, capacity and institutions as stage on which outcomes and destiny of investments are determined. The empirical material presented reinstates the national actors who are often absent in analyses of LaSAIs and problematises investments as top-down and driven by narrow sectoral interests. It highlights how LaSAIs influence the emergence and consolidation of a national policy on foreign investments that re-organises agri-dynamics in favour of agribusinesses. Analyses of this nature demonstrate that researching the dynamics of institutions and policy practices makes more visible the interactions that shape state capacity and the potential effects of LaSAIs. It also makes visible state politics, power and institutional processes, central in determining investment governance and outcomes. By going beyond simplistic narratives of LaSAIs as they link to land-grabbing, the chapter asserts that the dominant argument of LaSAIs will be won or lost within improved national institutional cooperation and coordination efforts. The following chapter considers LaSAIs in the sugar industry, and how industry politics, governance and institutional processes shape smallholder inclusion and exclusion in the changing land property relationships and value-chains.

Chapter 5 Smallholder Inclusion and Exclusion on the **Zambian** **‘Sugar-belt’**

5.1 Introduction

In this second empirical chapter, industry-specific practices and patterns of smallholder inclusion and exclusion on the Zambian ‘sugarbelt’ are considered, with the view of building an understanding of how inclusive sugar value-chains are. LaSAIs and agribusiness actors hold power in institutional and contractual relationships with smallholders, influencing who they work with. Smallholder organisation and participation in sugar value-chains including their interactions as market access avenues – contractual arrangements, terms and conditions under which smallholders produce sugarcane – and how these are determined is central to this chapter. It goes beyond simplistic binaries of inclusion and exclusion that often accompany analyses on contract farming and outgrower schemes to appreciate how complex production spaces can be and the need to recognise competing interests. As opposed to a national focus shown in the previous chapter, this chapter concentrates on industry level dynamics, but similarities between the chapters are drawn around industry politics, power relations and institutions that shape inclusionary and exclusionary dynamics. By combining industry and local community elements, the role and power relations around intermediaries and related institutions (e.g. buyers, agents, enforcers of practices) are considered in detail.

It is argued that inclusion and exclusion are complex and multi-dimensional. Possibilities of smallholder inclusion reflect *corporate, donor and public* relations that shape the agro-industry structure. However, the real value of these relationship lie less in government’s ability to coordinate, monitor and discipline agri-businesses than in providing conditions for agribusiness expansion. That agribusinesses exert enormous industry influence, defining market dynamics, illustrate a failure if not inability of national actors to confront important elements shaping social realities at local level. Within projects, complex factors interact to variously create pathways for inclusion/exclusions but are intensified by industry politics, structure and organisation. A focus on social-economic sustainability in donor and government collaborations at macro-level would be crucial in enabling participation and if agri-businesses are to drive the agenda for poverty reduction and rural development.

The recent surge in LaSAIs and ensuing land-grabbing has presented contractual arrangements in smallholder coordination schemes as inclusive and more beneficial compared to for instances outright corporate land purchases or long-term leases (World Bank 2010) (Chapter 2). Funnelling investments through outgrower schemes requires that we understand how agribusinesses relate to smallholders and how stakeholder interests are balanced. The way smallholders participate in value-chains and how terms and conditions for their inclusion are carved has implications on local possibilities for accumulation as well as access to production resources. Local implications for agrarian structures as they relate to LaSAIs and value-chain expansion points to not only exclusion but also processes of adverse inclusion (Du Toit 2004). Understanding how these elements play out require unpacking social-economic and political processes that underpins inclusion in local spaces which can highlight power in relationships and bargaining processes. To reflect on how inclusive sugar value-chains are, analysis in this chapter is placed within the wider dynamics of LaSAIs and ensuing “win-win” narratives that underpin its promotion in international development policy (World Bank 2011; Braun and Meinzen-Dick 2009). The second research objective is addressed through an industry analysis, and a discussion of smallholder experiences both those included in sugarcane contractual arrangements and those excluded.

5.2 Inclusion, Exclusion and Agrarian Change

Outgrower schemes (used interchangeably with contract farming) are not a new phenomenon (Glover and Kusterer 1990; Little and Watts 1994; Oya 2012; Prowse 2012) but have gained renewed attention and promotion in international development policy as alternative to outright land purchases associated with LaSAIs (World Bank 2007). Little and Watts (1994) define outgrower schemes as a:

“form of vertical coordination between growers and buyers-processors that directly shape production decisions through contractually specifying market obligations (by volume, value, quality, and, at times, advanced price determination; provide specific inputs; and exercise some control at the point of production (i.e., a division of management functions between contractor and contractee)” (p.9).

Contractual arrangements in outgrower schemes occupy a central position in the ‘land-grabbing’ debate as most inclusive institutional and organisational arrangement, and a model for increased incomes, with few implications on local institutions. In international development policy and practice, outgrower arrangements have been folded under ‘win-win’ narratives

(World Bank 2007; FAO 2009). Smallholder coordination arrangements have been advanced in the LaSAI debate as conduits for local participation in markets and as pathways for income distribution, technology diffusion, knowledge transmission, and most importantly as alternative to ‘land-grabbing’ (Vicol 2017; Peluso and Lund 2011). According to Braun and Meinzen-Dick, 2009, p.3):

“contract farming and outgrower schemes that involve existing farmers and land users can enable smallholders to benefit from foreign investment while giving the private sector room to invest..... contract farming or outgrower schemes are even better (than lease or purchase) because they leave smallholders in control of their land but still deliver output to the outside investor.”

Outgrower schemes arguably avoid land displacements (World Bank 2011), and produce win-win outcomes for participating communities (Kay 2012; Hall et al. 2017; Smalley 2015). However, structure and organisation of outgrower schemes vary greatly. Critical agrarian political economy perspectives argue that LaSAIs seek opportunities to control productive resources such as land and water (Peluso and Lund 2011), presenting outgrower schemes equally as important forms of land control (Vicol 2017). Agribusiness dominance in markets arguably creates unfair playfield, raising questions about the appropriateness of outgrower schemes (Kirsten and Sartorius 2002). Diverse institutional arrangements in agriculture exist such as those characterised as extractive, enclave and colonist (Hall 2011). As Oya (2012, p.6) argues, there has been “[...] no due consideration of political drivers, nor any serious account of power and class as organising principles to understand contract farming’s origin, development and outcomes for the different classes of participants.” Whereas power relations between corporations and smallholders have been seen to produce unrealistic and unequal bargaining power between parties (Prowse 2007), case studies such as those from Malawi show how contract farming lead to conflict, impoverishment, land concentration, and economic and social differentiation (Phillips 2009). To Adams et al. (2018, p.3), “power and dependences are established by the institutions as the ‘rules of the game,’ which correspond to externally driven increase in prices of land,” shaping bargaining power. Thus, rather than being forceful, agribusinesses variously exert power to control resources (Chapter 7). Land control may also determine whether local communities are incorporated into commercial value-chains via processing estates or commercialisation without core estates. This determines whether inclusion would be on advantageous terms or otherwise. However, prospects for smallholders vary, depending on the nature of the coordination schemes, the role of private-sector actors and

on what participants can/cannot do. Thus, the politics of such deals revolve around terms of inclusion or struggle for incorporation (Borras and Franco 2013, p.1735).

In Zambia, outgrower schemes have been encouraged as pathway to rural development, employment and as empowerment (Chapter 4). However, without grounded insights into industry practices and experiences of rural households, it is difficult to appreciate broader claims around contractual arrangements as well as LaSAIs as inclusive models and pathways for ensuring rural development. This requires examination of *smallholder-firm interactions* and how such relationships shape gains, inclusionary and exclusionary dynamics, and is a focus of this chapter.

5.3 Methodology

This chapter draws from multi-level semi-structured interviews ($n=27$) with various stakeholders. These included national level key informants, industry experts, donor and NGO actors, district and sub-district actors (Table 5.1) (Appendix 3).

Table 5.1: Data collection

Multilevel interviews (national, district and industry):		$n=25$
<i>Sugarcane/Contract participants</i>		
	Kaleya (N=160)	Magobbo (N=80)
Household survey	80	70
Key informant interviews	8	8
In-depth household interviews	6	6
Focus group discussions	5	5
<i>Non-sugarcane/Contract participants (Magobbo)</i>		
Household survey	30	
Focus group discussion	1	

Interviews focused on the wider developments in the sugar industry and how these shaped production dynamics and smallholder integration. The chapter also draws on household surveys with cane and non-cane growers in Kaleya and Magobbo including focus group discussions and wider community interviews. These considered livelihood and land-use dynamics in relation to production and determinants for sugarcane inclusion/exclusion. Documentary analysis considered industry background, growth and evolution (Section 3.5.2).

5.4 Results

5.4.1 Growth and Expansion of Sugar Value-chains in Zambia

The timeline in Figure 5.1 illustrates key ‘regimes’ in the Zambian sugar industry from 1960. It highlights early state involvement in the industry, which persist to date (Section 5.5.6). Sugarcane production was originally private-driven (*first regime, 1960-1972*) and exclusively large-scale. Since nationalisation, the Zambian government closely supported the sugarcane industry (*second regime, 1972-1995*), stimulating initial smallholder integration into sugarcane cultivation in the early 1980s at Kaleya. Industry expansion remained modest whilst smallholder participation remained limited or static.

Privatisation of the industry (*third regime, 1995 to date*) marked a distinctive phase in the history of the sugar sub-sector and integration of smallholders in Zambia. The new wave of capital inflows from Illovo Sugar Plc in the post-2000 consolidated ZaSPlc’s industry position. In this period, ZaSPlc developed an additional 10,500 hectares of sugarcane whilst expanding its mill capacity (Figure 5.1; see also Figure 3.4).

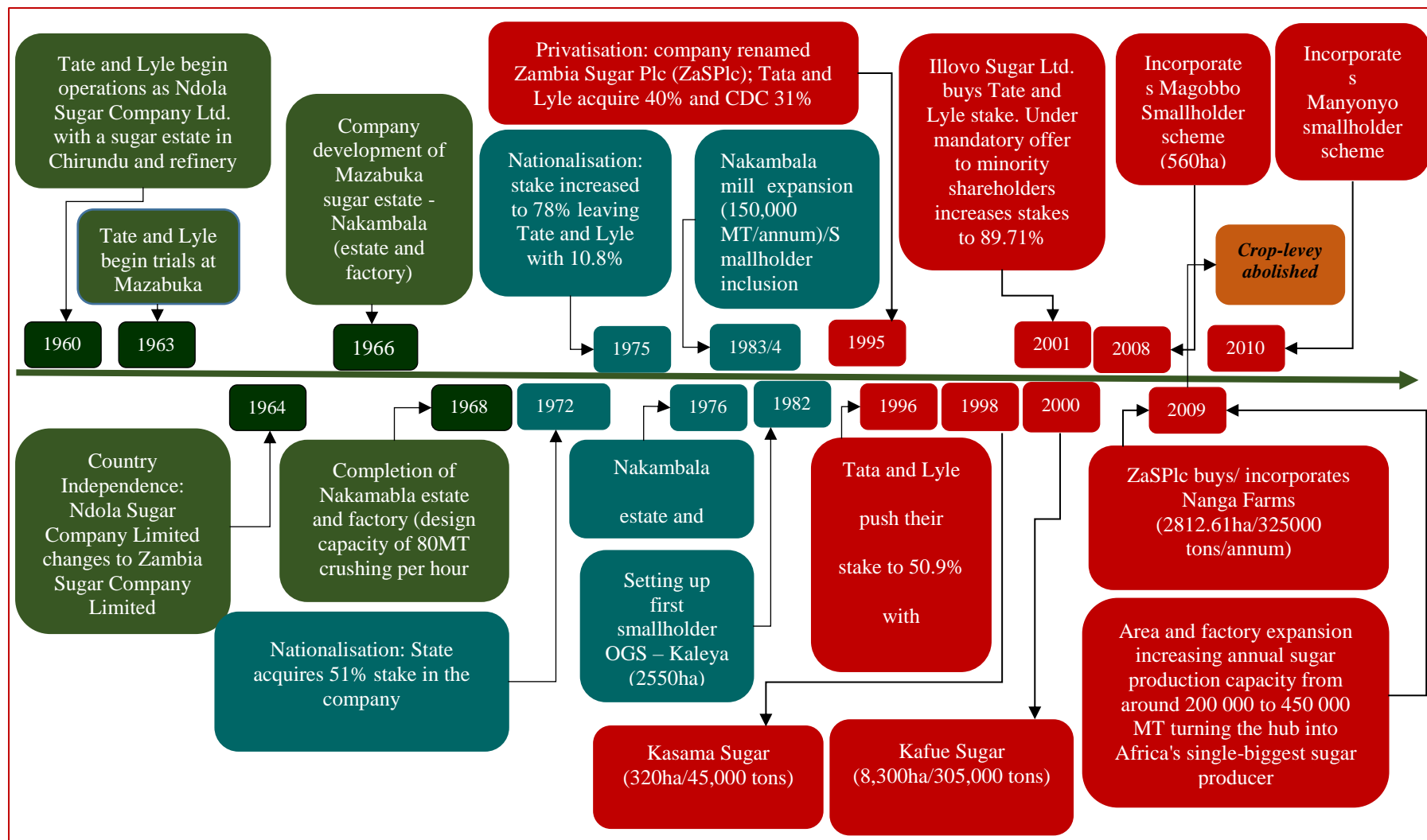


Figure 5.1: Growth and expansion of the sugar industry in Zambia. Colour codes: Green=*1st regime*; Blue=*2nd regime*; Red=*3rd regime* (Derived from group discussions, interviews and national archive records).

This industry expansion and ensuing forms of smallholder integration reflects the centrality of regional and foreign capital in the Zambia's LaSAI-driven sugar value-chains. Whilst production systems vary, and contract participation not evenly spread among farmers, the focus here is largely on two smallholder outgrower schemes: Kaleya and Magobbo. References are however made to the third schemes (Manyonyo, See Chapter 7).

5.4.2 Sugarcane Expansion: Revisiting Smallholder Outgrower Schemes

a. Kaleya Smallholder Project

Historical data and group discussions show how the formation of Kaleya in the 1980s marked the initial idea of smallholder inclusion into sugarcane. The rationale was to enhance cane throughput to the processing factory of ZaSPlc whilst incorporating smallholders as outgrowers. For a long time, smallholder incorporation in sugar value-chains reflected dynamics of structural change more broadly and the ensuing structural dependence on ZaSPlc. Oral histories reveal that initial inclusion of smallholders in Mazabuka/Kaleya started in 1984 when the government advertised sugarcane growing as an opportunity for smallholders. Driven by prospects of increased incomes and reduced poverty, the Kaleya scheme grew from 64ha and 8 farmers (1984) to 2,400ha and 160 smallholders (2016).

Originally, each farmer was allocated a 4ha sugarcane field, and 0.5ha as dwelling land on which a farmer built a house and grew subsistence crops. In 2000, smallholder cane fields were increased to an average 7.5ha. However, all land belongs to KaSCOL, and farmers are tenants running a 14-year lease – a crucial aspect in determining inclusion and terms and conditions for growing sugarcane (Box 5.1; Box 5.2). In 2000, smallholders acquired 19.5% equity share in KaSCOL aided by ZaSPlc itself which at that time commanded 25% shareholding in the intermediary but later transferred its equity share to its brainchild Mazabuka Cane Growers Trust (MCGT) (Figure 3.8). During what is known as commercialisation of KaSCOL and floating of company shares, farmers reportedly *“lacked financial capacity and information, but private-sector actors jostled for shares”* explained one farmer representative (SDK2:13.11.15). Crucially, a commercial imperative still remains dominant at Kaleya with most farmers expressing the opinion that shareholding prioritised commercial as opposed to smallholder farmers.

In Kaleya, smallholder production and market participation relate to sugarcane agreements. Sugarcane agreements define roles and responsibilities between the estate and smallholders.

Whilst KaSCOL provides inputs, managerial and extension services, smallholders concentrate on cane field management. Consequently, labour requirements on sugarcane plots closely relate to family structures (Table 5.2).

Table 5.2: Sugarcane labour calendar in Kaleya (Derived from group discussions)

		✓ LP: land preparation, trash clearing ✓ I: irrigation ✓ RM: removing smut-cane					✓ W: weeding ✓ FA: fertiliser application ✓ H: harvesting			✓ SL: slashing, clearing canals/field edges Key: Variations in intensity: ↑peak and ↓minimal			
Activity	Responsibility (men/women)	October	November	December	January	February	March	April	May	June	July	August	September
W	Both		↑	↑	↑	↓	↓						
I	Both	↑	↑	↑	↓	↓	↓					↑	↑
FA	Men	↑										↑	↑
SL	Men			↑	↑	↓	↓						
LP	Both									↑	↑	↑	
H							Harvesting						
Dry-off							Harvesting						
RM	Both			↑	↑	↑							

KaSCOL harvests sugarcane but has given the cane cutting contract to smallholders through the farmer's association KASFA. Considering this as a good gesture by KaSCOL and an avenue for income generation for smallholders, KASFA encourages the use household labour to fulfil the cane-cutting contract as a "*way to empower our members.*" To smallholders, cane cutting presented an opportunity to empower dependants and extended family members who often laid a claim on sugarcane incomes (Box 5.4; Box 5.5). However, analysis shows that the real value of the cane cutting agreement lies less in empowering farmers than in maintaining smallholder-intermediary relations and tapping into cheap labour in the demographically-expanding scheme.

Labour organisation within households tends to influence cane management and productivity among smallholders which in turn determines incomes. But the intensity of sugarcane cultivation means smallholders must internalise costs of extra labour, which implicitly enhances market imperatives and dependence relationships with KaSCOL.

b. Magobbo Smallholder Project

Magobbo is formerly a resettlement area. Previously ranches by Susman Brothers (Hugh 2005), the government bought the land and resettled farmers including former workers in the Susman Brother's agribusiness. This shows that local participants in the sugarcane scheme not a homogenous social category. Prior to sugarcane, farmers grew various crops including maize, cotton, groundnuts, and cowpeas, sunflower as well as rearing livestock (Section 3.4). According to the resettlement committee (the main community representation for settlers), ideas about growing sugarcane started in the 1980s but were always derailed by poor community support and "*fears of loss of land among farmers*" (SDM1:21.06.16). When the project started (2008) with the help of the EU, government and ZaSPlc, fears of loss of land resurfaced, challenging legitimacy and representation of scheme/community interests in the sugarcane project. For instance, farmers disagreed on land allocation to sugarcane in preference to wider livestock including subsistence production.

Group discussions reveal how challenges of poor soils, floods and droughts drove farmers towards sugarcane as opposed rainfed crops such as maize. With reference to poor soils, a manager at Nanga Farm Plc (NaFPlc) reiterated that: "*some farmers abused the land with traditional agro-practices such as limited intercropping*" (SDMa:20.01.16). Perceptions about sugarcane among farmers also varied according to land fertility or productivity challenges,

reflecting the wider background and tensions about the project. Farmers in the land fertile zones and with larger landholdings generally resisted sugarcane uptake (SDMa:20.01.16).

The sugarcane committee, formed to articulate grower interests, was identified as an important driver of the sugarcane project. Government endorsement of sugarcane and willingness to deal with land issues in the community (e.g. relocations) equally contributed. The European Commission provided 60% of project funding whilst ZaSPlc/MCGT provided 32% and 8% as farmer loans respectively (ZaSPlc2:06.15). Crucially, ZaSPlc runs a sugarcane supply agreement with farmers, as the sole buyer. This background means specific patterns of contract participation intimately connects to ZaSPlc and its related institutions. That production, management and marketing is controlled exclusively by ZaSPlc's intermediary NaFPplc highlights this perspective. This centralised management system is seen by ZaSPlc as favouring smallholders in conducting joint activities (e.g. procuring inputs), whilst guaranteeing capital investments, but raises serious implications of what smallholders can do and the economic benefits.

In Magobbo, individual/household plots were amalgamated into one block-farm. Formally, ZaSPlc required households to own up to 4ha of land in the project catchment area. This requirement excluded marginal landowning households from participating, as well as the landless including the land scarce often women and youths. In this set-up, smallholders are lessors to ZaSPlc/NaFPplc. In return, households receive a share of profits made on their plots per hectare within terms and conditions determined by the miller. Although the sugarcane committee signed a 5-year renewable management service contract (starting 2011), our respondent at ZaSPlc believes *"hand holding by the corporation is still necessary"* (ZaSPlc2:06.15), highlighting tight production control and coordination.

c. Manyonyo Smallholder Project

Manyonyo sugarcane project started as an idea in 2000, with direct involvement of the Ministry of Agriculture's Smallholder Irrigation Project Unit. Supported by the Finnish government and the African Development Bank, scheme designs, layouts, and construction started in 2009. The project has 160 smallholders, 555 hectares of land and operates directly under ZaSPlc itself (Figure 3.3). Manyonyo was originally a diversified agricultural scheme and *"open on choice of crops"* (Z1:29.06.15) but excluding sugarcane as confirmed by donor and state actors (K1:18.06.15; K2:18.06.15; Z1:29.06.15). Contrary to Magobbo, Manyonyo considered multiple crops such as maize, bananas and horticultural crops including aquaculture under one

broad scheme – clustering. However, what national interviewees called “*corporate take-over*” by ZaSPlc completely shifted the project focus from horticultural crops to sugarcane – placing 555ha of smallholder land in directly under the possibility of conversion to sugarcane (Figure 3.3) (Z1:29.06.15). Some these processes highlight national and regional level dialogues (including silences) between and among the local authority, the company and state institutions. It also reflects the company’s territorial presence, power and influence, elements I advance in more detail in Chapter 7.

Production control – water and land – presents possibilities of becoming sugarcane smallholders whilst limiting scope of their influence. With reference to controlled expansion, the potential to expand smallholder production is dependent on not only the milling capacity at ZaSPlc but also the firm’s throughput as the dominant grower of sugarcane alongside commercial supply chains which limits smallholder supply (Figure 5.3). This reflects power dynamics in the industry (Chapter 7).

Tight coordination between cultivation and processing reflects specificities of sugarcane, the former is almost invariably subordinated to the latter. Perishability of sucrose content after harvest requires immediate transportation to the mill leading to structural dependence and domination of land-use within local mill supply area (Richardson and Richardson 2014). In Mazabuka and in relation to outgrower schemes, material control including sugarcane varieties, information flow and logistics between growers and the miller are highly integrated with interaction between the two ends conditioned by intermediaries. Overall, this hierarchical relationship and structural dependence influences, as shaped by the dominant firm, conditions and terms under which smallholders produce sugarcane.

5.5 Sugarcane Production, Terms and Conditions

Terms and conditions for smallholder participation in sugar value-chains vary according to production arrangements. They also differ according to origin, integration and operation of the schemes (Box 5.1). Three key institutions play a crucial role in determining the terms and conditions under which smallholders participate in sugar value-chains: *ZaSPlc* (buyer, processor), the Estimated Recoverable Crystal Committee (consisting members nominated by ZaSPlc and members of the Cane Growers Association of Mazabuka, CGAM), and the CGAM (representing all growers in the district). However, analysis shows the CGAM is dominated by, and aligns to commercial farmers and ZaSPlc as opposed to smallholders.

Box 5.1: Quota agreements and typical terms (Drawn from Sugarcane Agreements of 2010).

Box 5.1.1: Kaley Smallholder Sugarcane Agreement

In Kaley, cane farmers agreement evolved from the 1980s and 1990s alongside changes in management structures at KaSCOL and ZaSPlc. The agreement is detailed covering cane (production) and dwelling (residential) areas. While the agreements are signed between individual smallholders and KaSCOL, the cane price agreement is between KaSCOL and smallholder trust (KaST) on behalf of all farmers. The agreement emphasises what smallholders can/cannot do in the cane/dwelling areas. KaSCOL thus sublets cane/dwelling land areas at a rent under a 14-year renewable lease. The quota agreement is linked to the cane area covered by all smallholders.

According to the agreement:

1. Smallholders pay KaSCOL all expenses incurred such as supplying fertilisers and chemicals, hiring tractors; implements and operators; irrigation water and any other goods and services supplied.
2. KaSCOL harvests and transports all cane to the mill
3. Smallholders cannot carry out any developments or assign/sublet any cane/dwelling area without KaSCOL consent.
4. Access to and use of drains, water pipes or anything used in relation to irrigation system shall exclusively be in connection with the cane field and dwelling land and will be constructed or installed by KaSCOL. KaSCOL supplies/delivers irrigation water to the cane area and repair and maintain irrigation equipment. KaSCOL also ploughs cane fields, plant the cane and provide all the necessary inputs and services necessary for proper growing of cane

Smallholders maintain cane on the field to KaSCOL standards including adherence to fertiliser programme, maintenance of cane fields (weed-free condition); use of chemicals and maintenance of the surrounding of cane areas. KaSCOL may burn and harvest cane in the absence of smallholders. Smallholders shall ensure that their cane meet ZaSPlc quality standards. KaSCOL provides replanting services to smallholders but only KaSCOL approved varieties of sugar are allowed. Animals such as cattle, sheep, goats, donkeys and any other animals likely to be a 'nuisance' in the cane areas are prohibited. Smallholders can cultivate crops, keep poultry and other acceptable animals with consent from KaSCOL.

Payments are calculated as a percentage of proceeds of the sale of smallholder cane as per cane price agreement. The cane price would include the price of molasses; therefore, no separate payment is due for molasses. KaSCOL deducts all charges due and payment by the smallholders before any payment is made to farmers. Smallholders may nominate qualified members of their immediate family preferably spouse, own child and any other successor to take over. However, KaSCOL reserves the right to repossess the farm from any smallholder should three successful nominees fail to manage the farm accordingly. The agreement can be terminated: if the smallholder is declared

bankrupt; death of a smallholder and where no satisfactory person has been nominated to succeed or has not been approved by KaSCOL; on disciplinary grounds; resignation; health grounds; not building a good house to KaSCOL standards; poor performance – below 75% of the highest producer in that block; or absence from the project area for more than 30 years. However, in reality some of these elements are less emphasised.

Box 5.1.2: Magobbo Smallholder Sugarcane Agreement

In Magobbo, the sugarcane agreement says much about the roles and responsibilities of ZaSPIC, CGAM and the ERC committee than on what smallholders can do. This is in part because of the role of Nanga Farms as a service provider which cultivates sugarcane on behalf of farmers on five term renewable contract. The chairperson for the sugarcane committee and Magobbo Cane Growers Trust signs the sugarcane agreement on behalf of smallholders. Individual farmers cannot withdraw their land from the block-farm and use it for other purposes. However, where a farmer wishes to withdraw from the scheme, he/she must pass all obligations to his/her successor and ceases any claims to the land. Having leased their land, farmers are considered as being in business of growing and supplying sugarcane while ZaSPIC purchases all the cane within terms and conditions of the agreement. The agreement covers five key areas: supply and purchases, quantities, delivery, acceptance of cane and quality. Smallholders are not directly involved in the processes. Smallholder annual quota for sugarcane is defined as the multiple product of the registered area to be planted to cane – not less than 54,487 tonnes of cane (2010/2011) plus or minus 5%. The ZaSPIC's agronomy department makes available agronomic information from trials to the 'growers' and can test farmers' cane for pests or diseases. ZaSPIC is also the sole agency permitted to import/introduce new varieties of cane. All cane delivered is weighed at the mill's weighbridge which is *"calibrated and assized in accordance to the requirements of the ERC committee and the cane testing services"* often with no smallholder representation. ZaSPIC has the right to unilaterally reject any load of cane found with extraneous material (e.g. rocks, sand, metal or any other matter) that could be deemed damaging to the machinery or plant of the mill or if the juice quality of the cane is below minimum quality as set out by the ERC committee.

Grower payments are based on a long formular that consider various factors including the estimated recoverable crystals (sucrose) of the cane delivered, grower share of the ERC price, agreed costs in the crop year per tonne of ERC delivered to the mill including sales of sugar and speciality products as well as the millers share of the ERC percentage as agreed. The ERC price is determined, communicated and reviewed by the ERC committee taking into consideration any capital investments *"to expand or improve the efficiency of the mill or factory."* Scheme leaders and smallholders said that they did not understand the formula for sugarcane pricing and related determinants.

Growers can collect filter cake or preference to purchase a quantity of molasses in proportion to the cane delivered as determined by the ERC committee. However, missing avenues for

commercialisation or use at household level means farmers often do not claim or buy any by-products in which case ZaSPlc assumes ownership and opportunity to commercialise.

The role of the ZaSPlc's ERC committee is very important in understanding industry terms and conditions for smallholders. The ERC committee can:

1. Reduce annual quota by an average of the three years deficit/default if there is a shortfall on the delivery of cane in excess of 5% of the annual quota;
2. Reallocate any deficit in the annual quota of cane delivered by the grower to other growers;
3. Determines circumstances for exceptional increases above the annual quota (more than 5% of the annual quota) and whether this can be accepted for crushing;
4. Ensure that the purchase of cane satisfies quality requirements;
5. Regulates timings of sugarcane deliveries and the related means of transport for delivering to the mill;
6. Increase the annual quota for growers if additional milling capacity is made available; and
7. Approve and regulate cane varieties for all growers.

In Kaleya, farmers and KaSCOL sell sugarcane to ZaSPlc under a single purchasing agreement (Figure 3.4). Smallholder production is guided by a cane farmers' agreement which specifies obligations. Cane and purchasing agreements are developed by ZaSPlc and KaSCOL respectively, and are tied to the farmer association, making independent negotiations impossible (Box 5.2).

Cane-prices are determined by the district ERC committee (comprising ZaSPlc and their nominees) and payments to all growers are calculated on cane per hectare (TCH) – basically tonnes of cane per hectare which relates to yields. ZaSPlc buys sugarcane simply as a commercial transaction, but ultimately pays for sucrose – (ERC) (Figure 5.2). Sugarcane is assessed on potential amount of extracted sugar – the recoverable value rate (%RV) derived from a long ERC formula. In essence, the price for sugarcane and ERC would thus be different. A constant theme across group discussions and household interviews was that sugarcane prices did not include by-products, as such no separate payment was due to farmers (Box 5.2). Thus, KaSCOL applies a price-split arrangement. What this means in practice is that KaSCOL receives payments from ZaSPlc in form of ERC price but this is then translated and consolidated into TCH per household/farm less charges. Consequently, sugarcane quality and

cane-field management determine farmer returns and so are intermediation services. This two-tier price-split has always been a source of conflict between KaSCOL and farmers. One farmer complained: “*whilst the company gets 50%, farmers incur costs of production on the balance 50%*” (SDK4.12.1215).

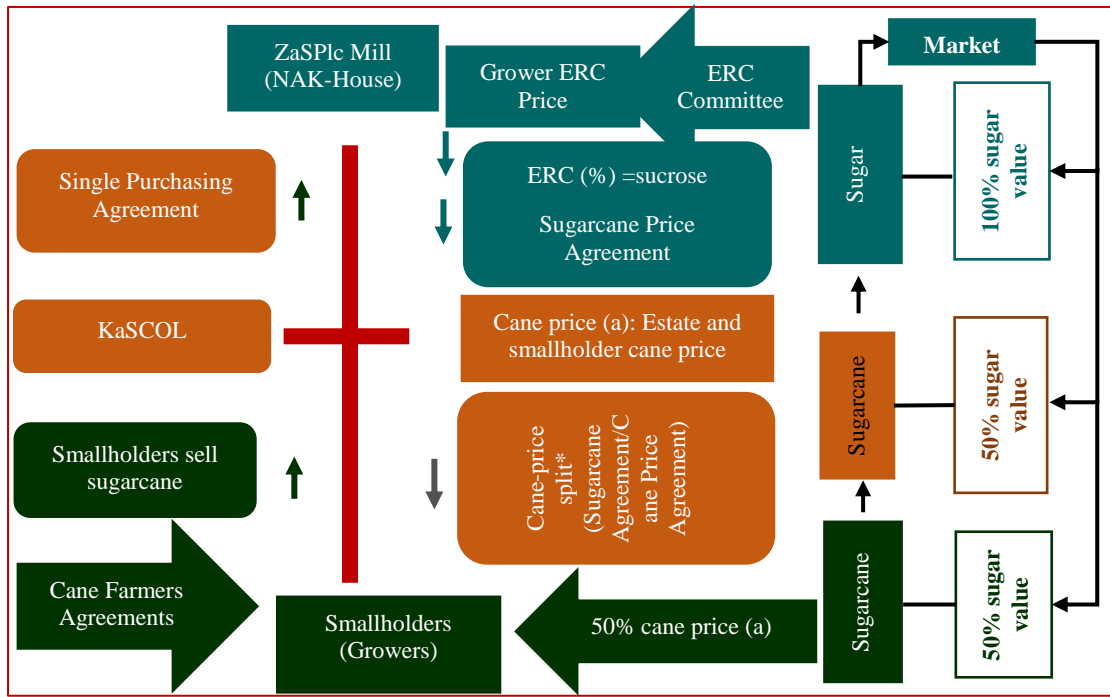


Figure 5.2: Cane split arrangement at Kaleya. Upward arrow shows product movement. Downward arrow show price transmission (Derived from interviews).

Meanwhile farmers in Magobbo are paid a share of proceeds per hectare. However, a deficit of market and crop knowledge among farmers means that market dynamics remain complicated for smallholders as one farmer representative remarked: “*we are sugar growers, but selling a commodity we have no idea about*” (SDM1:21.01.16). More widely, a majority of respondents ascribed low and deteriorating conditions surrounding sugarcane production to institutional set-ups in which the intermediaries were implicated. Claims that intermediaries/millers deliberately kept information on pricing confidential were frequently heard. Given the random measurement of ERC on intake at the mill (i.e. based on random samples picked from haulage trucks at entry to the mill), a widely shared view among national experts was that: “*cane pricing is crude to give the real value to producers*” (D15.28.06.15).

In both communities, farmers reported that smallholder prices were being influenced by several interrelated factors including:

1. the way sugarcane is stacked in haulage trucks, which determines which stalks are sampled for assessment;
2. length of dry-off period;
3. the burning of the fields;
4. cutting and harvesting; and
5. millers' share of the ERC price, including cost of inputs.

That decisions around these key elements which preclude smallholders reflected not only dynamics of contract participation but also asymmetrical power relations between farmers and intermediaries and the processor including its related institutions. Smallholders faced unpredictable decisions “*on production, marketing, and pricing of sugarcane*” (G4:15.06.15). In Magobbo, this affected the way risks and cost of failures were carried. This included accountability of parties on efficiency (e.g. wastage, poor crop management), which can mean a loss of real value of land. In Kaleya, it affected the way farmers perceive land and land development within the estate and overall profitability of sugarcane. For instance, group discussions revealed a general disinterest among cane growers to invest in the scheme preferring to relocate, buying land and investing elsewhere (Chapter 6).

There are arguments that ZaSPIC creates economic activities for local people, e.g. employment, which ensures wealth distribution. However, this conceals the costs associated and the related realities (Section 7.5.2). Most of the workforce in sugar plantations is seasonal (mostly male), and mostly concentrated around harvesting period (March – August) – including in Kaleya where part of the cane cutting contract has been given to smallholders (Box 5.1). The centrality of seasonal migrant labour to ZaSPIC was highlighted in four main ways:

1. Transportation of workers to and from other provinces (e.g. Western and North-Western provinces);
2. Establishment of temporal residential camps across the district;
3. Provision of social support such as HIV/AIDS sensitization (ZaSPIC and district agencies), and;
4. Distribution of food including energy drinks to migrant workers on plantations.

The local authority complained that this concentration of seasonal workers strained health, housing, land and water services, whilst reducing gross payments of wages locally which could help to reduce poverty (Chapter 7). One district officer expressed an opinion that the focus on migrant labour means that “*there are still high poverty rates prevailing in the district.*”

5.6 Negotiating Inclusion and Contending Exclusion in Sugar Value-Chains

This section addresses *structural* determinants of inclusion defined to include factors related to production, value-chain dynamics and national dynamics. It also discusses *non-structural* factors defined to include land ownership, inheritance and rules guiding membership in smallholder schemes. Combined, these factors show inclusionary processes are multi-dimensional, but closely relate to processes of exclusion.

5.6.1 Structural Factors

a. Public-Private Partnerships and Irrigation Management Transfers

Discussions with farmers and interviews with officials identified public-private partnerships (PPPs) and Irrigation Management Transfers (IMTs) as important determinants of smallholder inclusion into sugarcane. Donors and state actors have in the post-2000 provided smallholder irrigation infrastructure, formalising institutions responsible for the management of outgrowers and then handing those over to groups of farmers to work in them (Box 5.2).

Box 5.2: Public-Private Partnerships and Irrigation Management Transfers

Public-Private Partnerships have gained prominence in agriculture and rural development strategies in Africa (Harrison and Chiroro 2016). In Zambia, legal and institutional frameworks enable state and donor actors to foster irrigation infrastructure, enabling smallholders to work alongside commercial entities. The smallholders are embedded in the supply chains as a strategy for poverty reduction, whilst the commercial entity provides market thrust. There are grounds for this optimism: “[w]e are displacing you from your land but giving you a percentage share in the scheme/company” explained one official (Z3:04.01.16). The rationale is that: “commercial entities should not lead to the exclusion of smallholders/local communities” he added (Z1:29.06.15).

While promoting farmer inclusion, state funded schemes present sugarcane as an important crop for poverty reduction and rural development. Households who cannot access irrigation infrastructure and services are typically excluded. Within value-chain development, donors play an important role as funders: “the management models are key in drawing us into agriculture” (K1:18.06.15). Donors advance irrigation, technical expertise and infrastructural development, although efforts remain slow, limited and regional and around ZaSPIC. Thus, within Zambia, smallholder inclusion in sugarcane has always been regional. Interviews with national actors ascribed this to uneven donor and government support alongside financial power and influence by ZaSPIC (Chapter 7).

Records from the Zambia Revenue Authority show that 93% ($n=38$) of commercial farmers/entities producing sugarcane are based in southern province and around ZaSPlc. This spatiality and structure ensures that ZaSPlc is supplied by a variety of growers that are dependent upon one mill and processor (i.e. companies, commercial farmers, outgrower schemes) (Figure 5.3). This limit wider expansion of sugarcane among smallholders, making processes of inclusion highly contested. Donor and government actors acknowledged: “ZaSPlc and Mazabuka should have more smallholders engaged in sugarcane” (Z1:29.06.15; K1:18.06.15) in relation to state-donor support to the sector (Chapter 7), and the company and the milling capacity.

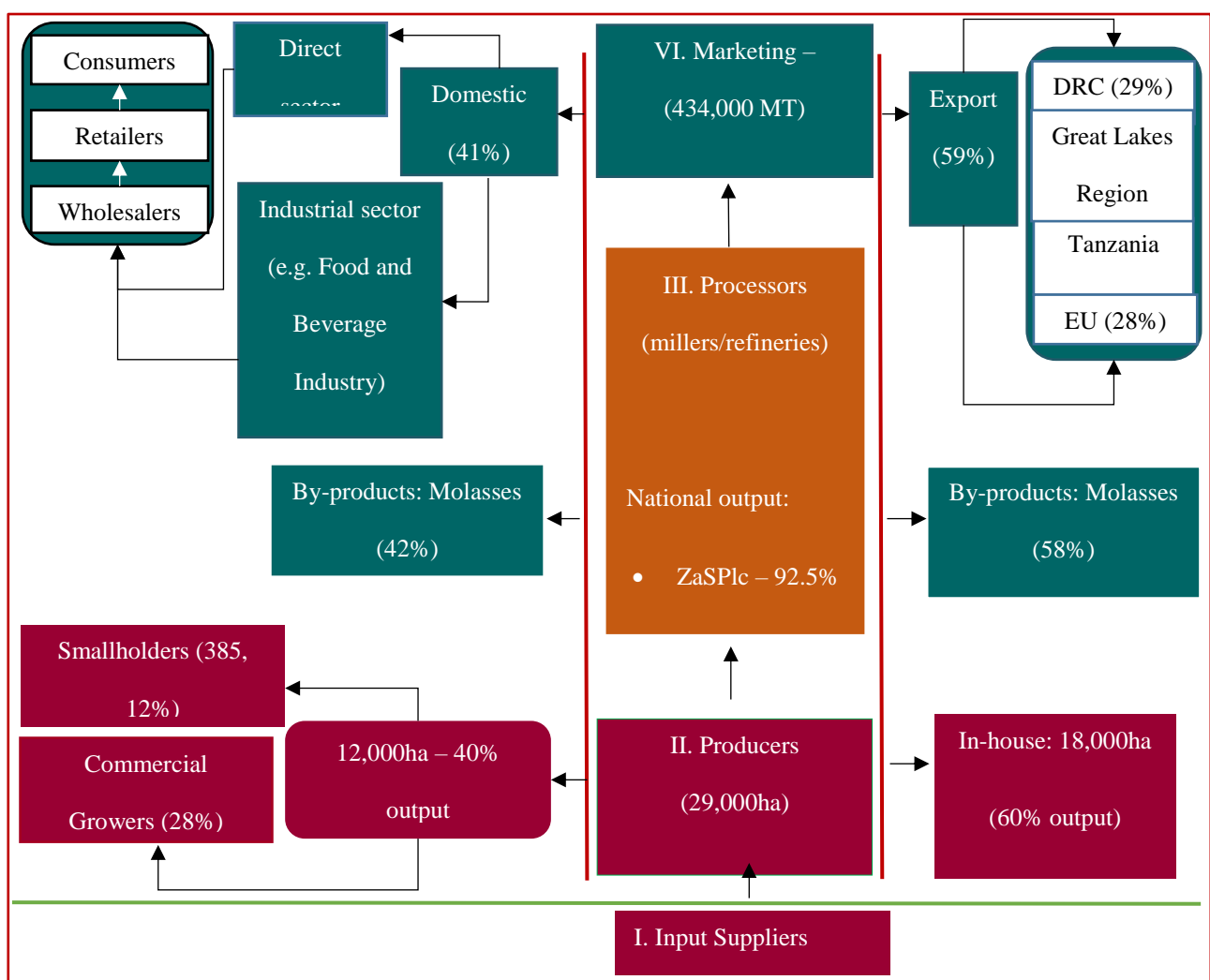


Figure 5.3: Zambia sugar industry structure based on stakeholder interviews

However, limited number of smallholders integrated in sugar value-chains also related to government and donor failure to incentivise smallholder inclusion elsewhere (e.g. Kasama and Kafue) (Figure 5.1). Limited value-chain participation by smallholders in sugar value-chains can be reflective of wider politics of sugarcane in Zambia (Chapter 7). By having more

production via smallholders, the government thinks that the power of Illovo/ZaSPlc may be curtailed. Whilst the government policy encourages more smallholders to participate in sugarcane production and engage ZaSPlc, respondents were fearful of the power and influence of the company. Fearing company take-overs, one official in the MoA feared that ZaSPlc might monopolise sugarcane, adding: *“can we hold down this monster called Illovo”* (Z1:29.06.15). Chapter 7 discusses corporate influence and power dynamics in the industry in detail.

However, scaling up sugarcane among smallholders faces diverse challenges of technical expertise, collateral, insecurity of tenure, and high cost of irrigation infrastructure. Other challenges relate to observed variations in donor models and preferences which affects collaborations (e.g. collective block-farming vs individual clustering with mixed crops) (Section 3.4). These challenges mean that most smallholders are unlikely to participate in sugarcane growing in Zambia.

b. Value-chain Inclusion as Corporate Strategy

Privatisation and entry of Illovo galvanised the sugar industry and incentivised new ranks of smallholder sugarcane cultivators. The hallmark was the establishment of the Smallholder Development Office and the formation of Mazabuka Cane Growers Trust by ZaSPlc for promoting sugar in the district. One outcome has been a 141% ($n=225$) increase in smallholder growers in the period between 2009 and 2015. Our respondent at ZaSPlc explains that *“smallholder inclusion is a deliberate effort to promote outgrowers outside any other corporate social responsibility”* adding *“you can see the sacrifices the company is making”* (ZaSPlc2:06.15). ZaSPlc evidently desires to be viewed as that institution with the power of transforming smallholder sugarcane dreams into realities, with a variety of investments and policies as set out in Box 5.3.

Box 5.3: Illovo and smallholder sugar sourcing in southern Africa

Oxfam’s ‘Behind the Brands Campaign’ has witnessed commitments from global corporations such as Coca-Cola to ‘zero tolerance’ for land grabs in their sugar sourcing (Oxfam 2013). Suppliers such as Illovo Sugar have made similar commitments with respects to smallholders and land rights. Illovo published its own guidelines and road-map on land and land rights with reference to sustainable farming practices and land acquisition within its supply chain. *“Illovo prioritises alternative model investments, such as the development of smallholder grower farming operations in areas in which we operate, rather than acquiring their land for our own development”* it says (Illovo 2016). Within

this period, Illovo has been branded a ‘champion’ on ‘just sugar sourcing’ moving to ban ‘land-grabbing’ in its supply chain (Oxfam 2016).

A lack of resources, knowledge and capacity among smallholders builds a case for intermediaries as management companies that can guide on agronomic and technical aspects of sugarcane (e.g. disease control and quality management). This included commercial elements such as procurement (e.g. fertiliser, pesticides and herbicides) and cane field management (Box 5.1). However, variability in governance structures for outgrower schemes means service providers play variable roles, with implications for the positioning and inclusion of growers. Smallholders require intermediary coordination of production partly because, from the management and quality perspective, small-scale projects as advanced in sugarcane still are large-scale biased. Smallholder inclusion and exclusion thus relates to the role of intermediaries which also relates to the processor.

However, a continued deficit in capabilities among smallholders (e.g. on crop requirements, pest and disease controls, procurement processes, marketing dynamics), more so alongside the presence of intermediaries, means participating farmers are not able to perform particular roles in sugarcane production. In Kaleya, discussions reveal heightened land contestations between smallholders and KaSCOL, the former demanding control over land and production. In Magobbo, farmers face a lack of crop knowledge and control over production: “[w]e grow sugarcane but there is nothing we know” (SDM2:06.15). A sense of frustration was observed among a majority of farmers who blamed intermediaries for their low financial gains, with some expressing the desire to work independently of Nanga Farms. However, on reflecting on meetings with farmers including discussions on various elements around sugarcane production, input procurement and prices, a manager at NaFPlc reported a general farmer disinterest in sugarcane crop knowledge. This means suggestions of independent management of schemes by smallholders was going to be difficult.

In Kaleya, management practices were determined mainly at inception in the 1980s. These have passed down the years with new farmers relying largely on family experience and participation in sugarcane production as opposed to formalised trainings. Whilst these were written in cane farmers agreements with an understanding of smallholder agricultural operations, it is difficult to tell actual farmer input in the guidelines. Initially, these practices were communicated on recruitment through the initial farmer trainings of six months.

Overtime, trainings have become fewer and wider apart such that new farmers as successors have tended to rely on family experience and knowledge transmission. KaSCOL officers conduct field inspections and advise farmers on areas of concern. Thus, a senior official at KaSCOL was equally unconvinced about farmer-led schemes seeing “*continued farmer receipt of warning letters from KaSCOL over non-adherence to cane management practices*” (SDKa:14.11.15). Whilst sustaining smallholder inclusion, the current institutional set-up means intermediaries remain an extension and trajectory of corporate dominance within which smallholders are implicated.

The outcome of ZaSPlc’s expansion and ensuing smallholder integration – controlled and dependent upon corporate expansion and strategies – has been deepening grower dependency. Thus, the publicly articulated focus on smallholder integration conceals ZaSPlc’s expansion and concentration within the agro-industry chain which has ensured dominance in production (Figure 5.3). Highlighting a highly dynamic agribusiness context, such expansions present possibilities for as well as subordination of smallholders. These are also indicative of the transforming agrarian structures, processes and control by corporations in which smallholders negotiate inclusion.

c. Role of Contracts, Quotas, Water and Markets

Interviews and group discussion data reveals how delivery of contracts to growers for the supply of sugarcane expresses another conduit for determining smallholder inclusion. Using sugarcane agreements, ZaSPlc tightly controls quotas, water for irrigation and markets. Sugarcane agreements are “*powerful and valuable documents without which one cannot produce sugarcane*” explained one district official (D15:28.06.15). These highly-sought after agreements are not only conduits for specifying quantities, varieties and standards expected and impressed through intermediaries but also mechanisms for determining who participates in sugarcane production, where, how and when.

The perishability of sugarcane that demands immediate processing means that to accommodate diverse growers, ZaSPlc must run a tight sugarcane supply quota arrangement. However, a consistent theme across group discussions was that allocation of scheme quotas spelt exclusion for some smallholders (e.g. Magobbo), which again produces another trajectory of rural livelihood transformation (Chapter 6).

For sugarcane, water is critical and emerging hydro-social relationships around the resource enables or limit possibilities for grower inclusion. In Mazabuka, ZaSPIC holds water rights, controlling the resource for outgrowers. In Kaleya, some farmers believe that the control and usage of water always aligned/strengthened KaSCOL's sugarcane expansion whilst neglecting smallholders. In response and as a cost-saving measure, some farmers limit irrigation cycles to only two, with the balance covered by rainfall. This increases the crop's susceptibility to diseases (e.g. smut), affecting yields. Farmers report that it cost them between £123-184 per irrigation cycle and that they were irrigating an average 5-6 cycles as opposed to average 10 cycles required per season. To many respondents, *"relationships around water and water rights require urgent consideration"* (D15:28.06.15; G4:15.06.15) (Chapter 7). This confirms how inclusion can proceed on disadvantageous terms and conditions. In this case, the question is not about contract participation but rather what contract participants are able to do once they enter coordination schemes.

Farmers gave mixed views on the way sugarcane schemes were organised and on the merits of collective production. In Magobbo, scheme leaders gave several advantages of being organised in schemes and under collective production arrangements. One scheme leader argued that *"producing sugarcane is costly, individual farmers cannot afford on their own"* while another one remarked that *"it is easier to acquire and pay back bank loans."* Others added: *"sugarcane needs technical advice on planting, management, irrigation and harvesting and local farmers lack this knowledge"* and that *"mutual interests and group ownership reduces risks of sabotage by unhappy groups of people."* However, scheme leaders and farmers agreed that collective production arrangements through amalgamated land brought about fears that the land will never be given back to farmers in the future as sugarcane promoters promised. Some farmers bemoaned a project's lack of consideration of pre-existing water sources including cultural and traditional attachments such as graveyards which were erased in forming the block-farm.

Group discussions with farmers revealed that prior sugarcane household members engaged in diverse land-uses and income generating activities such as crop or livestock production particularly for women. However, adoption of sugarcane meant that household members *"are drawn on one source of income – sugarcane – which leads to intra-household conflicts."* Group discussions with scheme leaders and farmers also expressed opinions that direct involvement by Nanga Farms proved costly as the service provider had to cover all costs including water, inputs, labour, fuel including administration costs before any payment was due to farmers. A

general feeling among respondents was that “*as a trustee we would want to get some works from Nanga Farms to reduce the payments we make to the service provider*” (FGD, Magobbo 2015). In Kaleya on the contrary, farmer complaints surrounded what they characterised as unclear commercial transactions, control over land and water, affecting investments in the scheme and restrictions on what smallholders can do within the scheme or dwelling lands.

5.6.2 Non-structural Factors

a. Politics of Land and the Growing Importance of Inheritance

Interviews and group discussions in Magobbo revealed that land ownership in the farm-block was crucial in determining smallholder participation in sugarcane production. Formally, ZaSPIC required households to have a maximum of 4ha of land available in the catchment area and for sugarcane. This requirement excluded the landless, land scarce and marginal land-owning households from participating, including the poor who could not afford to purchase land. These were mainly *women, the aged, widows* and *youths*. As highlighted in section 3.4.1, sugarcane production and agreements in Magobbo required that farmers lease out individual plots of land as a block-farm to ZaSPIC and Nanga Farms. ZaSPIC believed that this guaranteed its capital investment. However, the land agreements did not provide any escape route for farmers that might want to pursue alternative livelihoods and economic pathways outside sugarcane. This was because the sugarcane agreements as well as the farmer constitution requires a minimum of 20 years before farmers could claim back their initial land and possibly opt-out of the scheme/block and sugarcane or re-allocate their land to other activities (Box 5.1). Focus group discussions however revealed that few were aware of this period.

Given the ceiling on scheme land ownership per household (4ha) in the scheme, farmers with extra land in the catchment faced three possibilities.

1. *Sell* their extra land, but weak monetised land markets and low prices meant that some farmers lost out due to fear of incurring losses and the need to achieve quicker returns.
2. *Swap* an equivalent amount of land with anyone willing to join the scheme, but discounting – from economic calculations – preference, location, fertility and quality components of land since there was no way farmers could know the value of the land.

3. *Lose out* completely. Group discussion with the scheme leaders revealed that this was because the land in the catchment area could technically not be converted to other uses as this was against the agreement with ZaSPlc. In this case land was vested in the community trust, in practice the sugarcane committee.

Extra unclaimed hectares of land were placed under the committee. Sugarcane payments from this land act as a source of income for committee activities. However, this so-called '*buffer money*' was a sharp source of conflicts, and leadership contestations, raising governance challenges and accusations of misappropriation of funds.

Claims of land accumulation by some farmers were reported in group discussions and household case studies. The *better-off* farmers within and outside Magobbo accumulated pieces of land in the scheme creating absentee landlords, as one caretaker remarked: “[t]he farm owner stays in town. He asked me to come here to join the sugarcane family” (SDM8.02.16). The land and *resource poor* category farmers that could neither swap nor buy land in the scheme were excluded. To one manager at NaFPlc, participation by outsiders (who could flex their financial power and buy land from farmers in the catchment area) eventually led to a mixed farmer group, raising “*challenges for scheme coordination, governance and benefit sharing*” (SDMa:20.01.16). During fieldwork, divisions in the scheme were visible, with two parallel committees all running and claiming legitimacy. A remark from one district official was illustrative: “*Magobbo is where everyone wants to be in the sugarcane committee*” (D6:06.15). Financial incentives available to committee members from the buffer money heightened stakes for leadership positions but also created possibilities of ‘elite-capture’ (Phillips 2014). This was compounded by the fact that district officials prioritised commercial interests aligning to ZaSPlc interests, in effort to maintain ‘*opportunities*’ for smallholders. Consequently, the scheme suffers from lack of control/guidance either from district officials or ZaSPlc/NaFPlc, enhancing power imbalances in the schemes (Chapter 7).

Consequently, and within grower households, divergences and disputes were reported in group discussions and interviews. For instance, multiple claims to land were reportedly heightened by sugarcane adoption, leading to exclusion from *within*. Where powerful household members dominated, this resulted in alienation and exclusion of weaker members such as youths and women from sugarcane incomes and decision making. Although a few devised plans for instance for income sharing, this again affected what a household could do (e.g. asset acquisition, investments). Within this account, women constitute yet again another cohort of

losers, typically facing marginalisation. Declining importance of livestock and reduced subsistence production had impacts particularly on women (Section 3.4), who traditionally had participated in these activities, compelling them to enter the sugarcane labour market.

A scheme policy to recruit one worker from each household, against the culture that discourages them to work and the perception that sugarcane is a man’s crop, has seen women participate in various tasks on the plantation including weeding (Table 5.3). Group discussions with women cited *poverty, poor expenditure decisions* by husbands as heads of the household, *unfavourable sugarcane returns, indebtedness, social prestige* and *respect* as some of the motivating factors for seeking wage employment.

Table 5.3: Proportion of workers from smallholder households working in Magobbo scheme ($n=80$; availed by Nanga Farms).

Year	Female	Male
2014	33% ($n=26$)	67% ($n=54$)
2015	30% ($n=24$)	70% ($n=56$)
2016	26% ($n=29$)	64% ($n=51$)

However, group discussions with women revealed unsavoury experiences from working on sugarcane plantations. Women complained about poor working conditions; low wages, unfavourable work shifts that discouraged more women from participating – with fears of health implications emerging from exposure to dangerous sugarcane chemicals (e.g. on skin condition, reproduction). Once again, a key highlight here is how inclusion brings forth adverse experiences for women value-chain participants.

In contrast, Kaleya faced generational challenges with the passing of some ‘original farmers’ (102/160 farmers; 66%). Whilst being successful in attracting young famers, inclusion has become highly contested, more so in polygamous families since only one person often a nephew can legally inherit the sugarcane field. Inclusion in the scheme is defined either by a *Will or inheritance* (Box 5.1). However, serious inheritance disputes abound, as one farmer remarked: “*it is all about waiting for somebody to die in order to inherit the sugarcane farm*” (GDK2:13.01.16). Cane fields were perceived as family-owned as opposed to individual, increasing claims as well as obligations on the part of inheritors. Increasingly, family members often organised to impose their preferred candidates or demand a share of proceeds. In response to family conflicts and most importantly land ownership structure in the scheme, farmers are

seeking investment opportunities elsewhere: *“this is just inherited property. We need to secure a future for our children”* remarked one farmer (GDK2:13.01.16). That some farmers are relocating and seeking livelihoods/investment opportunities away from the scheme whilst remaining in sugar value-chains, highlight how production systems increasingly disconnect farmers from their position as growers and as custodians of the land (Dubb 2016) (Chapter 6).

Whilst KaSCOL demands that each farmer deposits a Will indicating their successor, culture that sees sugarcane plots as family owned was blamed for increasing cases of household inheritance related conflicts. Within the Tonga matrilineal tradition, strong beliefs were reported: *“that farmers – predominantly male – do not entrust property in their children”* (SDKc:19.01.16), heightening tensions with extended families. Culture is more challenging for women: *“a female spouse – who has powers to remarry on the farm – cannot inherit”* explained one KaSCOL officer (SDKc:19.01.16). Women shared the feeling that *“their future in sugarcane was neither determined nor secured, more so if one was married to a successor”* (GDK3:11.12). This tradition means opportunities for women were attached to their marital status and were differentiated (Box 5.4) compared to their male counterparts (Box 5.5).

Box 5.4: A Woman Successor in Kaleya

The story of Jemuna² started in 1993 when her polygamous husband joined the scheme. Upon his death (2011) their son inherited the farm but due to poor sugarcane management, KaSCOL transferred the farm to Jemuna (the mother). Jemuna reports lack of respect in the house, intimidations, and increased family obligations. She remarks: *“it is always war after sugarcane payments,”* reporting emotional/physical abuse from her children (who perceive themselves as rightful heirs) and false accusations from relatives about poor farm management. *“I fear that my children or family members family would harm or kill me”* (CSM3:02.16). Her opinion is that this is because *“am not the original owner of the farm”* and that I *“am a woman.”* Organising/coordinating household labour became problematic.

² Real names have been concealed to guarantee anonymity

Box 5.5: When a man inherits a farm in Kaleya

When Dimuna's father died, extended family members chose two preferred candidates to take-over whilst preparing sixteen other potential candidates. Upon announcing Dimuna as successor, he describes "*unhappiness, disappointment and anger*" among family members and that "*he feared for his life.*" Similarly, he noticed changes in the work culture among household/family members and poor cooperation. Financial disputes soon ensued but believes this was common to all successors. He adds: "*I have to be stubborn on expenditure decisions in order to follow my dreams*" (CSM1:02.16)

Some of these challenges related to failure by family members to actively pursue alternative livelihood/economic opportunities outside the scheme – a clear culture of sugarcane dependency. To one KASFA representative, "*it is not the question of financial resources,*" but "*culture that sees sugarcane fields as promising a good future*" (SDKc:19.01.16). These dynamics determine what farmers could do within the scheme, and the possibilities of poverty reduction. For instance, the poor category households were more likely to face sharp inheritance conflicts. These households reflected poor labour organisation and were those that were unable to invest away from the scheme, highlighting crucial hierarchies within transforming social relations (Chapter 6).

b. Scheme Membership and Role of Traditional Leaders

Local interviews and group discussions reveal that participation in sugarcane further related to scheme membership as well as the role of traditional leaders. In Kaleya, a farmer association KASFA dealt with inheritance issues whilst acting as link between smallholders and KaSCOL. In Magobbo, the committee was key in selecting participants, bringing to the fore elements of corruption and nepotism. But some industry experts described these associations as "*weak and fluid*" and "*production and survival oriented as opposed to being critical in engaging downstream actors*" (D15.28.06.15) (Box 5.6). A lack of business and industry understanding means that "*associations think they have an ok deal*" argued one expert (G4:15.06.15). In both communities, farmer associations lacked expert knowledge on sugarcane. Most farmers believe that this led to a lack of effectiveness on production and price matters, leading to what was described as failed promises. Thus, the way farmer associations shape community narratives and the playing out of politics greatly shaped inclusion and exclusion as well as possibilities for farmers.

Box 5.6: Farmer Associations and Leadership Struggles in Magobbo.

In Magobbo, sugarcane business is handled by the sugarcane committee – a committee of 10 members led by a chairperson. The committee members are elected from the general membership by the smallholders on 5-year terms. The committee is not specialised and receive no training sugarcane production, pricing, marketing or procurement. Its role includes dealing with grower’s concerns such as information sharing on prices, procurement and other decisions by ZaSPIC and Nanga Farms including dealing with scheme conflicts. The committee draws on the Magobbo Cane Growers Trust – a trust that holds and receive funds from sugarcane grown in former grazing lands and other unclaimed land – heightening leadership stakes in the scheme.

The research team was told that elections to elect a new committee were held on 30th September 2015 under the guidance and observation of district representatives such as the council and the DACO who facilitated the ushering in of the new committee members. However, by 2016, power was still not handed over and the new committee was not allowed by the old committee to conduct any sugarcane business especially signing for the committee monies (e.g. payments to farmers or drawing from the scheme account). Discussions with the settlement committee – the oldest committee formed in the 1980s to deal with settlers and act as an overseer in the entire settlement area – confirmed that it was being consulted on community matters by both the old and new committees. The settlement committee argued that the sugarcane scheme was receiving mixed messages from the district: political representatives, DACO, ZaSPIC and the courts who were involved in solving the case.

Efforts to resolve leadership challenges through the courts, policy and settlement committee all proved futile. A laid-back approach from ZaSPIC seem to place district as well as scheme actors in a difficult situation and led to conclusions that ZaSPIC preferred working with the old committee whom they continued to consult on sugarcane matter (e.g. signing on farmer payments). Farmers were fearful that the partnership between the old committee and ZaSPIC aimed to transform the scheme into the KaSCOL model which could mean complete loss of land by farmers. To the settlement committee, what was going on “is a battle over the future of Magobbo” whilst farmers expressed opinions that the old committee handed onto power because they were misappropriating scheme funds.

Chiefs on the other hand dealt with land matters whilst endorsing sugarcane. In Magobbo, evidence revealed how instrumental chiefs were at project inception particularly with respect to relocations of households from the sugarcane farm-block to new dwelling lands just outside the sugarcane catchment area. Strong links between the Ministry of Chiefs at district level and ZaSPIC were observed, more than any other government department interviewed. However, Chiefs entrench business interests as opposed to representing smallholders in wider district

circles. However, discussions with Chiefs revealed another trajectory of corporate influence that side-lined the smallholders. Chiefs complained about broken promises and departure from investment pledges, e.g. *“the number of smallholders growing sugarcane is smaller than we imagined, which makes ZaSPlc richer”* (D3:01.16). They also complained about being sidelined: *“ZaSPlc does not align with us, they work independently and directly with farmers”* (D4:01.16). Chiefs were also of the view that the the current institutional arrangement was sophisticated for community members to adopt sugarcane in that it placed so much power in ZaSPlc, its institutions and intermediaries to dictate who grew sugarcane in the area (Chapter 7).

In response, chiefs proposed somewhat of a *community-based approach* to sugarcane productin. A sense of frustration among chiefs who wanted more community members to grow sugarcane was clear: *“we want a different sugarcane model where farmers can deliver to the mill on sledges/ox-carts”* remarked one Chief (D4:11.15). They believed that this model would allow more villagers to grow sugarcane and contribute to reducing poverty and suffering in their communities. However, these dynamics, indicative of power relations, highlight dynamics of who can influence what in the sugar industry – and is a focus of Chapter 7.

5.7 Unpacking Exclusion in Magobbo

As outlined in section 3.4.1, the selection of Magobbo as a case study community allowed for identification of non-cane growers within the 3-5 kilometre radius applied in the study on which data on dynamics of exclusion were collected. This radius however did not yield sufficient coparable cases in Kaleya as non-cane growers were located far beyond the scheme.

Interviews and household surveys with non-cane growers revealed original plans by promoters of the scheme to incorporate all settlers in the area as growers. This would involve swapping with farmers who had extra land in the catchment area. However, rather than swapping, some farmers sold their extra land for quick economic gains (including those that exited sugarcane). This led to unintended lost opportunity for others who wanted to grow sugarcane and thus non-participation. The sugarcane committee corroborates: *“there were disagreements, some just resisted whilst others sold their land completely”* (SDM2:06.15). Conversely, opportunities for new participants outside the scheme were created through land purchases. The landless, land scarce or those who were willing to swap but did not get that chance faced exclusion.

In determining actual shifting patterns of land-use, transfers or sales, farmers were asked about land allocation before and after the sugarcane project and then probing current land availability (Figure 5.4). In addition, survey data showed that on average, households held 2.3ha, 2ha and 1.6ha of land as *available*, *accessed* and *utilised* respectively, lower than before sugarcane adoption. This was clearly indicative of land transfers and conversions in relation to sugarcane expansion.

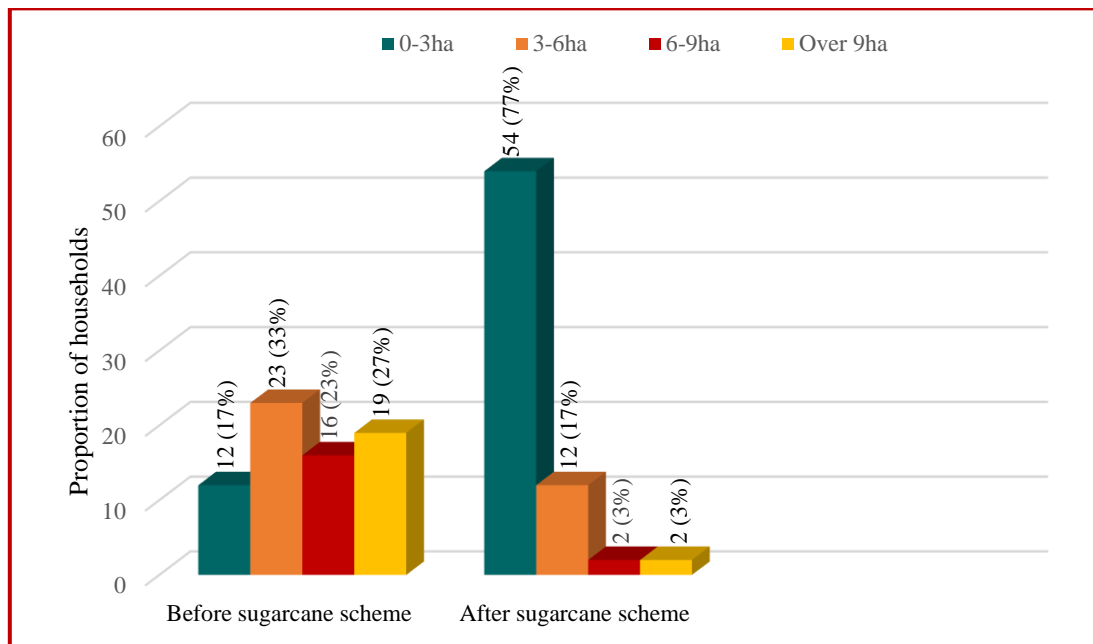


Figure 5.4: Household land-use pattern before and after the sugarcane project ($n=70$, from household surveys).

Interviews and group discussions identified two sets of factors for determining exclusion:

1. Active farmer decisions; and
2. Those related to project selection.

In illustrating processes and multiple realities, I explored these further in household surveys asking non-cane growers how important they thought these factors were in influencing their exclusion as summarised in Table 5.4. Some farmers that were land insecure expressed unwillingness to participate in sugarcane production, judging the risks of loss of land in that sugarcane growers in Magobbo effectively leased the land to ZaSPIC. They also highlighted unclear sugarcane benefits. Other factors were indirect relating to household contentions and those associated with the project selection criteria.

Table 5.4: Factors influencing sugarcane exclusion in Magobbo ($n=30$).

Exclusionary factors	<i>Very important</i>	<i>Important</i>	<i>Less important</i>
Active farmer decisions			
Fear of loss of land	60%(18)	20%(6)	20%(6)
Unclear sugarcane benefits	17%(5)	33%(10)	50% (15)
Project selection criteria			
Not owning land in the catchment area	88% (27)	12%(3)	–
Family land disputes	50%(15)	50%(15)	–
No one to swap land with	–	71%(21)	29%(9)
Participation by outsiders reduced inclusion chances	9%(3)	36%(11)	55%(16)

Although some farmers were unconvinced about sugarcane benefits, survey data shows sugarcane remains appealing to non-cane growers: about 94% ($n=28$) of the surveyed non-sugarcane growers considered growing sugarcane in the future. The perception was that sugarcane was profitable a crop. This also included the fact that there were few opportunities being promoted to non-cane growers for agriculture and other businesses in the area. Already, this has knock-on effects on adjacent communities. Some farmers were acquiring land in Kabesha (east of Magobbo) in response to rumours that the area will soon be an extension of the Magobbo block-farm and that farmers will be invited to become growers. One non-sugarcane grower who acquired land in Kabesha remarked: “*when sugarcane extends to Kabesha, I will automatically be a sugarcane grower*” (SDM13:18.01.16).

Magobbo farm-block is an incorporation of both individual household and communal grazing land. One major concern among non-cane growers included the incorporation of communal grazing land into sugarcane (about 23ha) placed under the committee, as encouraged by chiefs, district departments such as agriculture and lands and other district officials. Under the idea that money realised from the grazing land (known as buffer money) would be used to develop the wider community (e.g. infrastructure as social responsibility), non-cane growers reluctantly agreed with the project promoters and government departments to release the land. However, this immediately proved problematic as one grower argued: “*the money is not benefiting the community that originally accessed the grazing land*” (SDM13:18.01.16). A majority of non-cane growers including cane growers alleged misappropriation of funds by the sugarcane committee. In this context, opportunities for cane growing translated into a crisis for non-cane

growers, illustrative of how processes of inclusion sets into motion processes of exclusion (Tobin et al. 2016).

5.8 Discussion: Coordination Schemes as Inclusive Models?

This chapter explored dynamics of smallholder inclusion and exclusion on the Zambian ‘sugarbelt.’ In so doing, it contributes to a growing body of literature interested in how value-chain expansion plays out in local environments (Bolwig et al. 2010). Evidence highlights lived realities and experiences, underlining how the socially contested intersection of the global-local value-chain produces diverse and uneven but interdependent hierarchies of inclusion and exclusion. Whilst LaSAIs and ensuing outgrower schemes as coordination schemes continue to be linked to inclusionary perspectives as mutually beneficial arrangements, this study challenges these somewhat simplistic narratives. Participation and governing power relations show how market institutions cannot always be pro-poor and inclusionary. There are diverse mechanisms through which outgrower schemes create hierarchies of dependences at local level. However, understanding smallholder inclusion and exclusion requires a consideration of structural and non-structural factors. Within the structural context, multi-level partnerships, corporate strategies and intermediaries create an inclusionary context, though with a visible agribusiness influence (Peters 2013). Government and donor collaborations sustain conversations around private-sector development and smallholder integration for poverty reduction (Barret 2008). However, fears of corporate take-overs by state agencies highlight divergences between broad smallholder inclusion in sugarcane production, employment and income distribution as rural empowerment and development and agribusiness objectives (German et al. 2016). Whilst development narratives enhanced the role of smallholders in sugarcane, endogenous corporate expansion also limits their participation (Hess et al. 2016; Dubb et al. 2016). In part, this relates to tight control over land and water, with smallholder schemes rendering a systematic conduit through which resources are absorbed into corporate production (Dubb 2016). Here, land property relationships are redefined, allowing corporations access to land whilst exerting control over communities, with impacts across social relations (Adams et al. 2018). Any narratives around ‘*just sugarcane sourcing*’ (as proposed under Oxfam 2016) thus require scrutiny. In the two case study communities, while coordination schemes present opportunities for economic and material accumulation, schemes fall short of being ‘win-win’ arrangements – there are winners (intermediaries and firms) and there are losers (typically certain smallholder participants). Rather than being homogenous, farmer groups are heterogenous with the better-off households obviously

accumulating. Within local communities, dynamics of sugarcane as a crop and of contractual arrangements produce mechanisms of inclusion and exclusion – the poorest households generally and particularly women and youths face exclusion.

Non-structural elements played even a greater role in shaping participation and non-participation among smallholders, contrary to some narratives (Barret et al. 2012). Smallholders relate to value-chains differently and participation is clearly non-random as opposed to random (ibidi.). Any inclusion first relates to there being a farmer group/association, which intensifies inclusionary processes whilst opening hierarchies of inequalities within communities (Tobin et al. 2016; Ashraf et al. 2009). The consequences of widening inequalities in commodity chains are widely acknowledged (Phillips 2014) and so are the patterns of differentiation (Oya 2012). But the potential for perpetuating inequalities in this study stemmed from the fact that inclusion simultaneously produced processes of exclusion. This relates to the ways in which the schemes are instituted and managed, as well as how they interface with local social and political processes and practices, i.e. both the nature of the economic structures and the embeddedness with local socio-political processes and practices. This confirms what Tobin et al. (2016) argue: “*local exclusionary mechanisms are activated when value chains are implemented*” (p.78).

Inclusion reflects asset ownership and initial welfare status (Donovan and Poole 2013; Tobin et al. 2016), contrary to other generalisations (Barret et al. 2008). This means that economic benefits of sugarcane cultivation are limited to a small proportion of smallholders (Tobin et al. 2016). For instance, employment opportunities prioritised cane-growing households. Exclusion or inclusion on disadvantageous terms meant that some growers/farmers would always be willing to accept work and strike deals with the better-off and be willing to share gains (Chapter 6). This situation was clearly gendered, illustrating another trajectory of inequality (Broek et al. 2017). These transforming social relations points to a design challenge of how to share benefits to a wide-range of farmers without marginalising them (Howard 2016). Thus, any optimism placed on linking smallholders to markets through value-chains require a general rethink particularly that value creation and its capture fundamentally points in one direction – firms and their intermediaries. However, firms and intermediaries seem to care less or are oblivious to the social processes and structures with which they are interacting. As a result, smallholder-firm interactions confine to cane field operations as opposed to genuine industry activities that enhance local value. In Mazabuka, this is exacerbated by weak and fluid

farmer associations that are production and survival oriented as opposed to critically engaged with downstream actors around market and commercial activities that would generate greater value for their members.

Governance, transparency and decision-making are important in smallholder schemes. Resulting limited participatory governance processes in my case entrenched pre-existing marginalisation (Mathur et al. 2014). Decision-making was left in the hands of the minority who controlled benefits, including ‘buffer money,’ highlighting possibilities and consequences of elite capture (Phillips 2014). Within uneven social and political structures, these became gatekeepers of reforms. Two committees claiming legitimacy in Magobbo – one voted out of power by the farmers, the other refusing to relinquish power – highlight this aspect (Box 5.5). Through silences and occasional actions, corporations or district officials play complicit roles in entrenching scheme personal interests.

Competing and divergent interests within local spaces further create challenges for participation. For instance, differences in priorities between sugarcane and livestock production highlights incompatibilities in farmer preferences. Divergences between those with land in the scheme, those that divided land to negotiate family disputes, the economically powerful that bought land and the land-abundant that swapped, further highlight uneven hierarchies of experiences and participation (as noted by Phillips 2014 with respect to Malawi). These processes however presented avenues for land accumulation by some farmers within and outside the projects that reorganises tenure relations (Oya 2012). Clearly, presenting LaSAIs and ensuing contractual arrangements as alternatives to land grabbing is to create a false view about the realities of corporate expansion. Sugarcane agreements are not only agreements on paper. Rather, they permeate, transform and shape property-right relationships (see recent reports by Adams et al. 2018 from Malawi). Corporations and intermediaries exert significant influence within the value-chains, reflective of the industry structure/organisation and power relations. The choice of whether to become an independent grower or not is contentious. Analysis in this chapter shows that growers do not necessarily have to coordinate all aspects of production nor deal directly with millers as this produces other risks (Vermeulen and Cotula 2010; Barret et al. 2012). However, integration alongside inadequate smallholder participation in processes that ensure equitable benefit sharing means intermediaries are not always harnessed progressively within the collaborative environments such as outgrower schemes (Howard 2016). The incorporation of communal grazing land determined what the excluded

could do (e.g. livestock, subsistence production, ecosystem services). Farmers opting out of sugarcane challenge assumptions that inclusion is necessarily desirable (Hospes and Clancy 2011; Bolwig et al. 2010). However, unlike past studies, this study shows active decisions on exclusion are not always economic in nature, they also relate to social and cultural processes within host communities.

In Mazabuka, sugarcane can be described as a ‘pull crop’ for drawing farmers towards commodity production and for being responsible for the majority land conversion in the district. This aspect was incompatible and problematic for other forms of livelihood expansion (e.g. livestock) (Borras and Franco 2012). Reports where farmers sought investment and livelihood opportunities away from the schemes could mean an emerging farmer disconnection from not only land but also from their status as farmers (McKay and Colque 2016). From another angle, this builds the case that ‘land-grabbing’ does not necessarily need to be forceful (Borras et al. 2011). As Adams et al. (2018, p.4) argues, “the grabbing might be slower than direct grabbing because farmers are not able to control inputs and output profits are lowered.” On the contrary, land-grabbing projects itself through slow and systematic processes of ‘accumulation by dispossession’ enveloped within economic processes – what McKay and Colque refer to as ‘productive exclusion’ (2016, p.604). Within this perspective, for instance, water is a critical resource but used and controlled by agribusinesses to determine the positionality of farmers and what they can do. In Mazabuka, sugarcane decisions are land and water decisions. Thus, the materiality of sugarcane produces inherent boundaries of inclusion and exclusion that growers must negotiate (Hess et al. 2016). The control of water rights by ZaSPlc sustained endogenous agribusiness concentration and expansion whilst ensuring grower dependency on the company.

5.9 Conclusion

Evidence from two case study communities provides insight into diverse factors that determine inclusion and exclusion, and it is clear that outgrower schemes have implications on the transformation of smallholders and local agrarian systems. Evidence presented in this chapter went beyond narrow binaries of inclusion and exclusion that accompany many analyses on contract farming and outgrower schemes, conceiving the production space instead as a platform where interests compete, producing diverse hierarchies within inclusion and exclusion. This study shows that inclusion and exclusion are complex and multi-dimensional. Possibilities of smallholder inclusion reflect *corporate, donor and public* relations that shape

the agro-industry structure in Zambia. In projects however, the real value of these relationship lies less in government's ability to coordinate, monitor and discipline agri-businesses than in providing conditions for agribusiness expansion. That agribusinesses exert enormous industry influence, defining market dynamics, illustrate a failure if not inability of national actors to confront important elements shaping social realities at local level. Clearly ZaSPIC is taking advantage of the institutional diversity around outgrower schemes and attempts to shape available institutions to their benefit. There is lack of negotiability and flexibility in the institutional arrangement which translates into unequal distribution of gains between smallholders, intermediaries and ZaSPIC – the latter being the main actor in pricing and calculation of sucrose levels. Within projects, complex factors interact to variously create pathways for inclusion/exclusions but are intensified by industry politics, structure and organisation. A focus on social-economic sustainability in donor and government collaborations at macro-level would be crucial in enabling participation and if agri-businesses are to drive the agenda for poverty reduction and rural-development. Inclusion thus must be advanced on strong scheme organisations that are farmer driven. However, this requires stronger grower-intermediary-miller collaborations to enable fair benefit sharing as opposed to binding relations – and is a focus of Chapter 7. The chapter has demonstrated how activation of value-chains produces and exacerbates inequalities within local spaces. Given the rationality of smallholders, my case shows that agri-industry participation is neither a privilege nor inevitable pathway as claimed in dominant narratives on the topic (World Bank 2010; 2008). Rather, agri-industry transformation should offer smallholders choices for participation or exit. These positions must acknowledge diversities on either side. But the current transformation of tenure and social relations means choices for smallholders at production level remain limited, and so are the prospects for livelihoods. The following chapter considers how inclusion in sugar value chains shapes land and labour relations and most importantly impacts household livelihoods, strategies and pathways – the basis for rural social differentiation.

Chapter 6 Outgrower Schemes, Livelihoods and Response Pathways on the Zambian ‘Sugarbelt’

6.1 Introduction

This third empirical chapter shifts the focus to local level and household analysis with an aim of exploring how integration and production of sugarcane contributes to and affects rural patterns of livelihoods and social differentiation in unfolding smallholder outgrower schemes. Drawing from classical agrarian political economy literature, LaSAIs arguably integrates smallholders into market dynamics, deepening social differentiation and intensifying processes of class formation. Rural populations have increasingly become heterogenous within and across communities, but how to narrate livelihood impacts in a conceptually coherent manner still remains a major challenge for researchers.

In this chapter, an analysis of household asset profile, strategies and livelihood response pathways focuses on two smallholder outgrower schemes. The first centrally controls land through an integrated company which rents out sugarcane plots to smallholders whilst acting as an intermediary (Kaleya). The second amalgamates individual smallholder plots of land to form a contiguous block-farm managed by a ZaSPIC intermediary, integrating smallholders as shareholders (Magobbo). How local livelihood outcomes differ between the two differently structured smallholder schemes are considered in relation to causes and consequences of the differences in the evolution, operation and integration of the two models. By doing so, this chapter addresses opportunities and barriers towards enhanced household and community livelihoods in sugarcane as well as response pathways for different households integrated in sugar value-chains.

It is argued that Kaleya scheme produces greater livelihood impacts across financial capital and other dynamics but that these remain low quality and fail to produce significant path-changing gains for households. Further, dynamics in livelihood groups and strategies, livelihood contributions of LaSAIs and sugarcane uptake, and livelihood response pathways, reflect causes and consequences of differences in the evolution, operation, and integration of outgrower schemes. One outcome is the production of narrow as opposed to broad-based livelihoods. Livelihood diversification away from sugarcane schemes but forged within land-based and agrarian activities show smallholders do not always switch to profit-maximising strategies. To develop effective smallholder outgrower schemes, this chapter shows that greater

attention must be paid to the role of institutional arrangements and local conditions in unfolding outcomes for land and water relations, and how emerging relationships shape inclusivity of an agricultural investment. Outgrower arrangements that ensure commodity production alongside alternative farmer activities that boost livelihoods are thus strengthened for this purpose.

Chapter 1 and 2 considered how the current discourse on value-chain development and smallholder integration into value-chains serve smallholder groups poorly, with exclusion constructed as problematic rather than a desirable rational and alternative livelihood strategy. Chapter 2 has shown that in critical agrarian studies, the connections between LaSAIs and outgrower schemes are strong, but evidence on which outgrower model produces improved livelihood outcomes remain relatively weak. Relatively little research is available on the livelihood implications and outcomes of different models of agricultural commercialisation (Hall et al. 2017; Cotula et al. 2005; Smalley 2013). The fact that LaSAIs and outgrower schemes have been resituated as important forms of land control (Chapter 5) means that institutional and contractual arrangements are central to delivering expected livelihood outcomes. However, a narrow focus on the micro-functioning of firms and companies, e.g. transaction costs including economic bargaining, in mainstream approaches often neglects context-specific dynamics of outgrower schemes, local livelihoods and the activities that smallholder farmers enter into as livelihood response pathways (BIRTHAL et al. 2005). Rapid value-chain expansion in commodities such as sugarcane that create complex contexts within which smallholders pursue their livelihoods is a key area of research need (Singh et al. 2016). Previous research has reported negative impacts of LaSAIs, for example through land enclosures (Oberlack et al. 2016; Bottazzi et al. 2016; Borrás et al. 2011; Peluso and Lund 2011). However, how LaSAIs contribute to the re-organising social-economic and environmental land-scape and how livelihood outcomes differ between differently structured outgrower schemes remains less explored (Hall et al. 2017; Pritchard et al. 2017; Vicol 2017).

6.2 LaSAIs and Outgrower Schemes: Re-engaging Livelihood Perspectives

Chapter 2 noted how the onset of LaSAIs reinforced debates on the merits of outgrower schemes as means of integrating smallholders into commodity value-chains (Oya 2011). While there exist diverse defining features for outgrower schemes, coordination arrangements such as those where smallholder incorporation into commercial value-chains is shaped by core processing estates are lauded as pro-poor, and best alternative to outright purchases (World Bank 2011) but remain controversial on livelihoods outcomes (Borrás and Franco 2013).

Rather than a focus on institutional, social and economic processes of resource control (Borras and Franco 2010; 2012; Hall 2011), recent studies have started to integrate sustainable livelihood approaches (SLA) in the land-grab debate (Vicol 2017). Scoones (2009) called for new priorities to re-energise livelihoods perspectives whilst Zoomers and Otsuki (2017) have called for the revision and incorporation of livelihood analyses in land investments, arguing SLA can help explain differential responses and outcomes. Included also are international development actors and civil society organisations concerned with socially responsible investments for local communities (FAO 2012). Diversity in processes of inclusion and exclusion, power dynamics and institutional processes that shape bargaining power in outgrower schemes means that smallholders can have their livelihoods squeezed, generating diverse impacts across different households. Within this perspective, efforts such as those by Zoomers (2008) examine how livelihoods cope under new scarcities and land-grabbing while others focus on the inclusiveness of LaSAIs and business models (Di-Matteo et al. 2016; Vicol 2017). Equally featuring are reflections on the interaction of actors within value-chains and local livelihoods (Challies and Murray 2011) and how investment crops shape resource access for rural households (Nhantumbo and Salomão 2010). However, how LaSAIs play out in different outgrower schemes continue to receive peripheral attention in the land-grab literature.

I have shown in Section 2.6.2 the need to connect the somewhat macro-analytical perspectives associated with the debate on the agrarian question (within land and labour dynamics) and the people-centred household-scale framework of sustainable livelihood analysis. In reformulating classic agrarian question (asking: who owns what? who does what? who gets what? and what do they do with it?) (Bernstein 2010), debates explore the nature and character of these processes and interpretations in the face of LaSAIs, asking how these processes operate. As Pritchard et al. (2017) notes, these broad macro-analytical brushstrokes conceal essential elements: [...] if the emergent dynamics of rural social differentiation and class formation are hitched to the politics of labour, how do we unpack the problem of why some households devide upward livelihood trajectories, while others remain mired in disadvantage, and/or descend into more intense poverty?" (p.44). This necessitates a departure from sustainable livelihood analyses concerned with what comprises rural livelihood assets and they matter to different households to a focus on micro-details about household's decision-making and livelihood pathways – the middle ground (Pritchard et al. 2017; Dorward et al. 2009; Dorward 2009).

Debate on issues related to the agrarian question is highly relevant to rural Zambia, where the livelihood circumstances of agricultural communities have been buffeted by dramatic changes driven partly by LaSAIs. In Zambia, the promotion of LaSAIs in national policies continues to reshape social and institutional relations and models for integrating smallholders but implications on what local people can do is poorly understood (Matenga 2017; Hall et al. 2017). Rural livelihoods such as in Mazabuka have come under pressure from LaSAIs particularly in the post-2000 with the entry of Illovo and expansion of ZaSPIC (Lay et al. 2018). Different outgrowing structures as outlined in Chapter 3 mean local livelihood responses and outcomes for outgrowers vary, and evaluating these differences is a central focus for this chapter. The ways that smallholders are incorporated in models of agriculture commercialisation determines gains and possibilities for local participants, financial or natural capital-based. In rural Zambia, the expansion in sugarcane reorganises land tenure relations in outgrower schemes which in turn shapes what smallholders engage in for their livelihoods, as alternative pathways (Chapter 5). These possibilities differ according to land access and control in outgrower schemes and institutional arrangements, which links to Dorward's middle ground approach outlined in Chapter 2. This is relevant in understanding local groups of livelihoods, their activities and exploring processes of rural differentiation (Pritchard et al. 2017).

Examining temporal trajectories of livelihoods and outcomes allows a better understanding of assets as dynamic and as part of a wider livelihood transformation in the context of household decision-making (Pritchard et al. 2017). This view is relevant because incorporation of smallholders into commercial value-chains on advantageous terms means smallholders can expand their capabilities and engage into diverse activities that facilitate local accumulation and boost resilience of livelihoods (Ellis 2000). Integration into outgrower schemes can allow smallholders to hold onto activities that maintain current livelihood levels. The opposite could mean being excluded and squeezed out, which can possibly lead to less resilient livelihoods.

This chapter focuses on how LaSAIs contribute to local patterns of livelihoods in sugarcane outgrower schemes. It explores how capabilities across alternative activities (as strategies and response pathways) are created beside sugarcane, and how new risks and vulnerabilities emerge for growers. Rural livelihoods also relate to the wider social and institutional context (e.g. trends, hazards and seasonal aspects) (Zoomers and Otsuki 2017). The chapter presents outcomes of LaSAIs and livelihoods as dependent upon structure and organisation of

outgrower schemes as well as ability to benefit from resources and enter into activities of welfare value.

6.3 Methodology

This chapter draws from key informant interviews, surveys, in-depth household interviews, focus group discussions as well as detailed observations and field notes (Table 6.1) (Appendix 4).

Table 6.1: Data collection

Multilevel interviews (national, district and industry):		<i>n</i>=25
<i>Sugarcane/Contract participants</i>		
	Kaleya (N=160)	Magobbo (N=80)
Household survey	80	70
Key informant interviews	8	8
In-depth household interviews	6	6
Focus group discussions	5	5
<i>Non-sugarcane/Contract participants (Magobbo)</i>		
Household survey	30	
Focus group discussion	1	

Various interviews considered wider implications of sugarcane expansion on resource access, control and utilisation in the wider communities. This was followed by household surveys across different participants, concentrating on asset dynamics and farming strategies. Focus group discussions were conducted across gender, age, and farmer associations, considering livelihood experiences and differentiated impacts of sugarcane expansion. Group discussions with community and association/committee leaders allowed for the identification of *poor, medium and better-off* households. The procedure for selecting 12 households through group discussions was guided by the desire to use the discussions as vehicle to purposively select a range of households exhibiting diverse livelihood circumstances. In-depth household interviews across the three categories gathered more knowledge on household decisions around livelihood strategies, land-use changes, labour and income sources. In-depth household interviews took an oral history style but within study themes, recounting livelihood decisions and opportunities (Pritchard et al. 2017). Livelihood impacts considered diversity and ability to induce a mix of agriculture and non-agriculture activities and how desirable these were in the context of household welfare. Thus, rather than a focus on statistical conclusions about LaSAIs in Zambia, the study explored dynamics in two case studies as “*critical vantage*

points” to consider the implications of sugarcane expansion on local development and livelihoods (Neves and Du Toit 2013, p.96).

Quantitative data from household questionnaires were analysed using SPSS to generate statistical summaries that can validate and confirm qualitative data. Qualitative data from different sources were sorted and coded in NVivo based on broad themes and objectives and subjected to thematic analysis (Kumar 2005; Bazeley 2007). Central to this analysis was the need to engage with local narratives and experiences in order to account for causes and consequences of the differences between the two schemes.

6.4 Results

6.4.1 Livelihood Groups and Strategies

In Mazabuka, smallholders make up much of the agrarian landscape, and inclusion in outgrower schemes is encouraged in national policies for economic and political reasons. Participants are not homogenous, and contract participation differently impacts local patterns of wealth and livelihood assets. Mean ages for smallholders were 40 years (Magobbo non-outgrowers), 57 years (Magobbo outgrowers), and 54 years (Kaleya outgrowers). Most households were male-headed, married and had agriculture as their main source of income (Table 6.2).

Table 6.2: Participants background information.

		Magobbo non-cane contract participants (n=31)	Magobbo contract participants (n=70)	Kaleya contract participants (n=80)
Marital status of head of household	<i>Single</i>	3%	9%	8%
	<i>Married</i>	81%	74%	63%
	<i>Divorced/separated</i>	3%	7%	8%
	<i>Widowed</i>	13%	10%	21%
Mean age		40	57	54
Sex head of household	<i>Male</i>	77%	76%	65%
	<i>Female</i>	23%	24%	35%
Mean household size		6	9	10

Main income sources	<i>Agriculture</i>	26%	100%	100%
	<i>Business</i>	29%	Nil	Nil
	<i>Other</i>	45%	Nil	Nil

Socio-economic categories and livelihood groups were drawn from an adapted success/wealth ranking. To construct locally relevant socio-economic categories, focus groups with community key informants and scheme leaders were asked to define wealth groups and then use what is called a proportional pilling of stones representing households to divide the population into three wealth categories, on which household interviews were conducted.

Most households cluster around poor (50%, $n=40$) or medium (38%, $n=30$) category in Magobbo and around medium (45%, $n=72$) and better-off (40%, $n=64$) in Kaleya. Group discussions and household interviews showed that ‘living well’ relates to four key elements: 1) land-ownership 2) investment activities 3) length in sugarcane production, and 4) institutional arrangements and the extent to which smallholders participate in sugarcane production. Across the cases, lack of natural capital (land) and capital for investments was identified in interviews and focus groups as being crucial in determining wellbeing. In Kaleya, smallholders emphasised inadequate investment resources. Whilst smallholders made land purchases and exploit customary land in Chief Mwanachingwala, farmers in Magobbo in contrast faced acute land challenges as explained by Chief Naluama: “*farming expansion is very difficult because we are surrounded by big commercial farms*” (D4:27.11.16).

In Magobbo, *poor* households were landless and lacked requisite resources to rent or purchase alternative productive land, while the *medium* household accessed average 0-3ha of land outside the scheme. Community data revealed sugarcane targeted prime land, displacing smallholder agriculture. In response to these enclosures, most farmers were searching for alternative production land away from the sugarcane schemes. Short-term and informal rental markets away from the scheme sometimes as far as 10 kilometres were common, permitting farmers to fluctuate between moving in and out of production.

In Kaleya, the *poor* and *medium* category acquired pieces of land but made little or no new investments and largely invested and produced on their dwelling land (0.5ha). However, land acquisitions averaged 3ha in Kaleya acquired through *relatives*, *traditional authorities* or as *outright purchases* compared to lower hectares in Magobbo often accessed through rental markets. Across the cases, the *better-off* took risks by investing in land and non-farm activities

(e.g. property development and other businesses), which requires some level of investments but these were few. This category possessed productive assets, and could diversify to accumulate, investing in alternative land for livestock and crop production, attending to prior wealth/asset acquisition (physical capital).

Across the cases, surveys revealed key drivers to sugarcane uptake among smallholders emphasised *food insecurity, lower incomes, influence from friends, family pressures, including risk strategies against floods/droughts*. In Magobbo, less emphasised as driver to sugarcane uptake was availability of land (26%, $n=18$), compared to 65% ($n=52$) in Kaleya who reported land availability.

However attractive financially sugarcane appears to be, there are hidden costs as well as risks. In both cases, survey data revealed a striking low degree of income diversification among growers with most households heavily reliant on sugarcane. Income calendars revealed a clear seasonality pattern, peaking during harvest (as plantation jobs open) and after sugarcane payments. Low and unpredictable sugarcane incomes and prices push farmers into the traditional lending system – *Kaloba* – which charged 100% interest. In Magobbo, *Kaloba* was cited for indebtedness among growers, but non-cane growers seized the opportunity as lenders: “*sugarcane farmers borrow money from me whenever my children send me cash*” (SDM9:18.01.16). While plantations offer wage opportunities, a consistent theme in group discussions with women and youths revealed difficulties in finding jobs. Unequal access to jobs on the plantations/estates among women and youths entrenched inequalities, some of which relate to the industry’s reliance on migrant labour (Chapter 5). In Kaleya, contractual arrangements enable the farmer association (KASFA) to run a sugarcane cutting contract from KaSCOL for its members/dependants, enhancing employment of labour (human capital). More widely, one district official bemoaned low labour absorption in schemes: “*outgrower schemes are creating jobs but there is still high levels of unemployment and poverty out there*” (D8:26.06.15).

Sugarcane income analysis from household questionnaires showed Kaleya growers were relatively better-off than their Magobbo counterparts (Table 6.3). However, Kaleya faces enormous service charges from KaSCOL, averaging Zambian Kwach 36,017 per season per household compared to Magobbo’s ZMK9,075 in the same period. However, poor expenditure patterns reported in group discussions force farmers (poor and medium) to explore *Kaloba*, which results in indebtedness.

Table 6.3: Estimated incomes (Extracted from household questionnaires).

Kaleya (n=77)			
	2013	2014	2015
Production (tons)	795.143	835.481	754
Farmer prices (ZMK)	106.558	109.987	124.104
Gross annual income	77,337	83,605	85,778
	Average deductions: ZMK 36,017		
Net annual income	41,320	47,588	49,761
Estimated monthly incomes	3,443	3,966	4,147
Magobbo (n=65)			
Production (tons)	Unknown but farmers own average 4.2ha in the scheme		
Farmer prices	Unknown		
Gross annual incomes	48,083	33,288	38,345
	Average deductions: ZMK9,075		
Net annual income	39,008	24,213	29,270
Estimated monthly incomes	3,250	2,018	2,439

Surveys across the case studies reveal crop production is a *very important* livelihood activity among 95% (n=76 in Kaleya) and 67% (n=47 in Magobbo) of farmers (e.g. Maize and vegetable production). Interestingly, 84% (n=67) and 90% (n=72) in Kaleya considered livestock rearing and petty trading as generally playing a less important role to their livelihoods respectively compared to 34% (n=24) and 41% (n=29) in Magobbo. District interviews reveal that land conversion to sugarcane (natural capital) induced a general shift away from livestock, highlighting incompatibilities with pre-existing livelihood strategies (physical capital). Officials explained that farmers in the region defined agriculture in terms of sugarcane production, “*challenging efforts for diversification*” (D13:16.01.16).

In Kaleya, the more socio-economically advantaged households were more likely to cultivate larger land areas, diversify crops for consumption and income generation including maize, vegetables, groundnuts, sweet potatoes, cotton, sunflower, tobacco, pumpkins, beans, cassava, and cowpeas. On the contrary the poor and medium households focused on maize, vegetables, groundnuts, sweet potatoes for consumption. Group discussions and household interviews related this to labour competition, and lack of requisite physical resources (e.g. inputs such as fertiliser, chemicals and irrigation water) at household level. In Magobbo, shifting and fragmenting land-holding due to sugarcane expansion and the lack of resources to either rent or purchase land reinforced these challenges. Land access outside the schemes in both communities showed the importance of not only independent household production and natural capital, but also highlight land constraints associated with sugarcane growing. Where possible,

this resulted in a narrow focus on subsistence production mainly around maize, pumpkins, groundnuts and vegetables.

Surveys showed household land allocation patterns before and after sugarcane uptake which revealed changing importance of crop production to current livelihoods (Figure 6.1). Across the case studies, cropping calendars revealed land allocation to crops and their importance to livelihoods generally reduced with the uptake of sugarcane (including cash crops such as cotton and sunflower), with very little diversification.

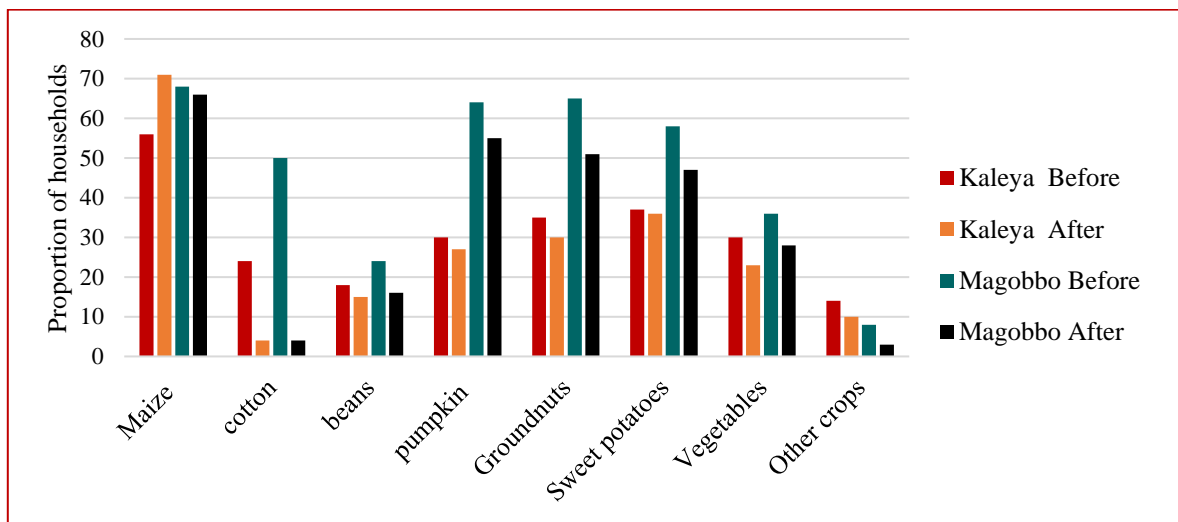


Figure 6.1: Land allocation before and after sugarcane uptake drawn from surveys.

Maize was crucial in food provisioning and was second to sugarcane in terms of land allocation. A significant drop in land allocated to cash crop cotton was recorded in Magobbo from 71% ($n=50$) to 6% ($n=4$) compared to Kaleya, from 30% ($n=24$) to 5% ($n=4$) before and after sugarcane uptake respectively. The general trend in southern province and within the period of LaSAIs is that the number of households growing cotton sharply declined from 18% in 2005 to 6% in 2007, and from 15% to 11% as a share of national production in the same period (FAOSTAT 2017). For smallholders, cropping patterns for cotton competes with maize for land and labour while sugarcane was seen to constrain both.

6.4.2 Sugarcane and Livelihood Contributions

This section addresses livelihood contributions of LaSAIs and sugarcane expansion among outgrowers. Across both cases, focus group discussions, surveys and interviews made no claims of immediate household-use of sugarcane or *direct* enhancement in physical assets. Unlike other crops such as *Jatropha curcas* with multiple household uses (e.g. boundary fence,

hedges, medicinal values, windbreaks etc, see Favretto et al. (2014), this research finds no claims of household use of material properties of sugarcane. A consistent theme among farmers however was that financial capital from sugarcane helped make improvements in other assets including access to social services and food.

Upfront physical infrastructure investment is crucial for successful sugarcane production. In case study areas, infrastructure such as bulk-water supply systems and canals as provided and maintained by intermediaries shifts bargaining power in favour of companies, excluding growers from key production processes. In practice, sugarcane related production assets (e.g. mini-dams, canals, sprayers etc.) were not directly transferable to other activities of livelihood and welfare value. This also hindered household investment in on-farm range of infrastructure, which limited household level of physical asset accumulation and opportunities for deriving livelihoods. In Magobbo, smallholders lacked access to necessary water for crop production and other uses on dwelling land, with some resorting to shallow wells or boreholes away from their dwelling lands. In Kaleya, KaSCOL supplies households with tapped water, which they can then use for home gardening but farmers face challenges of rationing. Smallholders can also use water from canals for washing and other uses but face strict rules from KaSCOL.

Kaleya generally exhibited high levels of physical asset acquisition. However, survey data highlighted divergences in assets, falling on *productive*, and peaking on *non-productive assets*. For instance, only 14% ($n=11$), and 28% ($n=22$) of the participants had cattle or alternative private water sources (combined) for production in Kaleya compared to 29% ($n=20$), and 14% ($n=10$) in Magobbo (Figure 6.2). A few better-off farmers acquired productive assets for diversification but seldom sugarcane-specific.

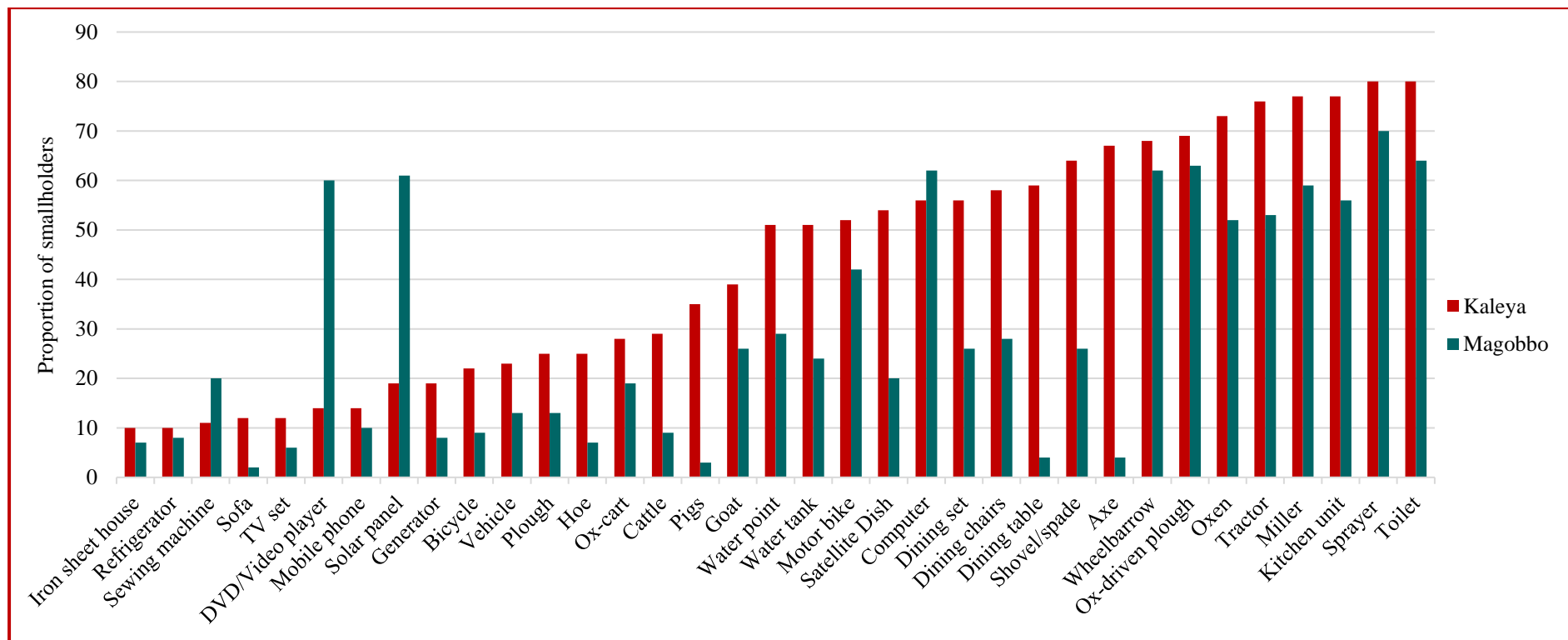


Figure 6.2: Asset profile for sugarcane cultivators (survey data).

In Magobbo, shareholding together with lack of necessary equipment limits farmer involvement in various key processes of sugarcane production, raising challenges of knowledge translation. Lack of participation in production was cited by scheme leaders as being responsible for reducing sugarcane incomes: “*we must free Nanga Farms of some works, e.g. cane cutting and haulage to enhance incomes for our members*” (SDM3:06.15). In contrast, farmer involvement in production in Kaleya enhanced incomes and crop knowledge. However, the centrality of intermediaries in smallholder outgrower schemes means capabilities and skills development among farmers remain poor (human capital). Some of this relates to low education levels and asymmetrical information flow within the scheme set-up and the industry as highlighted by events missing from farmer programs such as farmer trainings on pricing, marketing and commercial aspects (X7:15.06.15).

In Kaleya, household labour was crucial in determining productivity and so was their health and capabilities (human capital). Here, and where insufficient labour existed, the *better-off* households hired extra labour while the *poor* and *medium* households increased their working hours. However, intra-household disputes for instance around inheritance, control of the sugarcane fields and income negatively affected labour productivity. In Magobbo, shareholding permits family members to work on the plantations. However, restricting number of workers per household to only one means employment challenges persist on the plantation.

Group discussions and surveys explored community social organisations and access, and what sort of resources and opportunities were shared (social capital). Analysis revealed low levels of social organisations and networks in both communities, with smallholders lacking wider socio-economic support. One frequently mentioned association among women was a community level micro-finance organisation for savings, Own Savings for Assets and Wealth Creation (OSAWE). Group discussions revealed that regular payments (about ZMK200 per month), competing financial demands and the seasonality of sugarcane incomes discouraged women participation. Others cited governance and lack of trust in groups as discouraging participation. More widely in Magobbo, group discussions revealed a degenerating pattern in social networks as land-holding became fragmented and livelihood strategies more isolated. Community-level support systems however remain high-trust, enhancing coping strategies such as informal borrowing, borrowing food, assistance from neighbours, and friends. In Kaleya, similar patterns were observed, but clear divides were reported between ‘successors’

(new farmers that take over sugarcane plots through inheritance e.g. when original farmer dies) and ‘original farmers,’ affecting social cohesion, support and cooperation.

6.4.3 Livelihood Dynamics and Response Pathways

This section draws on group discussions and household interviews to explore livelihood dynamics and response pathways for different smallholders. Pathways were considered in terms of new investments in land, social expenditure such as those on education and health including crop and income diversification that took place without compromising household material well-being (Pritchard et al. 2017). Drawing on local definitions as summarised in Table 6.4, analysis considers the extent to which outgrower households were *hanging-in*, *stepping-up*, and *stepping-out*, using the terms introduced by Dorward et al. (2009) and discussed in section 3.2.2. Evidence shows the main driver for household decision-making mediating farmer responses to sugarcane expansion included the flexibility of *ownership*, *access* and *utilisation* of natural capital such as *land* and *water*. Although varied across seasons, timing, duration, division of labour, analysis showed that response pathways revolved around coping and adaptive strategies, predominantly food security, diversification and supplementary income as stressors.

In Kaleya, households ‘*hanging-in*’ generally made no new livelihood investments within or outside the schemes and were described as always having ‘*old model assets*’ with little market value (15%, $n=24$). They were the landless who cultivated fewer crops and worked on their dwelling land (0.5ha) (Kaleya) or relied on land rental markets or sharecropping (in Magobbo:49%, $n=39$). In Kaleya, a few that acquired extra land (averaging 3ha) lacked requisite resources for investments. Across the cases, the lack of access to financial services meant that this group of farmers exploited *Kaloba*. Poor expenditure decisions led to low education levels, health access, poor planning and food insecurity. Selling household assets, engaging in piece-works (labouring) and borrowing were common risk strategies. This group of households worked less on their sugarcane farms, experienced poor cane yields and often received warning letters from KaSCOL (SDK3:19.01.16). In Magobbo on the contrary, these mostly worked on the plantation to supplement their incomes, e.g. weeding, spraying, irrigation etc, including the new labour regime for women that engaged in precarious and poor-paying estate jobs (Table5.3).

Table 6.4: Livelihood groups and activities drawn from wealth ranking and various sources.

Kaleya			
	<i>Hanging-in</i>	<i>Stepping-up</i>	<i>Stepping-out</i>
Land holding outside schemes³	Yes	Yes	Yes
Investments	No, face investment challenges	Attempt to make investments although often falling	Make relatively larger land investments/development
Cropping patterns	Staple maize, vegetables for consumption	Maize, vegetables, sweet potatoes, groundnuts for consumption and sale (limited)	Maize and other crops for consumption alongside cash crops (cotton, sunflower)
Production dynamics	Poor farm and labour management/organisation	Good farm and labour management/organisation	'Exceptional' farm and labour management/organisation
Income sources	Sugarcane, labouring, selling household assets	Sugarcane, petty trading, remittances, crop/livestock sales, renting out property. Engage in low value non-farm activities	Sugarcane fields within Kaleya and in other schemes in the district; renting out property, hiring extra fields, salaries from professional work, strong remittances, trading and crop sales including livestock. High value non-farm activities
Employ farm labour	No, rely on family labour	Yes, during peak periods	Yes, through-out production period
% of community households	15%	Majority	10%
Magobbo			
Land holding outside schemes	No, landless	Yes (0-3ha)	Yes (3-20ha)
Investments	No, lack resources to rent alternative production land	Attempt to make investments within agriculture but always failing	Yes, beyond agriculture
Cropping patterns	Sugarcane and staple maize	Maize, groundnuts and sweet potatoes	Maize, cowpeas, groundnuts, sweet potatoes, cotton
Production dynamics	Lack requisite inputs, no livestock	Limited access to inputs. Can own 5-10 cattle, goats, pigs, chickens and other livestock	Have requisite resources for production. Can own 10-30 cattle, goats, pigs, ducks, donkeys, chickens and other livestock
Income sources	Sugarcane	Sugarcane, petty trading, crop and livestock sales at limited scale	Sugarcane, trading, crop sales, livestock sales as well as incomes from professional work
Employ farm labour	No	No	Yes.
% of community households	Majority	38%	13%

³ Precise estimates were difficult to get as land holding increasingly locates away from schemes

Households '*stepping-up*' accessed land away from the scheme but made limited investments due to lack of requisite resources (Kaleya:75%, $n=120$). They attempt to expand, diversify production and invest in complementary assets such as hammer-mills, petty trading, property and livestock *albeit* but at a limited scale. Limited diversity in crop production meant that households focused largely on subsistence (Magobbo:38%, $n=30$). Keeping debts to the minimum, these were described as having a medium level of '*modern assets*' including education and food and health access.

Households '*stepping-out*' engaged in diverse livelihood activities (e.g. property development, grocery stores, transportation) as well as acquire complementary assets (e.g. hammer-mills) (Kaleya:10%, $n=16$; Magobbo:13%, $n=10$). Land access enabled rearing of livestock (e.g. cattle, goats, poultry) including production of diverse crops for consumption and sale (e.g. tobacco and cotton). Diverse incomes sources allowed households to limit their debts. Requisite resources enabled land-based investments including drilling boreholes necessary for expanding crop production. This also included social expenditure (health and education) as well as possibilities of hiring extra labour for production. In terms of scheme/plantation opportunities, these households worked in somewhat specialised areas such as maintenance and light duties. In Kaleya, group discussions described these as '*good planners*' with '*latest household assets*' (SDK2:13.11.15).

6.4.4 Sugarcane-based Livelihoods in the Wider Context

Several factors were cited as preventing the achievement of livelihood goals (Table 6.5). A recurring theme in group discussions emphasised restrictions of what farmers could do within schemes which was largely production related and access to ecosystem services. This was widely emphasised in Magobbo where most farmers reported regrets over a lost opportunity of livestock rearing: "*I would choose another business that can give me flexibility on the land to rear animals*" (Magobbo 2016). In Kaleya, smallholders emphasised "*lack of title deeds to the sugarcane plots*" and dwelling land which they said affected the level of investments farmers made within the scheme, corroborated by the area Chief.

Table 6.5: Barriers to achieving livelihood goals (Various community data sources).

Barrier	Farmer perceptions	Kaleya	Magobbo	Illustrative Quotes
Water	Sugarcane heightens water politics, affecting crop production, and livestock	100% (n=80)	46% (n=32)	“Farmers are deprived of water and restricted on usage” (Kaleya)
Land	Sugarcane leads to loss of land, affecting diversification	50% (n=40)	90% (n=63)	“Sugarcane took away our land. Now we have to rent sometimes 9-10 kilometres away” (Magobbo)
Labour	Sugarcane is labour intensive	5% (n=4)	11% (n=8)	“Lack of family manpower contributes to low tonnages” (Kaleya)
Eco-systems services	Sugarcane affects eco-system services	70% (n=56)	76% (n=53)	“Firewood is difficult to access unless sanctioned by the company” (Magobbo)
Family disputes	Sugarcane heightens family claims to land; affects investment, production and expenditure	5% (n=4)	16% (n=11)	“It is all about waiting for somebody to die to inherit sugarcane plots...families are disintegrated” (KASCOL Officer)
Sugarcane prices	Sugarcane brings market fluctuations which is risky for household welfare	60% (n=48)	50% (n=35)	“Unlike other crops, cane prices fluctuate very much” (Magobbo)
Transparency and support	Limited farmer representation affects scheme governance, transparency and information access	5% (n=4)	86% (n=60)	“There are always unclear deductions especially fertiliser” (Kaleya farmer 2015) “No one stands for us during financial transactions” (Magobbo)

Farmers described the seasons 2013-2015 as generally poor, pointing to costs of production as it relates to weather patterns (rainfall, floods), pests and diseases and price declines. However, analysis showed how integration into sugar value-chains brought new livelihood challenges for smallholders across trends, hazards and seasonality.

a. Trends

One consistent theme in local assessment was that LaSAIs exerted pressure on land resources around schemes, and on the larger proportion of smallholder production. In surveys, most sugarcane growers reported reduced access to land (78%, $n=62$ and 70%, $n=49$) and eco-system services (51%, $n=41$; 33%, $n=23$) in Kaleya and Magobbo respectively. Meanwhile, data showed how smallholder agriculture suffered from unpredicted, variable, low and occasionally intense rainfall patterns. Disruptions to farming patterns due to climate variability increased risks of maize dependence and rain-fed agriculture which again drove sugarcane uptake among 65% ($n=52$) and 90% ($n=63$) of farmers in Kaleya and Magobbo respectively. While water shortages affected yields and increased costs of production, low and fluctuating prices eroded farmer incomes. Sugar companies and firms related trends in price fluctuations to regional

economic challenges such as access to secure regional and international markets such as the EU – which are reportedly affected being affected by competition from countries such as Brazil (SDKa:14.11.15).

b. Hazards

Sugarcane companies and smallholders revealed serious water deficits in schemes. Low and variable rainfall patterns recently experienced in Zambia led to a serious electricity shortage, inducing a growth decline of about 3% in 2015. Subsequent fuel subsidies and emergency annual electricity import bill of about \$660 million (equivalent to 3.2% GDP) sent shivers among policy makers about the risks of hydro power (IMF 2016). A resulting reliance on irrigation in schemes increased the costs of production further while entrenching water politics. One farmer representative in Kaleya confirmed: “*we have a problem of water allocation and distribution between smallholder and estate fields*” (SK1:06.16) as corroborated by one KaSCOL officer (SDK3:19.01.16). Water shortages increased susceptibility of sugarcane to pests and diseases (e.g. yellow aphids, beetles, smut), further lowering yields and incomes. A lack of expert knowledge on sugarcane compounded these challenges and increased smallholder reliance on intermediaries. This was compounded by regional volatilities of currencies so that pesticides and other chemicals including complex fertilisers/blends common to sugarcane become costly for smallholders, pushing the cost of production and eroding profitability of sugarcane (Mbulo 2015). In Magobbo, knowledge gaps among smallholders produced mistrust in the buyer-grower relationships as one representative at ZaSPlc remarked: “[*Farmers*] doubted the narrative that the decline in yields 2014/2015 season was due to yellow aphids and challenges of water” (ZaSPlc2:06.2015). In some households, this resulted in the loss of livestock, which again affected risk strategies.

c. Seasonality

Seasonal calendars show that maize and other subsistence production paralleled sugarcane cropping, the latter mixing rainfall and irrigation water. However, rainfall period induced livestock diseases that result in losses and is also peak for livestock and/or asset sales, as farmers respond to increasing food prices, food and labour shortages. For some farmers, food shortages were immediately replaced by – as a coping strategy – consumption of new crops before maturity – *green consumption* – at peak in February and March, which again affects overall harvests. In both cases, poor harvests and rushed “green consumption” widened the gap between subsistence/maize production and consumption as it relates to the next planting season.

Sugarcane requires considerable labour input throughout its cultivation cycle (Table 5.2). In Kaleya, farmers reported that only *three* months after harvest were relatively free from sugarcane related activities with others arguing that in practice it was only “*one month before land preparation begins all over again*” (Kaleya 2015). Kaleya calendars revealed labour intensity and shortages between August and February. For maize and other crops, this period is also the time for land preparation (e.g. land ploughing), sowing and weeding whilst the same period demands irrigation, weeding, smut-cane removal and slashing/clearing of irrigation canals for sugarcane. Labour shortages limited the capacity to cultivate larger farmlands and diversify livelihood activities. However, household interviews showed that the social-economically advantaged households were more likely to hire extra labour, thereby cultivating large farmlands. Low incomes, labour shortages as well as tight management requirements for sugarcane compel poor and to some extent medium households to spend more time and labour on sugarcane in comparison to better-off households, producing narrow farming and livelihood strategies.

The seasonality of sugarcane, which coincides with subsistence production, produced crucial trade-offs for the poor and medium households such as finding waged employment whilst maintaining subsistence production. Across the cases, seasonality exacerbated labour shortages while waged employment suffered low wages alongside high variability in food prices. Once again, this entrenched sugarcane dependence and poor coping mechanisms. To one farmer, “*it is the same life and same problems being encountered*” each year (Magobbo 2015).

6.5 Discussion: Outgrowers and Livelihood Dynamics

This chapter has sought to demonstrate how LaSAIs and outgrower arrangements impact local livelihoods in differently structured outgrower schemes in rural Zambia. Insights presented point to the centrality of causes and consequences of differences in the evolution, operation, and integration of outgrower schemes in unfolding social and agrarian relations and livelihood outcomes. This study shows outgrowers that link smallholder production to other livelihood options are effective in employing labour and promoting diversified and sustainable livelihoods, but quality of employment remains low. Dynamics in livelihood groups and strategies, livelihood contributions of LaSAIs and sugarcane uptake, and livelihood response pathways emerging across the case studies point to narrow farming and livelihood strategies around sugarcane as opposed to diverse and broad-based livelihoods that boost resilience. Livelihood diversification efforts away from sugarcane but within agriculture shows that

smallholders will not always switch to alternative high-paying strategies. For significant path-changing gains for poor households, research must delve into the way local resources have been controlled and accessed in outgrower arrangements and how local conditions shape investment outcomes.

Land remains an important determinant for rural social differentiation and launchpad for upward mobility, but with labour dynamics emerging as equally important. While the evidence of increased incomes brings optimism around outgrower arrangements (Barrett et al. 2012), evidence shows a focus on financial capital challenges wider assertions about delivery of livelihoods. Thus, there are clear ‘losers and winners’ among different farmer groups and between schemes, with diverse hierarchies of gains that exclude the poorest households. This is as much the result of processes associated with the structure and organisation of outgrower schemes as is the way in which contract farming insinuates itself into local livelihood landscapes (Vicol 2017, p.164). Different institutional arrangements spread gains unevenly, accompanied by restrictive spread of benefits to local participants (White 1997). This is evident in income calculations, deductions and sucrose-based payments. Differences in the outgrowing models means local collective actions and farmer collaborations between schemes and around production and bargaining processes remain limited (Rutten et al. 2017). Infrastructure, productivity, knowledge spill overs and transfer from agribusinesses to smallholders thus remain limited (Kleemann and Thiete 2015). This is more striking in shareholding variant of outgrowing than where an integrated company which allows shareholding, production and alternative pathways for local accumulation.

Households linked to other livelihood assets such as land and water resources beyond the schemes generally registered improved livelihoods. However, diversification away from the schemes but within agriculture across the schemes can be interpreted as a strategy to deflect the overtures of corporate agriculture and processes related to outgrowing models. The materiality of sugarcane means smallholders face poor labour organisation and crucial trade-offs which limit sugarcane production and challenges crop production. This in part is because household labour cannot easily be shifted (Hall et al. 2017). With reference to sugarcane, smallholders cannot restrict production to a proportion of their land and allocate the rest to other crops as is the case with for instance raspberries (Challies and Murray 2011), making access to alternative production resources crucial. Sugarcane monocropping which restricts crop and livestock production within its proximity adds to local adaptation challenges. These

fears confirm inconsistencies in the views that present LaSAIs pre-eminently as development force (Borras and Franco 2012). Meanwhile household adjustments between and among different livelihood capitals remain problematic. Contrasting experiences in *Jatropha* (Achten et al. 2010), sugarcane as capital intensive crop makes it even more difficult for smallholders to limit initial investments and control start-up risks. The resulting centralised processing set-ups render production not only large-scale but also limit pathways for gains among smallholders particularly in shareholding variant (Dubb et al. 2015). The question of gender is crucial in these arrangements. Whilst gender norms shape patterns of work activities among household members, women are now breaking away particularly in Magobbo to seek financial independence on plantations.

Across the cases, low sugarcane returns, restricted access to natural capital around plantations and inadequate institutional support increasingly pushes farmers away from sugarcane schemes and lose their position as farmers (Dubb 2015). Whether land is owned by intermediaries or held under rental arrangements, tight control by firms means systematic alienation of farmers from downstream value creation/capture (Vicol 2017). Whilst attempts exist to produce smallholder efficiencies (e.g. Magobbo), evidence shows there are clear new configurations of market power and control in production spaces (Cohen 2013). Through diverse patterns of land control, evidence confirms clear processes of capital accumulation by firms which is inconsistent with inclusive development outcomes (Anseeuw et al. 2012).

Processes of agrarian differentiation as they relate to income sources and resilience become apparent as better-off households respond to opportunities away from sugarcane schemes. Livelihood strategies and pathways are thus both constitutive features and a consequence of pre-existing inequalities that interlinks with land-based relations and agrarian dynamics – a spring-board for upward social mobility (Neves and Du Toit 2013; Pritchard et al. 2017). Across the case studies, growers need access to land as a platform for *hanging-in*, *stepping-up* and *stepping-out*, particularly that households rarely exit agriculture. Previous studies talk about how smallholders affected by LaSAIs switch to wage employment on the investment farm or choose options that offer the higher pay-off (Dessy et al. 2012). This research shows otherwise. Farmers prioritise flexibility of own land ownership and cultivation, with land being the basis for building food production and security (*hanging-in*), engaging in other income generating activities such as livestock rearing (*stepping-up*) whose value feeds into other livelihood activities (*stepping-out*). Decisions about investments and pathways are more

complex, with the socio-economic and natural environment playing a crucial role in unfolding livelihoods (Hall et al. 2017). Thus, livelihood strategies do not always facilitate accumulation of capital or upward social mobility of households. Rather, strategies reflect to a larger extent household circumstances, some of which might be distress.

Overall, local livelihoods and pathways speak to consequences of sugarcane expansion and resulting models of commercialisation that determine resource control on the one hand as well as shape livelihood strategies and responses on the other. Here, mechanisms for ownership, securing and strengthening land rights are crucial as insecurity of tenure is not always about land titles. Any successful livelihood outcomes would demand that promoters and policy actors consider not only the dynamics at the production space (e.g. natural capital) but also the institutional structures and local conditions that mediate farmer integration and their role on emerging livelihoods (Hall et al. 2017a).

6.6 Conclusion

There is no one way to interpret livelihood processes and impacts associated with LaSAIs. However, livelihood processes depend on how land has been integrated into sugar value-chains as well as institutional and power dynamics shaping its availability, access and use. A central question surrounding models of agricultural commercialisation is how different outgrower schemes deliver what is expected of them and what this means for rural social differentiation. In recent years, the growth of LaSAIs in Zambia ignited debates about outgrower schemes, and their role in shaping rural livelihoods. While introducing diverse production systems, LaSAI control of land and water resources and influence on commercial aspects increasingly disconnects smallholders from agriculture and local resources, entrenching unequal rural livelihood landscapes. For sugarcane, and where access to land and water within and outside schemes exist, positive outcomes for livelihoods can be realised, as shown in Kaleya. Participation in production enables higher incomes, and improved employment of labour which can be combined with other assets/options for building livelihoods. In contrast, in the Magobbo case, incorporation of smallholders as shareholders and creation of a block-farm allows smallholders to receive dividends, but farmers cannot influence efficiency and profitability of operations. Employment effects between the two cases were different, with Magobbo labour regimes exhibiting uneven integration across women and youths compared to their male counterparts. One outcome has been a lack of sufficient flexibility to combine labour, farming and other livelihood options. Relationships around local resources have not only been

exclusionary for smallholders but also entangling, challenging pro-poor narratives that often accompany value-chain expansion (Chapter 5) (Vicol 2017). However, it is difficult to tell whether a process of deagrarianisation is taking place within households or not.

Dynamics in livelihood groups and strategies, livelihood contributions of LaSAIs and sugarcane uptake, and livelihood response pathways reflect causes and consequences of differences in the evolution, operation, and integration of outgrower schemes. Farmers carry both risks and benefits associated with sugar value-chains, but emerging contractual arrangements mean that wider “win-win” narratives associated with outgrowers remain inconsistent. This study confirms sugarcane has not produced significant path-changing gains for poor farmers (Vicol 2017). Instead, it underscores the view that there exist diverse ways and processes to land control which do not necessarily involve expulsion of smallholders (Peluso and Lund 2011). Adequate smallholder access to land and water resources at production space as well as within the value-chain is needed for LaSAIs to adequately transform grower livelihoods in unfolding outgrower schemes.

Outgrower designs require striking a balance between resources that feed into commodity production and those that build subsistence and boost resilience. Beyond the specificities of the commodity sugar, and the models covered, findings engage in ongoing debates about the social relations of agrarian change in Africa. Understanding local specificities of evolution, operation and integration of outgrower schemes is a vital step towards creating nuanced and sustainable policy frameworks for rural development. The following chapter considers national policy and institutional dynamics, industry patterns of inclusion and exclusion, and livelihood impacts within the wider context of industry politics and agribusiness power and influence in national, regional and local domains.

Chapter 7 Business ‘Power of Presence:’ Foreign Capital, Industry Practices and Politics of Sustainable Development in Zambian Agriculture

7.1 Introduction

The final empirical chapter takes up the thread of discussion of trends and patterns of LaSAIs discussed in Chapter 4; dynamics of inclusion and exclusion encountered in Chapter 5; and livelihood and response pathways presented in Chapter 6 with an aim of understanding agribusiness power and influence as well as institutions governing these processes. These are not disjointed processes, rather they relate to the policy and industry practices – and in particular the power and influence of the dominant agribusiness. Although the focus of this chapter is on a specific agribusiness, the chapter begins to show the way in which industries are structured and organised and how power and influence are implicated. Using perceptions about the way power is deployed in different domains – what I refer to as ‘power of presence,’ – an agribusiness manoeuvres at national, regional and local levels are analysed. In particular, the chapter analyses national, regional and local level domains around the sugar industry and how they enable an agribusiness to exert control and influence industry governance. Local level analyses focuses on how an agribusiness shapes land and labour relations and what this means for wider development and sustainability of livelihoods.

Throughout this chapter it is argued that investment and trade policies currently foster agribusinesses but neglect environmental assessments that expose social and ecological contradictions such as on competing water uses. State-donor relations enable smallholder integration in sugarcane as poverty reduction whilst agribusinesses are limiting their participation through controls on resources and production systems. Meanwhile through different power expressions, possibilities of sustainable agriculture and rural development are undermined by agribusiness practices. The chapter highlights the limits and importance of domestic institutions in

framing LaSAIs as well as mediating corporate practices that will be required to provide a greater focus on national planning processes for rural development.

Whilst neoliberal policy developments over the past decades have been a source of power for different actors, agribusinesses linked to outgrower schemes have somewhat been distanced from problematic ramifications of LaSAIs (Elgert 2016; Bloomfield 2012). Global governance institutions such as the World Trade Organisation explicitly emphasise agribusiness expansion, market access and increased global exports in developing countries such as those in sub-Saharan Africa (Spann 2017; Weber 2014). However, despite widespread acceptance of the deepening role of corporations in agriculture, the sort of power and influence exerted by agribusinesses in national settings and their implications on sustainable development remain poorly understood. Attempts to address sustainability concerns in LaSAIs have failed to examine and question how agribusinesses with outgrower schemes exert their power to influence industry governance, social and ecological relations (Spann 2017; Amanor 2012). Understanding claims to agriculture for development as enshrined in Sustainable Development Goals (SDGs) thus requires understanding how policy developments in poor countries enable agribusiness power to shape governance dynamics. In what follows I discuss ‘power of presence’ and what this means for an industry analysis.

7.2 Agribusiness ‘Power of Presence’

This chapter is conceptually grounded in the notion of *‘power of presence’*, which refers to how an agribusiness uses its existence at a jurisdictional scale to influence policy developments and industry practices at national, regional and local levels. Jurisdictional scale relates to bounded and organized political units, e.g., districts, provinces/regions, and nations, with linkages between them created by constitutional and statutory means (Cash et al. 2006). Power is the ability of one actor to prevail over others in achieving desired goals (Lukes 2005). Influence is the process of affecting the thoughts, behaviour and feelings of another, but the actual capacity to influence depends on power (Lefebvre 1991). Agribusinesses organise in national contexts, and deploy their existence, power, knowledge and influence to shape governance and regulation at different levels. In this chapter, I explore the extent to which an agribusiness can influence policies or align its efforts to a national agenda at one level, and shape regional and local governance dynamics at another level within the jurisdictional scale which reflects their presence.

The way in which ‘power of presence’ is applied is non-linear as there can be changes in political and economic processes and environments. For instance, local and regional expressions of power are interrelated, and link to the national context. National policy actors relate differently to agribusiness production, industry governance and agenda setting. Regional actors include district administrators implementing development plans. Local actors include smallholders as growers and their communities. It is important to recognise that actors at different levels have widely different interests, perspectives and resources that means that understanding the context is vital (see Cornwall 2002). Gaventa (2006) and colleagues, including Cornwall, have adapted Lukes’s seminal framework on power consider a development context. This isolates three forms of power. Instrumental power considers overt, measurable, and observable expressions of direct influence (for instance through force, financial, social resources). Structural power refers to the wider socioeconomic and political context within which political agendas are shaped and decision-making and actions are embedded. Discursive power considers how actors shape socio norms, values, and identities, and how these favour dominant interests (Lukes 2005). Gaventa (2006) adds an insightful angle to these forms of power. That is, ‘Lukes’ three forms of power must also be understood in relation to how spaces for engagement are created, and the levels of power (from local to global), in which they occur’ (p.25).

Using Lukes’ three-way split, Gaventa (2006) uses the simpler language of visible, invisible and hidden power and then relates them to (Gaventa 2006). These effectively describe the different ways in which one actor may exert power over another. However, there are other forms of power that may be seen more positively, about ‘power to’. This is effectively captured in the work of Rowlands (1995, 1997) who talks about the power that might be in collaboration when groups of actors work together. This form of power, ‘power with’ tends to be less of a zero-sum game’ – “an increase in one person’s power does not necessarily diminish that of another” (Rowlands 1995, p.102) – which may lead to beneficial outcomes for the actors working collaboratively (even if others may be affected differently).

In this chapter I apply both ‘power over’ and ‘power with’ (Rowlands 1997; 1995; Veneklasen and Miller 2007). I expand on power as domination and zero-sum (power over) and formulations of power considered collaborative and non-zero-sum (power with) (Rowlands 1997; 1995) to expand on Gaventa’s visible, hidden and invisible formulation of power (Gaventa 2006). The value of

Gaventa's framework also lies in how considers how power is exercised at different levels and in different spaces/domains Power analysis thus invokes narratives of scale – as “spatial, temporal quantitative or analytical dimensions used to measure and study any phenomenon – and levels – as units of analysis that are located at different positions on a scale” (Cash et al. 2006, p.8).

This chapter maps out three domains at local and regional levels and five domains at national level to demonstrate how agribusiness power and influence takes place at different levels, which relates to the guiding laws, regulations and operating rules around the sugar industry (Cash et al. 2006). Domains are opportunities/channels where an agribusiness can act to potentially affect policies, discourses, decisions and relationships that affect its interest. Domain boundaries are shaped by power relations, defining “what is possible within them, and who may enter, with what identity, discourse and interests” (Gaventa 2006, p.26). Domains are illustrative, selected to show different kinds of power, observed or perceived; the former inclined towards local-level dynamics while the latter leans towards national-level policy practices. Domains are *closed* when firms make decisions without broader consultation and involvement; *invited* when agribusinesses invite actors to participate; and *claimed/created (organic)* when the less powerful actors make sufficient pressure and claims on the powerful (Cornwall 2002; Gaventa 2006).

In Zambia's sugar sub-sector, competition for industry leadership and hegemony is visible, which, with supportive laws and regulations, creates barriers to entry (Kalinda and Chisanga 2014). Regional and local level domains show a powerful agribusiness can exercise *power over* for instance through shaping actions and thought processes of less powerful actors. This also relates to agribusiness practices in regional development linkages and practices (embeddedness and participation in regional/local development plans); land tenure relations; and labour regimes (dynamics on employment) in outgrower schemes (visible power). However, agribusinesses can also influence socio-political and economic agendas (hidden power), shaping meaning and what is acceptable about an industry, production or marketing (invisible power) (Gaventa 2006).

7.3 Methodology

Data collection was shaped by a framework which utilises perception as evidence, assessing views and perceptions of an agribusiness power and influence in various domains. Perceptions provide insights into agribusiness legitimacy and acceptability of their actions, how and why they act the

way they do and implications for their actions. Perceptions also highlight how stakeholders experience an agribusiness with outgrower schemes (Bennett 2016).

This chapter draws from multi-level key informant interviews, in-depth household interviews, focus group discussions including detailed observations and field notes (Chapter 3) (Appendix 5). Multi-level interviews were conducted with state, donor and NGO actors, private sugar consultants, firms and companies, academics and research think-tanks to understand structure and organisation of the sub-sector, trends and dynamics as well as diverse perspectives around the sugar industry ($n=13$). Interviews also considered stakeholder views of agribusiness power and influence in the sugar industry and in agriculture in general. These were complemented by policy analysis to identify drivers of sugarcane expansion and key actors and narratives. Policy analysis helped in exploring how an agribusiness shapes industry direction. The chapter also draws from district interviews ($n=12$) illuminated how agribusiness practices impacts local and wider development prospects, paying attention to influence and power dynamics at play. These also considered district-agribusiness relationship and what this means for prospects for sustainable rural development. Meanwhile a diverse group of participants at sub-district level were included to generate a cross section views and perspectives on agribusiness conduct and practices. Perspectives were generated from a mixture of contract and non-contract farmers to generate robust perspectives on the practices of an agribusiness (Table 7.1).

Table 7.1: Summary data sources

Multilevel interviews (national, district and industry): $n=25$			
<i>Sugarcane/Contract participants</i>			
	Kaleya	Magobbo	Manyonyo
Key informant interviews	8	8	1
In-depth household interviews	6	6	Nil
Focus group discussions	5	5	1
<i>Non-sugarcane/Contract participants (Magobbo)</i>			
Focus group discussion	Nil	1	Nil
Wider community interviews	3	3	3

Household interviews were conducted across better-off, medium, and poor category households. Interviews took an oral history style but within study objectives, focusing on smallholder experiences and drivers of change. Focus group discussions were also conducted across gender, age, and farmer associations concentrating on smallholder experiences, agribusiness practices,

local processes and implications for industry participation and sustainable rural development. In terms of analysis, broad themes were developed from qualitative data manually and using software NVivo and subjected to thematic analysis linked to research objectives (Kumar 2005; Bazeley 2007). Policy analysis with an inductive approach enabled us to link policy elements to practice (Cole 1998) which was important in exploring agribusiness influence.

Analysis considered broad themes developed from qualitative data using software NVivo. These were then subjected to thematic analysis and linked to research objectives (Kumar 2005; Bazeley 2007). An open coding scheme was adopted in analysis of policy documents. Coded fragments of the documents were then linked to the themes in the research objectives. Concepts from the policy documents were labelled and defined into specific categories and dimensions for comparisons with agribusiness power domains. Policy analysis with an inductive approach enabled us to link policy elements to practice, which was important in exploring agribusiness influence (Cole 1988).

7.4 Results

Intra-domain analyses show how an agribusiness combines different forms of power to shape policy, regional and local dynamics. Analysis of interview data shows *hidden/structural power* expression as *power with* is key in national domains, whilst visible/instrumental expressions are crucial in local/regional domains (as power over). This was reflective of state-donor collaborations as well as corporate financial and economic power.

7.4.1 Regional and local-level analyses: agribusinesses, rural and economic development

This section focuses on regional and local domains within which agribusiness power and influence is perceived. These were selected based on their ability to show visible/structural, hidden/structural, and invisible/discursive expressions of power in relation to *power over* and *power with* respectively. My analysis with respect to the forms of power being exercised in these domains is summarised in Table 7.2. To demonstrate agribusiness *power over* and *power with* as they relate to *visible* and *invisible* power expressions, regional and local analyses identified practices of an agribusiness in three domains: 1) wider development linkages, 2) land tenure relations, and 3) labour dynamics. I focus on these in the following sections.

a. Agribusinesses in Wider Development Linkages

Agribusinesses have in the wider development linkages expressed *power with* and *power over* which also relates to *visible power* (Table 7.2). Agribusinesses have been promoted for regional and local development in Zambia. A senior political representative believes “*Mazabuka is privileged to host the biggest agribusiness in the region*” (D5:26.06.15), which has been accompanied by business opportunities in banking, construction, hospitality and fast-foods industries. Related investments in social and economic infrastructure such as energy, irrigation, health and education arguably “*enhance the socio-economic status of the district*” and contributed to poverty reduction (D6:26.06.2015). However, most public officers were critical, arguing ZaSPIC has changed the patterns of development in the district/region.

Interviews revealed a lack of cooperation and engagement between ZaSPIC and the district such as in development planning, infrastructure and social-service delivery. One example was the Spatial Development Framework for the Mazabuka Urban Integrated Development Plan (IDP) which, driven by the theme *Building Mazabuka Together*, was designed to guide present and future developments in the district. One officer in the Planning Department reported ZaSPIC was “*a key stakeholder in the development of the IDP but became disinterested during implementation*” (D12:16.01.16). Instead, the company was perceived to exert *power over* by generating its own development plans mostly within the estate, which to one respondent in the Planning Department, “*were incompatible with district sustainable development plans*” (D12:16.01.16). Planning Officers accused ZaSPIC of “*illegality in land development and planning within estates*” (D8:16.01.16) but blamed this on the agribusiness’ *power with* in national political and economic connections seen as limiting and undermining local regulations (*visible power*).

Table 7.2: Power of presence domains and expressions (Colour codes show emphasised elements: Black=*invisible power*; Blue=*visible power*; Gray=*hidden power*).

Level	Domain	<i>Power with</i>	<i>Power over</i>
	Land tenure relations	Black	Blue
	Labour dynamics	Black	Blue
	Wider development linkages	Blue	Blue
National level	Zambia National Sugar Adaptation Strategy	Blue	Gray
	Vitamin A Fortification of Sugar	Blue	Gray
	Sugar price formation and transmission	Gray	Gray

District interviews showed sugarcane expansion changed the demographic dynamics of Mazabuka. The largest migrant group in the formal agricultural sector in Zambia are cane cutters from other provinces (SDMa:12.06.16). This transitory workforce predominantly male was cited by the Planning Department as straining public infrastructure, housing and health services. The argument was that, “*seasonal workers stopped returning to their villages,*” and “*are acquiring and developing illegal pieces of land*” which contributed to unplanned settlements (D12.16.01.16). A consistent theme across district interviewees was that social service and infrastructure provisioning was less prominent in ZaSPlc’s social activities. Here, *power over* enables ZaSPlc to restrict education, housing, and health services to their estates and direct employees despite calls to extend services to wider areas (ActionAid 2011). This also highlights an agribusiness structural power within a particular territory and domain.

District officials expressed opinions the presence of an agribusiness undermined revenue generation in the local authority (*power over*). Municipal Council officers bemoaned lack of valuable service contracts such as those around warehousing, distribution and haulage as conduits for securing economic benefits but instead perceived a “*strong foreign business involvement*” (D7:12.15). For instance, most warehousing and distribution, and cane haulage are reportedly conducted by Barlow World Logistics and Rolling Thunder respectively (Richardson 2010). Thus, many district officers believed ZaSPlc gave a false reputation about the district: “*that we receive a lot of money from the corporation*” (D8:26.06.2015).

Others believed it was almost impossible for the local authority to explore revenue generating streams linked to the agribusiness because of continuous state intervention in local decisions such as around taxation. Respondents reported how state officials enter investment sites to make policy pronouncements and express their support for ZaSPlc. Respondents constantly referred to government decision to abolish crop-levy (2009), which cost the local authority an estimated \$400,000 annual cane levy from ZaSPlc (Richardson 2010, p.929). According to the area Member of Parliament, this has led to serious “*erosion of financial capacity in the local authority*” (D2:11.06.16). The decision to scrap crop-levy is generally perceived to illustrate ZaSPlc’s

influence in national politics (*power over/visible power*), but also highlights governance gaps at local level. That the directive to scrap crop levy came when the then President Rupiah Banda officiated at the company's launch of Nakambala sugar estate in 2009 confirms perceived *power with*:

"I wish to assure South African investors...that their investment in Zambia is secure, safeguarded by the progressive politics and robust legal framework put in place by my government" (Chishimba and Mulenga 2009, cited in Richardson 2010, p.928).

Clearly, state manoeuvres to align public interest to an agribusiness allows ZaSPlc's *visible* power to influence government actions. One political representative reflected that this meant that agribusiness had many ways of achieving its objectives even at the expense of local capacity. Consequently, most district officers felt disempowered by state-business relations seen as undermining local authority not only on taxation but also on ability to intervene in estates/schemes such as on environmental regulation. This highlights ZaSPlc's perceived influence as well as government's 'neoliberal light touch' approach to the sector, which allows policies to oscillate between imposing taxes and removing it, and between strict socio-economic and environmental rules to relaxing them.

b. Land Tenure Relations

Land tenure relations highlighted agribusiness *power to* and *power over* in local domains including engagement with smallholders, which also relates to *invisible power* (Table 7.2). Revenue Authority records reveal that 93% ($n=38$) of commercial entities producing sugarcane were based in Mazabuka, connecting to ZaSPlc. One outcome has been conversion of vast customary land from subsistence agriculture (maize, livestock) to commercial sugarcane under diverse land ownership and production arrangements (Chapter 6). Consequently, "90% of land in Mazabuka falls under commercial farming" according to one agricultural officer (D13:16.01.16) and is "possibly titled" (D2:11.06.16). Despite some political countermovement such as in the previous regime of Levy Mwanawasa that reportedly stopped ZaSPlc expansion through direct land acquisitions in the district,⁴ calling for enhanced local participation as outgrowers (D15:23.06.15), ZaSPlc recently incorporated 10,500ha sugarcane fields (2007) alongside a \$200 million factory

⁴ The launch of the first ever Citizen Economic Empowerment Initiative in 2008 stems from a wide perceived failure of Zambians to benefit from foreign investments (see also Richardson 2010).

expansion in 2009. International finance in outgrower initiatives such as the EU's Accompanying Measures for Sugar Protocol countries also played a crucial a role in sugarcane expansion in Mazabuka, enabling agribusiness *invisible power/power with*.

However, that land belongs to farmers in *Manyonyo*, leased out in *Magobbo* and under a management company in *Kaleya* reflects diverse ways in which an agribusiness shapes production and controls land (Table 3.3). Corporate take-over of the Manyonyo scheme in 2012 for instance is symptomatic of the agribusiness power and influence in the district. I focus on this scheme to demonstrate how financial power enables *power over* as well as how political connections help an agribusiness to consolidates land and shape production dynamics (*power with*).

The idea of Manyonyo project started in 2000: with direct involvement of the Ministry of Agriculture's Smallholder Irrigation Project Unit. With the support of the Finnish government and the African Development Bank, scheme designs, layouts, and construction started in 2009. Manyonyo was originally '*open on choice of crops*' such as maize, bananas, horticultural crops, but excluding sugarcane as confirmed by donor and state actors.

Officers in the MoA reveal that "*ZaSPlc claimed the project fell in its expansion radius*" (50km east of the Nakambala mill) and suggested "*modification to the scheme design and layout*" (Z1:29.06.15). According to officials in the MoA, the government agreed to convert the scheme to sugarcane under an off-take agreement (*invisible/structural power*) but leveraging smallholders in production decision-making. Donors as well as officers in the MoA reveal that on linking the scheme to a commercial bank for possible financing of Manyonyo operations⁵, ZaSPlc changed its position arguing that "*the bank processes were delaying the project.*" Discussions with ZaSPlc representatives corroborate: "*the bank gave uncomfortable clauses such as on disbursement of funds*" and upon reviewing them, "*we thought these clauses could chain smallholders*" (ZaSPlc2:06.15), illustrative of ZaSPlc's visible power/power over. Group discussion with Manyonyo scheme representatives revealed how ZaSPlc undercut the bank's funding of ZMK13.5 million (595ha) and the revised ZMK3.5 million (250ha) at 20% interest rate to offer ZMK1.5 million (126ha) at 14% loan through its brainchild Mazabuka Cane Growers Trust (MCGT) in

⁵ There was a conditionality that donor resources could not be used on operational expenses (K1.18.06.15).

2014 (X3:27.06.15). These perspectives also play out among farmers in Manyonyo: “*if not for ZaSPlc, no single cane would have been grown in this project*” (X3:27.06.15). I return to this positive view of ZaSPlc later but suffice to say that this reflects the wider *discursive/invisible power* – of public image and reputation that ZaSPlc wants to entrench in political and economic circles as being smallholder driven which was then highlighted by the establishment of the Smallholder Development office within the company in 2014. ZaSPlc prided itself that whilst the idea of Manyonyo project started in 2002, it was within 2 years of its involvement that the project became operationalised/implemented. Crucially, ZaSPlc can bring ideas that state agencies are able to implement without exercising any overt force.

Meanwhile ZaSPlc *power over* through financial and market power was perceived across all schemes (*visible power*). In Kaleya, the MCGT financed 6.2% smallholder equity stake in KaSCOL giving farmers a total of 19.5%. Analysis shows the real value of this financing lies less in being pro-smallholders than in shaping decision-making at KaSCOL in favour of MCGT and thus ZaSPlc which at that time already held 25% stake in the intermediary. Elsewhere in Magobbo, MCGT funded and facilitated farmer relocations as well as 20% initial development costs which, according to one representative at MCGT “*are incomparable to bank lending rates*” (ZaSPlc3:06.15). There was a perception among district actors that these sorts of support acted to extend ZaSPlc’s power and influence. For instance, this way ZaSPlc was perceived to deflect wider ‘land grabbing’ narratives despite exerting central management of production that are characteristic of plantations that ensures corporate land consolidation (*invisible power*) (Hall et al. 2017; Matenga 2017).

This relates to Illovo and the public face of smallholder sugar sourcing in southern Africa. For instance, Oxfam’s ‘Behind the Brands Campaign’ witnessed commitments from global corporations such as PepsiCo and Coca-cola to ‘zero tolerance’ for land grabs in their sugar sourcing (Oxfam 2013). Suppliers such as Illovo Sugar have made similar commitments with respects to smallholders and land rights. Illovo published its own guidelines on land and land rights with reference to sustainable farming practices and land acquisition within its supply chain. ‘Illovo prioritises alternative model investments, such as the development of smallholder grower farming operations in areas in which we operate, rather than acquiring their land for our own development’ it says (Illovo 2016). Illovo is now considered a ‘champion’ on ‘just sugar sourcing’ (Oxfam 2016). In response to land-grabbing concerns such as from advocacy groups, a quote from the ZaSPlc

representative is illustrative of *power within*: “*here we don’t have land-grabs. We actually look for land to benefit local people*” (ZaSPIC2:16.06.15). Whilst there is no technical ‘land-grabs’ in Mazabuka, Illovo manages to control vast swathes of land, and through employing different management systems limit the uptake and participation, choice and opportunities for farmers (*power over*).

c. Labour Dynamics

Labour dynamics enabled analyses of agribusiness *power over* in local level labour regimes that relates to *visible* and *invisible* power. Analysis shows how an agribusiness exerts its economic power and through using its image and reputation as larger employer to shape as well as undermine labour regimes (visible power). A widely held public image about ZaSPIC in Zambia is that the number of people employed by ZaSPIC provided not only a good example of how an agribusiness should interface with local economies but also represented the biggest contribution to the national economy. Frequently quoted figures show that the sugar industry engages over 11,000 people directly and 75,000 indirectly, most of which are associated with ZaSPIC (Palerm et al. 2010, p1) (Figure 7.1). The importance of job creation cannot be undermined politically, as the government is clear: “*we don’t want to shake these companies providing employment*” (Z1:09.12.15). Some NGOs believe that this narrative raised challenges for agribusiness regulation whilst others expressed opinions that policy positions on rural employment and the need to garner political support from an opposition dominated southern region offers opportunities for ZaSPIC to exert further influence (G3:14.06.15) (*invisible power*).

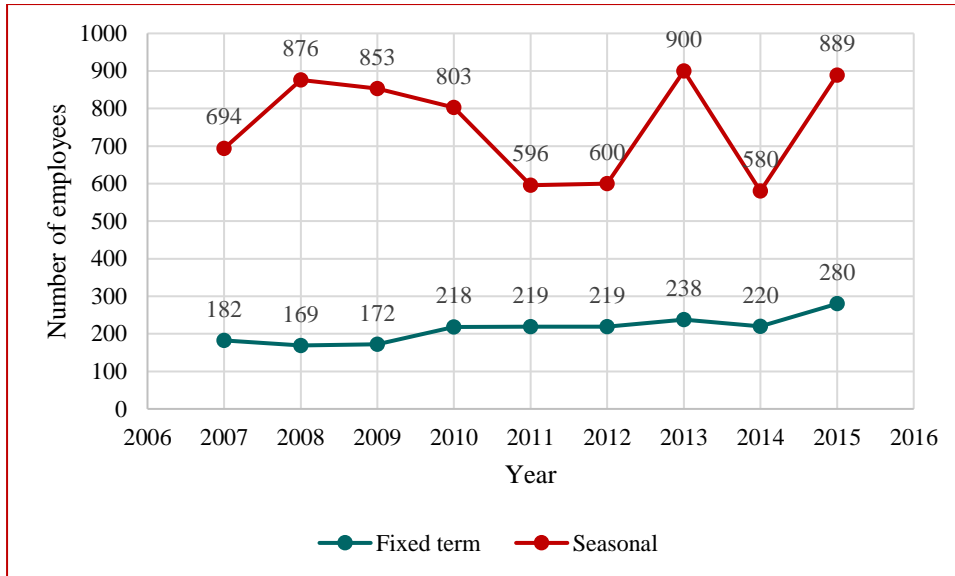


Figure 7.1: Fixed-term and seasonal employment trends in Nanga Farms

Tight control over production systems permits ZaSPlc to influence diverse labour regimes in sugarcane. Financial and economic dominance in production enables ZaSPlc to deploy skilled expatriate staff whilst exploiting unskilled labour and limiting smallholder uptake in schemes, as corroborated by Richardson (2010). This dualism means that despite the much publicised job creation, labour intensity in sugarcane is low. One donor representative at the ADB illustrated that “\$16 million spent on 165 farmers in Manyonyo could informally engage around 200,000 farmers in the cotton sector” (K2:18.06.15). However, according to one independent consultant, ZaSPlc has always argued that “what they don’t meet through direct formal engagement of smallholders is off-set through massive recruitment of workers” (P2:15.06.15). At issue, however, is that many of these sugarcane related jobs are seasonal (Figure 3), depressing gross disbursement of wages more so in outgrower systems where wages were reduced by a factor of three, when compared to ZaSPlc’s own plantations. However, it is clear labour regimes play an important role in asserting an agribusiness regional and national influence.

7.5 National level analysis: policy practices and business influence

This section focuses on key national-level policies shaping the sugar industry, and how these processes have been framed in a way that deepens the power and influence of an agribusiness. My analysis isolates *five domains* where policies and practices in sugarcane expansion play out to

enhance different sorts of agribusiness power. However, domains express *power with* and *power over* which with varying intensity are also linked to *hidden, visible* and *invisible power*.

First is ZaSPlc perceived policy influence around vitamin A fortification of sugar (VitAF). All domestic or imported sugar for direct consumption in Zambia require mandatory fortification with vitamin A. Interestingly, Vit.AF has been coordinated by the Food and Nutrition Commission (NFNC) under the Ministry of Health. Frequently quoted figures cite Vitamin A deficiencies (xerophthalmia) of over 65% and 53% among children and women respectively as the key driver to Vit.AF (Z13:23.18.16). Despite low sugar access among majority Zambians, Vit.AF continues to shape sugar politics in Zambia within which an agribusiness is implicated.

The NFNC confirmed that the capacity and dominance of ZaSPlc in the industry (*hidden power/power over*) gave the agribusiness an advantage over alternative vehicles such as maize meal. A senior officer at the NFNC explained how using a production capacity of over 250,000 MT (1998), “ZaSPlc convinced stakeholders of its capabilities to satisfy the domestic market and in order to receive state/donor support” (Z13:18.12.15). In immediately establishing itself in the Vit.AF and public health policy developments, collaborations with international finance such as UNICEF and the Global Alliance enabled ZaSPlc *power with* in subsidizing/facilitating fortification, equipment and other concessions.

A widely held view among respondents was that Vit.AF is effectively a non-tariff barrier on sugar imports which, in collaboration with state agencies that allows space for manoeuvre, limits entry of new investors (*power with*). To some actors in the Food and Beverage Industry (FaBI), *power with* effectively “locks the market for Illovo” (P4:15.12.15). According to one Consultant, that ZaSPlc contributes “only 10% of total production of Illovo against 30-40% net profit of the group” (P1:05.01.16) (Illovo 2016) is illustrative of how donor-state collaborations enable ZaSPlc exploit the domestic market. Sugarcane companies and private consultants revealed how prospective investments in different parts of the country failed to take-off for various reasons. However, interviewees implied that a deliberate failure by government to enhance competition, and intra-sector diversity through a financial focus on outgrowers linked to ZaSPlc reflected agribusiness *power with*. Limited investments in the sector have thus been blamed on ZaSPlc’s *discursive power (invisible power)* seen as discouraging new investments.

The links between Vit.AF and sugar import rules/guidelines imposed by various state departments and supported by ZaSPlc which calls for strict application of Vit.AF rules (*power with*) are strong. For instance, flexing its industry presence within the politics of VitAF, an NGO representative explained how ZaSPlc called for “*rigorous scrutiny of competing sugar processors,*” accusing them of failing to comply with packaging, labelling, quality and testing guidelines (*power over*) (Q4:09.12.15). Through such influence, ZaSPlc *hidden power* was perceived to coerce the government to renege on possible industry reforms. For a long period of time FaBI and NGO actors have called for abolishing Vit.AF alongside calls to allow sugar imports. They have also called for deliberate policy to encourage more agribusinesses in the industry as well as limit state involvement in the industry for competition and market growth (Ellis et al. 2010). However, state agencies insist on import permits from the MoA and elsewhere, entrenching ZaSPlc’s industry position and limiting industry competition (GRZ 2017; Ellis et al. 2012). Whereas inability to allow imports was seen by many as protecting the local market, state failure to promote competitiveness in the sector is pointed to ZaSPlc’s *power with* (Richardson 2010). Some policy actors in the MoA corroborate: “*agribusinesses lack transparency and wield too much power*” (Z1:29.06.15). Meanwhile, the FaBI actors as well as processors argue that whilst the public health objectives of Vit.AF are noble, related processes have hindered market growth and industry competition. Think-tanks, FaBI and NGO actors expressed concerns that the recently revised Food and Drugs Act (1994) which maintains fortification shows that “*reforms in favour of VitAF will continue to shape the dynamics of sugar*” (G2:18.12.15) and so will the *presence* of ZaSPlc.

Second is the donor-driven formulation of the Zambia National Sugar Adaptation Strategy (ZNSS). The ZNSS responds to trade policy shifts in the EU that departs from fixed regulations and price management in sugar markets to building partnerships and private sector development, considered the primary means for governing traditional export sectors in developing countries (Orbie 2007). In this transition, the European Commission offered financial assistance to developing countries for trade capacity (CEC 2012). Known as the Accompanying Measures for Sugar Protocols Countries (AMSP), objectives of this ‘aid for trade initiative’ point to enhancing sugar industry competitiveness, diversifying the economies of cane growing areas and addressing wider impacts of the reforms in adjusting countries (Richardson and Richardson-Ngwenya 2014).

The ZNSS is one major specific measure for promoting sugarcane. Formulated in 2006, the ZNSS prioritised sugar expansion through: 1) outgrower schemes; 2) sugar diversification; 3) infrastructure; and 4) the development of a national sugar trade policy (Palerm et al. 2010). As with Vit.AF, the implementation of the ZNSS revolved around ZaSPIC, with state-donor actors lauding the resulting integration of smallholders, bioethanol production and infrastructure development. That smallholder integration points to Magobbo and/or Manayonyo schemes means the ZNSS inserted ZaSPIC directly into state-donor programs (*power with*). Again, using scale, capacity and financial power, ZaSPIC positioned itself to play a visible role in actualising state-donor policy developments including guaranteeing their funds in the development of outgrower schemes which further plays to its image and reputation (*Power over*). Consequently, ZaSPIC effectively brought additional 1000ha under direct production and control in Magobbo and Manyonyo within two years. Analysis shows that a macro focus in the ZNSS neglected environmental issues. That donors and the government belatedly conducted a Strategic Environmental Assessment for sugarcane expansion – 4 years after the ZNSS – confirms these concerns (Palerm et al. 2010). Crucially, whilst the ZNSS expands scope for production in Mazabuka and around ZaSPIC, the SEA warns about serious water availability challenges stemming from competing uses: power generation, agriculture, mining and urban consumption in the main ‘sugarbelt’ Kafue River. A neglect in environmental regulation by the local authority highlight ZaSPIC *power over* in regional/local authority.

Third is a widely held perception that ZaSPIC deploys *power over* and *power with* through financial and economic opportunities to exploit the domestic market through access to concessions, including influence on trade policy rules that govern sugar imports. Prior to its historic factory expansion investment, ZaSPIC signed an Investment Promotion and Protection Agreement (IPPA), which interviewees believed effectively granted the agribusiness three advantages. First, was guaranteeing its investments in Zambia. Second was depressing its import bill such as on machinery whilst helping access cheap finance. Third and most importantly was compelling the government to treat sugar as a “*sensitive and priority product within policy guidelines*” (Mataka 2008 cited in Richardson 2010, p.929). With effective state bias towards foreign businesses and that only multi-million-dollar projects qualify for IPPAs, ZaSPIC’s economic power is perceived to play a crucial role in accessing concessions and shaping industry dynamics as corroborated by Richardson (2010).

Fourth is ZaSPlc's perceived *power over* in sugar price transmission and dynamics. Zambia is a low-cost sugar producing country, averaging US\$169/tonne compared to US\$263/tonne world average (Ellis et al. 2010). In highlighting pricing politics, the Competition Commission (CPCC) fined ZaSPlc 5% (ZMK76,728,650) of 2013 annual turnover for 'price discrimination and unfair pricing' (GRZ 2017). The CPCC reports that one category of industrial consumers was charged 22% more than others and that household consumers paid 28% more than the former also paying 41% higher compared to regional/export consumers. To one NGO representative, "*this fine is long overdue...and hoped 'this will unlock the market to encourage competition'*" (Q6:25.10.17). However, other NGO representatives were sceptical that concrete demands for ZaSPlc to immediately effect market-reflective price structure are missing, adding: "*there are lessons to be learnt on how agribusinesses commit injustices with impunity'*" (Q7:26.10.2017). FaBI actors who command 24% of the overall 41% domestic sales gave examples of how ZaSPlc increased sugar prices five times (oscillating between 7% and 14%) in 2014, whilst 2015 saw increases of 12.5% and 17%, sparking negative reaction among industrial consumers. In response, industrial consumers complained to the CPCC calling for reduction in prices to world market levels alongside a 10% surcharge to cover local conditions or allow sugar imports (Chisanga et al. 2014). However, interviewees argued that rather than addressing concerns through a wider stakeholder consultation and representation from FaBI, "*the MoA and ZaSPlc met and later sent adjusted prices'*" (P5:15.12.15) (*Power with*). A general perception was that this highlighted not only the way decisions were being made in the industry and how ZaSPlc shaped competition (*visible power*) but also how the absence of government action on market issues entrenched agribusiness influence in industry/national politics (*power with*).

The final domain reflects the way labour issues play-out at national policy level to highlight *power over* (structural power). National policies have allowed reduced minimum wages for the agricultural and sugar industry in Zambia. National interviews revealed how inadequate regulation and rules that permit ZaSPlc and strong lobby groups to negotiate and influence discounted sector minimum wages contribute to poor labour conditions at local level. A senior economist at the largest national farmers union (ZNFU) explained that the combination of seasonal, long and short-term labour engagements make "*agriculture unique'*" and that the sensitivity of the sector means "*we cannot put anyone on a minimum wage'*" (N1:04.12.15). As the Ministry of Labour "*has allowed this arrangement to continue'*" means that "*for now we are not affected by the labour*

legislation” he added. Sector-based approach to wages and conditions of services for farm workers have been adopted such as such as with the National Union for Plantation, Agricultural and Allied Workers (NUPAAW) as corroborated by an officer at Nanga Farms (SDM2:20.01.16). Given the dominance of ZaSPIC, many respondents perceive the influence of ZaSPIC in sugarcane-specific wages and conditions of service (*power with*). Not only that, *invisible power* projected through the powerful image and reputation as the largest employer that puts ZaSPIC in good terms with national politics was perceived to further enables it to exert influence on sector labour dynamics. While discounted sector-specific wages suggest a neglect of labour legislation, it also reflects the economic power wielded by the agribusiness as well as limits of state power in state-business relationships.

Within the labour perspective, there have been concerns that state institutions face challenges of how to enforce tax and labour laws. District officials reported ‘casualisation’ of labour and poor health and safety standards in sugarcane, which they blamed on weak frameworks for monitoring agricultural conditions on plantations/estates. Some of these relate to inability of local actors to enter production sites to assess adherence to agriculture and sustainability guidelines. According to one agricultural officer, “[t]here is politics involved in sugarcane. As civil servants, we have stepped-back lest we get accused of supporting an [opposition] political party” (D13:16.01.16) (*power over*). There have been complaints about alienation of local authorities in the business of sugarcane and general lack of embeddedness in the regional economy that potentially produces regulatory blind spots (*power over*).

7.6 Actors, structure and organisation of the sugar industry

This final section explores key actors, and their influence in the sugar sub-sector. Evaluation of the sugar industry started by identifying key actors/institutions shaping national and industry policies and practices. These were then linked to the perceived number of individuals (Figure 7.2). Whilst various institutions interplay to influence the sugar industry, analysis shows it is *state-donor-agribusiness* relations that dominate, enabling national, regional and local expression of agribusiness power (Figure 7.2).

State institutions exert power to formulate national and industry policies, whilst promoting outgrower schemes. Nutrition bodies such as the NFNC shape agribusiness/industry practices

through controversial public health policies such as those on fortification (Vit.AF). The CPCC regulate and shape market guidelines, accepting agribusinesses as private-sector development. Other institutions facilitate land acquisitions (Ministry of Lands, MoL), promote agro-investments (Zambia Development Agency, ZDA), and regulate water-rights whilst fostering renewable energy (Ministry of Energy and Water Development, MoEWD).

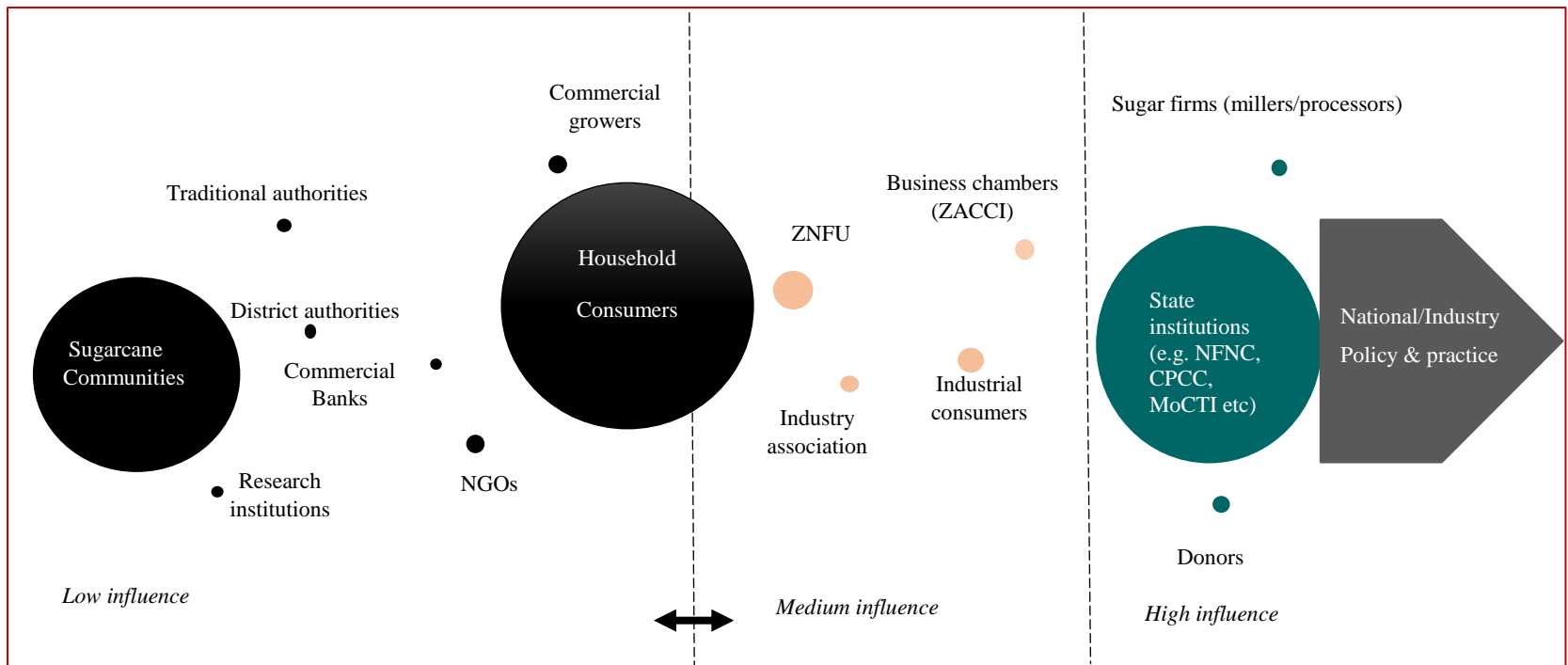


Figure 7.2: Actor influence in the sugar industry. Diameter of bubbles signify estimated number of actors/individuals involved in relation to others (as small, medium and large) (emerging from documentary analysis and perceptions of interviewees).

The Ministry of Agriculture (MoA) promotes commercial farming, whilst others facilitate trade and sugar related policies (Ministry of Commerce and Trade, MoCTD). Social and environmental sustainability aligns to the environmental management agency (ZEMA) which approves sugarcane projects but suffer political influence (Giles 2017).

Multilateral and bilateral development institutions provide technical and financial support. However, through resources and infrastructure, donors hold visible *power over* to shape policy as well as *power with* state institutions and agribusinesses to expand sugarcane production (Palerm et al. 2010). State-donor induced irrigation infrastructure enables smallholder integration through outgrower schemes whilst entrenching agribusiness concentration.

Associations such as the National Farmers Union (ZNFU) influence sector labour politics and policies such as on electricity tariffs and trade, production and market dynamics but their influence remains mixed. Local authorities intervene in land issues, with chiefs acting as key facilitators but are limited by state or agribusiness actors. Local and international NGOs that focus on welfare (CSPR), livelihoods (Oxfam), land rights (ZLA) as well as tax justice (ActionAid) also exert little industry influence, with efforts being more sectoral and less vigorously pursued (Phiri et al. 2015; ActionAid 2011). Similarly, household consumers are unable to engage the government/corporations such as on product quality and potential “discriminatory and unfair pricing” (GRZ 2017). Industrial consumers in the FaBI exhibit *power within* to organise and influence sector dynamics such as prices but identify lack of competition as inhibiting their business potential (GRZ 2017, p.1).

Data suggests that expanding state, donor and agribusiness influence limit spaces for broad-based stakeholder participation in the industry such as those in FaBI and advocacy groups. One FaBI actor expressed an opinion that “*the biggest problem is that ZaSPlc has no competitor at a large-scale,*” enabling it to “*establish a dictatorship line of doing business*” (P6:15.12.15). This was largely blamed on industry lack of competition, particularly “*government’s disinterest in inviting other players to enter the market*” and through “*granting significant incentives to ZaSPlc*” (Q4:09.12.15). According to a respondent at the Research-Tank IAPRI, the government has allowed “*different authorities in the sugar industry*” which at times “*seems to contradict its own policy on investment promotion and private-sector participation*” (G3:14.06.15). However, donor and state collaborations enable and sustain ZaSPlc’s expressions of power and influence in industry practices. State institutions were particularly

accused of entrenching agribusiness interests. For instance, to one respondent at the Competition Commission, lack of wider industry participation at large-scale level was probably because “*the market is not conducive enough for other players to enter*” (Z10:18.12.15Z) enabling an agribusiness power and influence across multiple levels and domains.

7.7 Discussion: Neoliberal Agriculture, Deepening Agribusiness and Claims to Sustainable Rural Development

This chapter highlights perceptions of how an agribusiness uses its power to shape policy development and industry practices. Through a combination of different sorts of power interplay, an agribusiness exerts control over the governance dynamics of an agro-industry chain, whilst limiting its commitment to social and economic sustainability. While various actors shape national and industry dynamics of sugarcane, *state-donor-agribusiness* relations dominate, ensuring agribusiness role in national development and agriculture. One outcome is that possibilities of sustainable agriculture, rural and economic development have been undermined by actual agribusiness practices as exemplified in local-level domains. By identifying different domains, analysis highlights the limits and importance of domestic institutions in framing LaSAIs as well as mediating corporate practices that will be required to enable a greater focus on sustainable agriculture and rural development.

The push for LaSAIs in Africa remains central in international policy on development and agriculture, ensuring agribusiness expansion. Donor and state actors shape mechanisms that underpin transformations in agriculture, but also raise governance issues (German et al. 2016). Gaventa’s power framework enables analyses of agribusiness power between and within various levels and domains. In drawing on Lukes’ formulation of power, Gaventa’s framework enables analysis of power beyond the visible to a consideration of how other forms of power, i.e. power with and power over, interact to shape an agribusiness jurisdictional presence. Agribusinesses deploy their ‘power of presence’ to influence policy management around sugarcane expansion, acting as key facilitators of government/donor projects through their willingness to incorporate smallholders (Richardson and Richardson-Ngwenya 2014).

National level domains reveal an agribusiness can exercise power with through synergies, public-private partnerships and collaborations with state and donor actors, enabling collective actions and alliance building (*hidden power*). Narratives around Vit.AF, and how the public health policy has been justified, shaped and implemented enables agribusinesses to operate from a privileged angle, shaping industry dynamics (*invisible power*). Donor-state-

agribusiness collaborations around sugarcane outgrower schemes under the donor-driven Zambia ZNSS have been regional and around ZaSPlc, enabling corporate influence. Within this context, state agencies restrict the power of municipalities (such as on water and land) through hierarchical mechanisms, or where responsibilities of national state agencies conflict with lower ones (for instance overlapping authorities) but maintaining agribusiness interests (Termeer et al. 2010). Closely linked are industry practices that shape sector strategies and policies including processes that underpin sugar price formation and transmission. Agribusinesses can hold *power over* expressed in an actor's capacity to act. For instance, through financial power and investment scope, agribusinesses sign IPPAs which protect their industry position and strengthen their influence.

These processes are by no means absolute but highlight interdependences between business and governments, which permits the former to enter crucial domains and influence the latter (Richardson 2010). Within such interdependences, agribusinesses may deploy diverse strategies to a countermovement at different levels including co-optation or closing spaces completely (West and Haug 2017). Some of these relate to financial and economic power seen in production expansion and industry capabilities. Actors such as NGOs and labour unions are some of the possible institutions that can confront the power of corporations and their national allies (Richardson 2018). However, agribusiness power expressions are problematic for genuine stakeholder participation and agriculture sustainability, as highlighted in national and sub-national domains. For instance, control in land tenure relations as well as labour regimes means resource-bearing communities remain peripheral in key production decisions, affecting local economic benefits. This raises the need for greater diversification in land holding and crops in order to guarantee sustainable livelihoods.

Agribusinesses influence policy management, and outgrower arrangements, challenging mainstream inclusionary narratives (Chapter 5) (Vicol 2017). Dominance in production accompanied by tight control over land and water as well as market channels highlight regional and local level power. While exploiting the publicly articulated focus on smallholders, in practice agribusinesses limit wider uptake of growers as can be seen in its continued dominance in primary agriculture in local domains (Figure 5.3) (Richardson 2010). Even where these have been integrated, different production systems split smallholders, affecting local cooperation (Chapter 5). This increasingly facilitates physical and economic exclusion of smallholders both from agriculture and land whilst deepening ecological and social contradictions of industrial

agriculture (Spann 2017; Peluso and Lund 2011) (Chapter 5). Sustainable local development must be viewed in the context of how policy developments and practices induce land concentration among powerful agribusinesses and how governance is shaped (Elgert 2016).

Policies and priorities for commercial agriculture produce an opposite effect, privileging an agribusiness at the expense of smallholder systems of agriculture as highlighted in national domains. For instance, the push for Vit.AF around an agribusiness reflect corporate power, enabling power of presence (Clapp and Scrinis 2017), whilst national policies adversely constrain local policies and practices, such as regulation and governance of outgrower schemes. While donor and state infrastructure create opportunities for smallholder integration, this support is problematic for agribusiness concentration and commitment to agriculture for development (Spann 2017). Agribusiness and sugar promotion in national policies conceal silent realities of industrial agriculture as high user of water, agro-chemicals and land, which undermines sustainability claims (Leguizamon 2016). Weak interaction between and among high-level national institutions and those at the local government level, highlight governance challenges in the latter, for example accountability, power, responsibilities and decision-making.

Global debates around ‘just sugar sourcing’ or ‘sustainable commodities’ increasingly deflect attention from agribusiness practices in countries that view LaSAIs as magic bullet for local development (Elgert 2016). In this research, regulation and monitoring failures from local authorities presents opportunities for unsustainable agribusiness practices (Giles 2017). A key governance challenge is the mandate of regional and local authorities to engage with agribusinesses. The way agribusinesses operate, oscillating between national and local level domains of power means that local authorities are merely spectators of developments in the sugar sub-sector, almost completely excluded from policy and institutional formulation, implementation and monitoring. This means agribusiness practices at different levels have potential to close spaces as well as invite actors in the promotion its interests (Gaventa 2006; Cornwall 2002). Evidence shows how the power framework illuminate scalar/governance mismatches, and the need for institutional arrangements to account for multi-level and multi-actor interactions which shape outcomes. Drawing from mono-governance perspectives, the role of the local authority is thus unclear (Van Alstine 2014).

There are clear mismatches between realities at local level and what national actors believe is the way to manage agribusinesses and LaSAIs. But this lacks salience, credibility, and

legitimacy in the eyes of critical players at regional and local level (Cash et al. 2003). Powerful corporations in agriculture present difficulties for countries such as Zambia to leverage socio-economic and environmental benefits. Some of this relate to lack of agribusiness social and economic embeddedness in the local economy, as discussed in regional/local domains (Richardson 2010). Although state officials can be enthused by the presence of an agribusiness at local level, their ability to regulate corporations is limited by an overlap in authority between national and local actors. District officials especially civil servants spoke of the difficult in monitoring and regulating agribusiness activities, compounded by national-level political involvement. There is little evidence that the local authority was acknowledged as a monitoring and regulatory structure by ZaSPlc. More widely, sugarcane issues, information sharing and decision-making processes are highly centralized, with the district level of governance often bypassed. As elsewhere (Van Alstine et al. 2006), a lack of local government involvement and increased government control means that authority is being implicitly (or even explicitly) transferred to foreign agribusinesses operating in the sector, raising social and ecological contradictions.

7.8 Conclusion

Agribusinesses are ‘emerging and new’ actors in African agriculture but never neutral. This chapter highlights five domains and how an agribusiness uses its “power of presence” within jurisdictional scale to shape sustainability in policy and industry practices in Zambia. State and non-state actors interact to shape domains underpinning agribusiness expression of power. One key governance gap identified from analyses of multi-level interactions and multi-level actors is weak regional and local government capacity. Governance gaps and limited capacity to monitor, regulate and influence in agribusiness were identified in three domains: agribusinesses embeddedness (or lack of it) in wider development processes; land tenure relations; labour regimes and practices. Regional and local-level practices reflect mono-centric governance perspectives which exerts state power and authority over regional and local economies as well as industry policy. This feature not only enables an agribusiness to oscillate between national, regional, and local levels but also permits enormous influence within the national scales, as exemplified in five domains: public health policy on Vit.AF; the donor-driven Zambia National Sugar Adaptation Strategy; access to investor concessions; sugar price formation and transmission; and national labour policy regimes. Through a combination of different sorts of power interplay, an agribusiness exerts control over the governance dynamics of an agro-industry chain, whilst limiting its social and economic contributions including uptake of

stakeholders. By identifying different domains around the sugar industry, analysis highlights the limits and importance of domestic institutions in framing LaSAIs as well as mediating corporate practices that will be required to provide a greater focus on sustainable agriculture and rural development.

The chapter provides insights into the centrality of relationships between and among agribusinesses and development actors in determining realities and prospects for sustainable development, including industry-specific practices within which smallholders are implicated. Findings of this study enables us to reflect on the limits of what national and local institutions can achieve with regards sustainability and sets us to think about how scholars can enable a greater focus on sustainability at different governance scales and levels. Sugar related issues have been framed at national level through policy practices, but weak interactions with local-level authorities produce crucial mismatches. Agribusiness expansion as pathway for delivering sustainable development is consequently problematic for agriculture, local development as well as sustainability. The top-down nature of sugarcane promotion and expansion, control over land and water resources raises problematic socio-economic and economic contradictions associated with LaSAIs.

My use of the concept “power of presence” is novel in that it helps unpack levels and domains throughout an agro-industry chain within which agribusiness power unfolds. It shows how analyses can draw on Lukes expressions of power to integrate Gaventa and Rowland’s formulation to provide insights on an agribusiness power of presence. This shows how the exercise of power goes beyond the visible, i.e. the power that an agribusiness exerts on other actors to act in its interest simply by being in that domain, to a consideration of hidden and invisible formulations as they relate to power with and power over within a jurisdictional scale. In so doing, the chapter helps to extend the existing literature on power dimensions of LaSAIs and agribusinesses, by bringing national processes that shape investment outcomes and raising questions for future research around the realities and possibilities for agriculture and local development. The discussion of agribusiness power of presence shows a contested agro-industry chain characterised by different sorts of power across all levels, enabling agribusiness control and influence. My analysis suggests that despite claims that LaSAIs can be inclusive and account for local realities (Deininger et al. 2011), regional and local participation is lacking. It shows that analyses that examine power dynamics within policy and industry practices enable us to reflect on the limits of what national and local institutions can achieve

with regards the push for sustainable development. Most importantly, the study highlights the need to examine the industry structure under which diverse actors operate and the power dynamics that shape actions and determine outcomes. This chapter has identified how the much-promulgated agriculture for development discourse and focus on agribusiness actors entrenches power of presence whilst concealing ecological and social contradictions related to LaSAIs. These findings are context specific but raise promising questions for further research. The fragmented governance of agribusinesses and LaSAIs in general challenges simplistic claims around the role of agriculture in international and regional policy management. The way an agribusiness deploys its power and influence across national, regional and local level domains present vital lessons for Zambia that the much-touted benefits of agriculture for development are far from automatic. And that any efforts towards generating greater benefits from agriculture will not require blind faith in LaSAIs. These lessons are drawn out and discussed in the following chapter, which looks in more detail at the interconnections between the four empirical chapters presented in this thesis.

Chapter 8 Large-scale Agricultural Investments, Sugar Value-chain, and Rural Livelihoods in Zambia

8.1 Introduction

This thesis has explored how LaSAIs play out within the national context by looking at national policy and institutional processes governing investments; industry practices shaping smallholder inclusion and exclusion; livelihood impacts, strategies and pathways; and agribusiness power and influence across various domains. By looking at four related and multi-level objectives in which LaSAIs are negotiated, governed and play out, this thesis has revealed the ways in which politics, power and institutional processes are insinuated in ‘land grabbing’ and in the national context, and what this means for agrarian change and rural social differentiation. Thus, whilst the interdependent nature of national, industry and local dynamics has been evident throughout the thesis, one of the central themes of this analysis has been the way in which politics, power and institutional processes are implicated at different levels. This discussion chapter integrates key findings from the four results chapters and establishes links between them as well as implications for agriculture and development, enabling a range of contributions to the current knowledge about LaSAIs. The chapter considers actors, relationships, and narratives in terms of politics, power and institutions; discusses how institutions and power dynamics shapes not only processes of value-chain participation or non-participation, but also how these shape access and utilisation of land and water as well as labour dynamics; and power and influence of new actors – agribusinesses – within national, regional and local domains. Prospects for, and challenges of integrating multiple theoretical frameworks are reflected upon. In building on the analysis advanced in preceding chapter, one of the central arguments in this chapter is that critical reflection on national politics, power dynamics and institutional processes that underpin LaSAIs will be crucial in facilitating a more inclusive and appropriate governance of foreign investments that can deliver a more locally-rooted agrovision for agriculture and more sustainable and socially-just rural development. In what follows, research objectives are revisited with an aim of addressing the implications of the research.

8.2 Revisiting Research Objectives

Policy, institutional and governance dynamics of LaSAIs were considered in Chapter 4. The chapter was conceptually grounded in some elements drawn from the theories of state stretched

to illuminate national politics, policy and institutional processes shaping LaSAIs. Whilst actors have been categorised in this research by their level of operation (e.g. national, industry, and local), actors assume multiple roles and are driven by multiple values, interests, and motivations. There is no one collective voice. However, evident across the preceding empirical chapters are contested narratives and different perceptions and extent to which actors advance or counter processes of LaSAIs. In the context of governance processes, coordination and collaboration challenges between and among state actors is evident in different advances such as narratives and views on water and land resources, raising competing framings of LaSAIs. These divergences at national level produces uncertainty in local contexts not only because of expanding LaSAIs but also because national politics, power and influence in institutional processes determine what local actors can or cannot do.

Despite divergencies in narratives, and challenges of coordination, a narrative of agriculture for development driving LaSAIs amongst state, donor and private-sector development actors is particularly persuasive, more so in relation to rural empowerment and development. However, the relative merits of LaSAIs, and the extent to which smallholders benefit, including the way land, labour and water resources are implicated in LaSAIs are contested by a range of actors at different levels. There is, for example, disagreements on how smallholders can be integrated into emerging value-chains on the one hand, and divergences between the narrative of agricultural expansion and caution around water and labour resources on the other. The nature of these challenges of collaboration and coordination between state institutions have been unpacked and problematised within this thesis and it is on the negotiation and decision making in these processes of agricultural expansion in response to LaSAIs that this discussion focuses on.

Findings show how state institutions create possibilities of LaSAIs but that the state agencies seeking to administer land-based resources also limit their potential through competing authority and agendas. Tensions over decision-making and creation of new frontiers of resource control between and among different institutions have been heightened by a national focus on water and land resources as well as the flow of government and donor resources into agriculture. Particularlry when it comes to contensions over perspectives on land and water, within LaSAI debates, economiclaly-oriented actors are quick to deligitimise environmentally-oriented actors who might apply brakes on investments by advacing an anti-development and anti-investor narrative. However, across this thesis it has been shown that whose

knowledge/narrative counts or not count is highly political, which means that comprehensive assessments of LaSAIs and the multiple risks that may be required to accompany such investments is neglected. These results bolster evidence that improved governance, policy and institutional cooperation and coordination are key in addressing some of the challenging aspects of LaSAIs such as transparency, tenure security and wider governance of the land sector, and improved conditions for local inclusion in emerging value-chains (Borras et al. 2011). Findings illustrate the potential and limitations of the top-down nature of resource governance. They bolster critical perspectives on the centrality of bureaucratic and legal extensions of state power; principles and rules shaping foreign investments; state capacity in creating conditions for production and reproduction; and role of local participations in understanding national dynamics of LaSAIs (Fairbairn 2013; Wolford et al. 2013).

Chapter 5 considered industry and local factors affecting smallholder participation in sugar value-chains including terms and conditions. The chapter was conceptually grounded in value-chain dynamics such as market access avenues, institutional arrangements, and representation to reflect how inclusive agribusinesses can be. There is a convergence of smallholder forms of participation in sugar industry with *agribusiness-state-donor* collaborations/initiatives but industry and local experiences remain problematic. Structural and non-structural factors combine to shape inclusion and exclusion, but play out to enhance an agribusiness control over production arrangements. Whilst the former activates the latter, these results illustrate that whilst advanced as inclusive forms of agribusiness expansions, smallholder outgrower arrangements enable corporate control over land and water including production, marketing and wider resources, which is problematic for local participation, livelihoods and sustainable development.

Chapter 6 considered micro-level impacts of LaSAIs on livelihoods. The chapter was conceptually grounded in the Sustainable Livelihoods Approach (SLA). Evidence presented showed that livelihood contributions of LaSAIs and sugarcane uptake, and livelihood responses reflect causes and consequences of differences in the evolution, operation, and integration of outgrower schemes. Within this perspective, outgrower schemes that link smallholder production to other livelihood options as highlighted in Kaleya are effective in employing labour and in the promotion of diversified and sustainable livelihoods. However, quality of employment and production remains low, which fails to produce significant path-changing gains for households. Results showed that whilst sugarcane cultivation does enhance financial

capital, a focus on incomes neglects other equally important forms of capital, producing narrow as opposed to diversified livelihoods that enhance livelihoods on a sustainable basis. Livelihood pathways enable diversification away from sugarcane schemes but are forged within land-based and agrarian activities which interlinks with prior household wealth positions. The chapter shows that the way schemes are organised and structured alongside contractual arrangements have skewed the capture of benefits towards better-off households whilst aggravating inequalities. These results indicate uneven distribution of impacts between and within sugarcane schemes and communities as well as farmer groups. They also illustrate that households do not always switch to high-paying strategies.

The final empirical chapter (Chapter 7) placed Chapter 4-6 within the wider structure and organisation of the sugar industry to explore how an agribusiness' "power of presence" exploits national, regional, and local domains to exert control over an industry governance and influence sustainability. National investments and trade policy developments foster agribusiness expansion in sugarcane but neglect environmental assessments that expose social and ecological contradictions such as on competing water uses. Regional and local level donor-state relations enable smallholder integration in sugarcane as poverty reduction whilst agribusinesses are limiting their participation through tight control on resources and production systems. My analysis suggests current policy developments, social and political efforts around "agriculture for development" in Zambia entrenches power and interests of an agribusiness whilst neglecting industry expansion, competitiveness and sustainability. Power expressions in national and sub-national domains show possibilities of sustainable agriculture and rural development have been undermined by agribusiness practices. These results illustrate limits and importance of domestic institutions in framing LaSAIs as well as in mediating agribusiness standards and practices that will be required to provide a greater focus on sustainable agriculture and rural development.

The picture roughly painted above is one which advances a variety of dynamics surrounding LaSAIs, underpinned by politics, power dynamics and institutional processes, which are differently deployed and exploited depending on actors. The following sections considers further the centrality of these key threads in LaSAIs, by making references to some key empirical findings.

8.3 The Role of Politics, Power and Institutional Processes

The four empirical chapters discussed in this thesis have referred to and shown the centrality of politics, power and institutional processes in LaSAIs at different levels, acting to shape narratives of governance and potential outcomes of investments. Whilst these processes and narratives shape national decisions and development discourse around LaSAIs, outcomes at local level point to prospects for value-chain participation and how land and water resources shape livelihood outcomes in investment hosting communities. Power is evident in approving LaSAIs, and in decision making around access to natural resources as well as environmental decisions/agency – the power to frame development agendas. Reflecting on Whitfield (2014, p.194), this exists in an even subtle way in the public sensitisation, which strongly promote a particular framing of LaSAIs as ventures to be promoted through facilitative regulation. LaSAIs are highly politicised in Zambian agriculture, with manifestation of these power dynamics emerging in wider development claims of the progressive nature LaSAIs, access and utilisation of land and water resources. However, institutional processes and their promotion of LaSAIs proceed whilst concealing power interplay and influence by key actors in the state, donor and private sector spheres, more so in industry and local settings. Across the empirical chapters there is a recognition that power underpinned by institutional processes manifest themselves in multiple and subtle ways. Thus, there is no one power, which makes predictions about patterns around who wins or loses within these debates less certain. This thesis has given examples of powerful actors across state, donor and private sector spheres, and at national, industry and local level, constructing narratives of change in agriculture, closing down alternative as well as counter narratives (e.g. on the nature and merits of LaSAIs, and public health narratives of sugar fortification). Clearly, the future of foreign investments, agriculture and smallholders in Zambia will remain contested and splitting for actors. In what follows, I draw on these concepts to reflect more closely on industry practices and impacts on land, water and labour and wider agrarian change and social rural differentiation.

8.4 Linking LaSAIs, Governance Dynamics, and Local Livelihoods together

This thesis explores the extent to which LaSAIs impact local development and rural livelihoods. Throughout this thesis, I have drawn on interdependencies at national, industry and local level, and shown how these have been shaped by national politics, power dynamics and institutional processes. Linking findings between and across each research objective strengthens this aim.

8.4.1 Agricultural Investments, Institutional Cooperation and Coordination

The concept of unbundling the state and the national political cultures that shape LaSAIs and outcomes introduced in Chapter 2 and 4 (Burnod et al. 2013; Wolford et al. 2013; Fairbairn 2013) provide a useful way of conceptualising LaSAIs which draws on national actors to make crucial decisions about decisions. Literature has until now focused on global governance processes of LaSAIs, including land control (see Schoneveld 2017; Peluso and Lund 2011). However, chapter 2 showed that perspectives for understanding governance dynamics and the role of the national state are still required, with the politics within national state institutions, extensions of political power and relationships remaining peripheral to the land-grabbing debate.

In response to these gaps, this thesis drew from an understanding of state dynamics, delving into policy and institutional framework analysis to explore governance dynamics and tensions between policy and development actors involved in LaSAIs. Studies such as Peluso and Lund (2011) and Borras et al. (2011) reveal how national states actively promote LaSAIs and ensure land control. In extending this view, this thesis noted patterns of increased growth in LaSAIs, but went further to identify three key trajectories: 1) acquisition of existing companies; 2) resource, market and efficiency seeking strategies among firms; and 3) investments in primary production and output markets (i.e. transport and storage). Growth trends were also identified: 1) diversification of existing and entry of new firms into agriculture; 2) increased demand for land, water and electricity; 3) increased tax receipts; 4) growth in agro-output, private-sector enterprises; and 5) increase in agro-processing. Whilst bilateral and international funding agencies as well as regional markets and politics drive LaSAIs, there is a particular domestic imperative to investments which is dominant in Zambia with five underpinning processes: 1) maize exceptionalism; 2) national politics and rural development; 3) legislation and tenure system; 4) investment and policy environment; and 5) investment promotion. Policy developments, social and political efforts have linked LaSAIs to job creation as empowerment, agriculture and rural development, as well as to increased cultivation and irrigated areas, but these have been driven largely by powerful national actors, who also shape dominant narratives around foreign capital. A focus on national level factors and analysis adds to the body of literature which has so far focused on international drivers and dynamics to explain what is happening in the world of LaSAIs in host countries.

By working to promote the smooth implementation of LaSAIs, state institutions have been invoked in narratives of LaSAI legitimation. Chapter 4 highlighted institutional processes/practices and how the presence of a LaSAI produces transformations in institutional arrangements enabling individual state institutions to promote and secure investments. As with Bottazzi et al. (2016), by expanding investment entry points, such innovations build tensions between and among state institutions, making structural change and shared goal attainment less likely. While LaSAIs draw on different actors and authority to facilitate investments (Figure 4.1), *state-donor* relations drive the agricultural change narrative. One outcome has been expanding scope and power for certain state institutions to influence investment decisions to the exclusion of wider consultations which affects policy development and coherence (Kalaba et al. 2013). By drawing on different sorts of state power and authority, these processes allow different institutions to justify LaSAIs. However, multi-stakeholder and sector interaction that could possibly enhance institutional support and coordination remains weak. Pedersen (2016) reports from Tanzania that government actors are more in control of policy making than donors, the latter participating on financing than in reform design. In contrast, this thesis gave examples of how donors deploy financial power or otherwise to advance policy pathways around LaSAIs, shaping national decision making around land and water and the way national institutions respond.

Power and institutional dynamics underpinning governance processes of LaSAIs in Zambia mean that collaborative and coordination efforts surrounding foreign investments are generally lacking, mainly for three reasons: 1) the nature of donor relations to state institutions; 2) tensions between and among state institutions; and 3) the role and influence of firms. For instance, emphasis on natural resources among national actors, accompanied by availability of public and donor funds seem to build tensions between and among various state institutions. Resource-based tensions such as those around water identified between the MoA and MoEWD reflect manoeuvres to monopolise state-donor resources. In particular, economic-related institutions highlight strong horizontal cooperation reflective of the dominant “agriculture for development” discourse (World Bank 2007). Recent research efforts show that whilst signaling negative implications for local development, these somewhat ‘path dependent’ practices neglect interaction with natural resource and environmentally-related institutions (Atela et al. 2016; Akram-Lodhi and Kay 2014). Deficits in inter-sectoral cooperation and collaboration heighten sectoral politics of power and authority and resource control, preventing possibilities for reforms and sustainability (Faye 2016) (Chapter 7).

Previous studies have focused on impacts of LaSAIs on majority groups such as smallholders, and how investments create positive configurations for smallholder leverage (Rutten et al. 2017). Building on local development imperatives associated with LaSAIs, this thesis finds that the wider focus on export linked commodities such as sugar that are large-scale-biased and respond to regional/global demand limits smallholder interaction with such crops (Chapter 5). Where farmer integration has occurred, smallholders face an uncertain future as political rhetoric around outgrowers for instance remains oblivious to micro-level experiences such as threats of appropriation of land, water and local assets including local farmer investment initiatives. Within this context, power and influence of agribusinesses is thus strengthened (Chapter 7).

This thesis demonstrates that ‘unbundling’ institutions and policy practices make more visible state politics, power and institutional processes governing LaSAIs and their potential effects. It shows that insufficient processes have been put in place to bring governing processes around LaSAIs up to speed with much effort being made in channeling market forces to favour foreign LaSAIs as well as facilitating foreign access to resources. This issue has both to do with state institutions, their power and influence as well as agribusinesses themselves. Clearly, the presence of an investment at national level sets into motion diverse policy and institutional processes that govern them. This raises questions about legal extensions of the state power (territory); national capacity of rulers to control the conditions of their own reproduction (sovereignty); political hierarchy and related legal practices and how they shape LaSAIs (authority); and experiences of the citizens as subjects highlighted in Wolford et al. (2013). Combined, relations around LaSAIs may produce positive discourses around agriculture, underpinning bureaucratic structures and legal frameworks that shape regulation of customary land access and management. However, power relations between state and non-state actors influence conditions for land acquisition and dispossession, shaping the meaning of land and territory as well as articulation of categories of identities and belonging as they relate to LaSAIs.

Wolford’s formulation shows how power flows through the various disaggregated levels and functions of the state, allowing for diverse actors to be drawn as critical actors in LaSAIs (2013). This thesis has revealed the challenge of how to clarify mandates, close overlaps, and build multi-stakeholder partnerships that can enhance decision-making around resources and investments. As Spann (2017) argues, this includes how to manage the transition towards

LaSAIs and implications of the departure from the top-down nature of governance of land, labour and water resources which can be problematic for long-term sustainable agriculture and local development. At one level, these challenges relate to institutional strengthening, and how to attach long-term perspectives to land ownership, development and LaSAIs. At another, they relate to how to create strong collaborations so that the Zambian policy and institutional setting that govern LaSAI processes can reflect and adapt local aspirations and goals. As will be shown in the next section, the way national politics, power and institutional dynamics shape decision making around LaSAIs produces challenges and prospects for smallholder participation in emerging value chains.

8.4.2 Smallholder Inclusion and Exclusion in Value-Chains

Much has been theorised about market mechanisms and smallholder coordination mechanisms at global level (World Bank 2009; Kruger et al. 1991), but connecting how national and sectoral processes shape inclusionary dynamics remain challenging. A key question facing LaSAIs is how to create conditions for linking smallholders into value-chains as inclusive businesses (World Bank 2008). Chapters 1 and 2 articulate how LaSAIs, outgrower schemes and value-chains have been promoted as inclusive, less harmful and facilitating smallholder accumulation. Yet, critical perspectives show schemes present unequal power relations an important forms of land control (Vicol 2017; McMichael 2013). Inherent constraints in inclusive business often ignore institutional and power relations between the state, agribusinesses and smallholder communities, raising the need for more socially embedded and power influenced analysis as advanced in this research. This research drew on the specificities of institutions, industry, cultures and governance aspects in value-chains which have been intensified by LaSAIs to ask: who is disposed; adversely incorporated and affected; who gains and why? In so doing, power dynamics that shape bargaining processes, negotiability and flexibility within prevailing institutional arrangements are exposed. This was necessary given efforts that advance the inevitability of the co-existence of foreign capital and smallholders. By linking the understanding of GVC dynamics to LaSAIs, this research connects the missing elements in value-chain analyses – land – whilst adding chain elements to LaSAIs studies which until now has had limited understanding of the GVC dynamics (Nelson and Pritchard 2009).

Previous studies have distanced contract farming from land grabbing and from negative ramifications of LaSAIs, insisting that strong customary claims lead to fairer contractual

arrangements that favour smallholders – pointing to somewhat of a balanced relations and negotiability (McMichael 2013; Barret et al. 2012; Smalley and Corbera 2012). This research has shown how LaSAIs centre on local land and water resources as sites in which smallholders are constructed as interdependent entities in agriculture and economic activities – of unequal power relations, bargaining and institutional arrangements within which investments are enacted. Agribusiness control of land, water and production, as highlighted in Chapter 5 and 6, means smallholders depend on intermediaries to access the value-chain, creating what Adams et al. (2018) characterises as dependences. Evidence shows coordinating upstream and downstream nodes in the value-chain, permits firms to centrally or through intermediaries exert production and market requirements (e.g. standards, varieties, production requirements). Coordination scheme arrangements and vertical integration makes relationships between lead firms and smallholders indirect, complex and strictly governed. However, divergencies in production set-up produce variations in *buyer-grower relationships*, but which are broadly formalised and structured through various monopsonic dynamics of the dominant firm (Chapter 6).

As chapter 5 highlights, whether land is owned by intermediaries or held under rental arrangements, tight control by firms ensures systematic alienation of farmers from downstream value creation/capture. Perceived low sugarcane returns, restricted access to natural capital within schemes and inadequate institutional support increasingly pushes farmers away from sugarcane schemes and, thus, their position as sugarcane farmers, jeopardising livelihoods, confirming recent reports (Dubb 2015). This research shows these have been shaped by configurations of market power and control in production spaces, generating clear processes of capital accumulation by firms which is inconsistent with inclusive development outcomes (Cohen 2013; Anseeuw et al. 2012). The presence of intermediaries make independent smallholder negotiations impossible – limiting of negotiability and exposes smallholders to the loss of land rights and autonomy over it (Adams et al. 2018; Hall et al. 2017). Through sugarcane supply agreements, intermediaries exert non-negotiable production, market and commercial requirements. Corporate land and production control places agribusinesses in powerful negotiation positions, as projected in sugarcane and water quotas as well as market dynamics (e.g. purchasing arrangements) (Chapter 5). Overall, this research has shown that terms and conditions for smallholder participation reflect both evolution, operation and integration of outgrower schemes, and how agribusinesses – their power and influence – articulate themselves in production systems (Chapter 6).

Chapter 5 shows grower inclusion in value-chains relates to sugarcane promotion in national policies and political rhetoric around agricultural commercialisation, job creation and rural development. Inclusion also relates to value-chain coordination and governance, reflective of wider agribusiness power and influence (Chapter 7). Inclusionary dynamics are not homogenous, and chapter 5 tied these dynamics together by showing that different outgrower farming arrangements produce diverse, uneven, socially contested but interdependent hierarchies of inclusion and exclusion. Buyer-grower relationships vary across land ownership, production and contractual agreements, which can be entangling, and exclusionary for smallholders.

This thesis showed structural (industry) and non-structural (local) factors converge to shape smallholder inclusion. For instance, “productivity enhancing” *state-donor* induced irrigation infrastructure provide the initial basis for smallholder participation in sugar value-chain or indeed non-participation (Chapter 7). Considerable regional advances in infrastructure development towards Mazabuka and around ZaSPIC facilitates firm power, accumulation and consolidates its industry position. However, this limits wider sugarcane expansion and smallholder integration, which faces technical, collateral, tenure security and infrastructure problems (as discussed in chapter 6). Socio-economic and political efforts clearly entrench sugarcane expansion and smallholder access to markets but positions agribusinesses as facilitators, which reflects smallholder position and possibilities in value-chains. Actual smallholder inclusion thus lies centrally with agribusiness actors who shape institutional arrangements for growers (Chapter 7).

Non-structural elements play an even greater role in shaping inclusion. Chapter 5 reveals that value-chain inclusion reflects initial welfare status, contrary to some generalisations (Barret et al. 2008). Evidence shows smallholders relate to value-chains differently and participation is non-random as opposed to random. In Magobbo for instance, this thesis has show how local employment opportunities prioritised cane growers as land owners or remained limited altogether. To enable participation, smallholders must own land or directly inherit farms but these options have no easier escape routes for smallholders once land is trapped into commodity crops such as sugarcane. The dynamics of *selling, swapping or losing land* identified within communities and among farmers reflect diverse experiences directly related to processes of inclusion. The better-off farmers integrate and profiteer from sugarcane and accumulate land in some cases leading to absentee landlords. The land-poor farmers, often

women and youths – who neither *inherit, swap, buy land/farms* nor control household *expenditure decisions* – are clear losers as confirmed in recent reports (Hall et al 2017). These processes aggravate local inequalities (Briones 2015) and highlight the centrality of land in shaping the convergence between capital, land and local populations/subjects and determining rural social differentiation.

Whilst previous studies attempt to distance contract farming from negative ramifications (Smalley and Corbera 2012), I have shown in Chapter 5 that buyer-grower networks/relationships are not entirely unproblematic. A deficit in resources, knowledge and capacity among smallholders builds a case for intermediaries. Intermediaries facilitate smallholder sugarcane production, but relationships are imbalanced. Sugarcane prices and expenses on inputs as well as tenure security (as shaped by institutional arrangements) produce high levels of mistrust between an agribusiness and local people and within communities, raising governance dynamics (Phillips 2014). That farmers cannot perform certain roles or lose control over their land means the argument for inclusion is much less convincing. A key contribution here is that there are clear implications for social relations, processes of rural differentiation and agrarian change but these are not only foisted on exclusion but also on adverse processes of incorporation (McCarthy 2010).

Previous studies have shown inclusion simultaneously activates processes of exclusion (Tobin et al. 2016), which has been constructed as problematic. In showing that exclusion is not always problematic, this thesis gave examples of how excluded smallholders benefit from sugar growers as money lenders, reaping the benefits of value-chain activation in the community, but from the margins. This is potentially an important finding. Chapter 5 shows how exclusion relates to diverse factors including: 1) contractual arrangements and sugarcane quotas from ZaSPlc, interpreted as a strategy for maintaining dominance in primary production; 2) active farmer decisions; and 3) project selection. Farmer decisions link to fear of losing land and perceived unclear benefits of sugarcane among farmers, which is inconsistent with arguments that smallholders always perceive integration as beneficial (Tobin et al. 2016). Converting communal grazing land to sugarcane (Section 5.7) determines what the excluded can or cannot do. Differences between farmers with pastoralist interests on the one hand and those that prioritised sugarcane on the other highlight divergences among local growers and incompatibilities of commodity crops with local aspirations. Whilst exclusion underpin landed relations, inequalities, social differentiation and marginalisation means local actors are not

always excluded equally (McKay and Colque 2016). That the direction of travel in land conversion prioritised sugarcane as opposed to the wider spectrum of smallholder interests as alternative farmer initiatives highlights rural politics, power and institutional arrangements on the one hand, and broad concerns of social differentiation, dispossession and the consequences of inclusion on the other. More crucially and unlike previous studies (Barret et al. 2012), active decisions on exclusion are not always economic in nature and farmers face diverse complex arrangements and realities that shape local decisions.

Conversely, exclusion relates to project selection factors, including 1) land constraints, 2) lack of opportunities to swap, and external involvement (limiting local participation) as well as, 3) degree of risk aversion in families (e.g. disagreements on land conversion). Displacements of people from their cropping fields and conversion of grazing land highlight ‘exclusion on disadvantageous terms.’ That farmers such as the landless, youths and widows enter into deals to work on estates on behalf of the better-off (to share gains) highlights diverse layers and crucial social implications for inequality in sugarcane (Phillips 2014). This situation is clearly gendered, raising design challenges on how to distribute benefits to a wide range of farmers without marginalising them. A key contribution is that intermediaries cannot always be harnessed progressively within a collaborative environment (Howard 2016).

This research has shown governance processes are crucial in outgrower arrangements. Chapter 5 shows farmer committees clamour for legitimacy, but even where institutional structures exist, financial incentives available to members heighten stakes for leadership, and thus elite capture (Box 5.6) (Harrison and Chiroro 2016). Chapter 5 ties this to an argument that silences and occasional actions by district officials and ZaSPIC to intervene in schemes reflect hidden power dynamics by state and corporate actors. A unique contribution here is that within households, a focus on sugarcane leads to multiple claims to land with one outcome being ‘*exclusion from within*’ as powerful household members especially in polygamous households monopolise profits and dominate decision-making, raising challenges for rural social differentiation.

Overall, this chapter has shown that going beyond simplistic narratives on commercial agriculture and ‘win-win’ arguments is a vital step towards more nuanced analyses of what inclusion and/or exclusion means in reality. Current dynamics in LaSAIs and irrigation expansion have insufficiently been appraised in terms of effectiveness and the role of smallholders. Less appraised also is how market avenues and governance dynamics shape a

range of interaction between different actors and impacts of such interactions on grower engagements and institutional arrangements. As Woodhouse et al. (2017) note, some of these elements highlight conceptual short-comings of LaSAIs and outgrower initiatives in sub-Saharan Africa that makes it difficult to engage effectively with smallholders as well as the importance and challenge of a multi-level analysis.

8.4.3 Grower Livelihoods, Diversification and Pathways

Previous studies have focused on livelihood implications of LaSAIs, social and economic differentiation more broadly and in different industry settings, with evidence of treating outgrower schemes as homogenous (Hall et al. 2017a; Matenga 2017; Matenga and Hichaambwa 2017). Less emphasised is how different scheme structure and organisation shape livelihoods. This could be overcome by examining differently structured schemes within the same industry setting, moving towards a greater understanding of the differences and effectiveness across diverse livelihood dimensions, as advanced in this research. Chapter 6 considers consequences of differences in the evolution, operation and integration of outgrower schemes on livelihoods and response pathways within the sugar industry setting. Three key potentially important finds from this chapter suggest: 1) outgrower schemes that enable smallholders to access alternative livelihood assets and options produce greater livelihood impacts across financial capital and other dynamics, but these remain low quality, and fail to produce significant path-changing gains for smallholders; 2) Livelihood contributions of LaSAIs and sugarcane uptake reflect causes and consequences of differences in the evolution, operation, and integration of outgrower schemes; 3) Livelihood diversification away from sugarcane schemes but forged within land-based and agrarian activities show smallholders do not always switch to profit maximising strategies, departing from dominant narratives that point to deagrarianisation (World Bank 2011). Overall, this thesis highlights the need to frame the agrarian question in terms of the politics of land and labour. It also raises the need to explore and understand complex intra-household decisions and how they undertake to leverage diverse livelihood. How value-chain implementation shifts power within households and how household members leverage decision-making remains an interesting area of research (Barret et al. 2012).

Livelihood contribution and experiences of sugarcane growing vary across *poor, medium or better-off* household categories. Across the schemes, changes in financial capital were perceived more compared to other capitals, highlighting skewed distribution of livelihood

impacts related to LaSAIs and sugarcane uptake (Chapter 6). Evidence confirms institutional and scheme coordination arrangements as they relate to land rights shape value creation and its direction of travel (Hall et al. 2017). This is much more about the way land has been implicated in sugar value-chains, and rural livelihoods – a function of power dynamics and institutional arrangements shaping outgrower schemes. Recent studies show that these processes are complex, but have important implications for rural social differentiation and class formation (Pritchard et al. 2018). Economic benefits for farmers largely relate to crop production. Sugarcane is the main commercial crop while subsistence maize crops dominate across all farmer groups. That sugarcane production accounts for the main source of income for the majority of smallholders results in significant absorption of household labour, heightening labour competition as highlighted in Kaleya (Chapter 6). Evidence suggests the arrangement in which farmers give away land to receive a share of dividends such as in Magobbo offer little benefits compared to the case where farmers directly cultivated sugarcane fields such as Kaleya. This study has shown that these farmers were more likely to report negative perception of LaSAIs and sugarcane uptake. Thus, beyond the much touted financial capital associated with value-chain participation, land remains an important marker of rural social differentiation, class formation and agrarian change. However, the study shows a wide-spread reliance and dependence on on-farm (sugarcane) income sources with very few (better-off) farmers being able to diversify in farm and non-farm activities. Where alternative land is accessed, the better-off were able to combine livestock rearing (outside schemes) and engage in petty-trading. These were also more likely to cultivate larger plots, diversifying crop production and selling surplus but within agriculture, challenging simplistic narratives of rural development implications of agriculture (World Bank 2008).

As with Donovan and Poole (2014), low incomes among poor households restricts initiatives to build and expand on-farm assets and economic activities. Farmed areas by poor and medium category households face insufficient labour, lack of inputs (e.g. fertiliser) and land constraints compounded by lack of resources to rent or purchase land. Poor labour and farm management means farmers face challenges of adjusting between different investment strategies, livelihood activities, and face different risks. Farmer responses to acquire land outside and away from the schemes highlight land scarcities, the importance of natural capital and the significance of independent farmer cultivation in local livelihoods. However, where the poor and to some extent medium category households acquired land, farmers face capital challenges for investments and land development, driving sugarcane dependency.

This research shows that pursuing livelihoods – amidst land, water, labour resource challenges – produces a narrow concentration of livelihoods as opposed to diversification, which is problematic for resilience (Harrison and Chiroro 2016). This has been compounded by inflexible sugarcane production regimes, and negotiation arrangements. As outlined in Chapter 6, cropping patterns before and after sugarcane uptake reveal less diverse household cropping patterns. Reduction in livelihood activities such as livestock rearing – that enables subsistence consumption of protein, provide draught power and complement seasonal financial capital – highlight land and labour challenges and most importantly incompatibilities of sugarcane with alternative livelihood strategies. Rural livelihoods in sugarcane communities are clearly evolving and producing new configurations in resource control. However, land constraints and ensuing restricted access to ecosystem services limit local diversification processes, meaning farmers cannot always reproduce themselves through and within agriculture (Vicol 2017). This potentially important finding is inconsistent with dominant claims (World Bank 2008). Increasingly, farmers identify themselves and define agriculture around sugarcane, indicative of what has been described as fragile semi-proletarianised livelihoods within re-organising land, livelihood and social relations (Adams et al. 2018; Hall et al. 2017a).

Analysis of seasonality reveals how income flow peaks during sugarcane harvest and payment periods. Some household members get opportunities to work on the plantations and estates but heavy industry reliance on seasonal and migrant labour means farmers face competition and restrictive opportunities (Richardson 2010). The losers are clearly women and the youths who neither influence household expenditure decisions nor find opportunities of wage employment and are landless, which entrenches local inequalities and social differentiation (Chapter 5). More crucially, smallholder participation, monetary gains and concerns about land rights, while important, have not been accompanied by a policy focus and investment on human and social capital within schemes. Trainings and opportunities for smallholders that potentially facilitate possibilities to engage and diversify livelihood portfolios are largely missing in scheme coordination. Once again, this highlights the importance of negotiability, politics of rural power and bargaining dynamics in outgrower schemes and challenge of livelihood diversification.

Evidence suggests that smallholders in Kaleya generally face better response pathways and prospects than in Magobbo which faces serious land and water constraints within and outside the scheme. This research shows that smallholder livelihood response pathways depends more crucially on what farmers can or cannot do within the schemes and whether they can organise

to engage in alternative production arrangements beyond sugarcane. Again and as highlighted in Chapter 2, this shows the importance of framing the agrarian question of rural context of land and labour politics (Bernstein 2006; 2010). Evidence shows that the poor households mostly in Magobbo were less likely to make new livelihood investments and recorded a poor asset profile – *hanging in* (Doward et al. 2009). These were typically the land-poor (e.g. widows, landless) confined to their dwelling plots or forced into precarious waged labour pathways, land-rental markets or sharecropping. Unlike previous studies, this study finds that the reliance on waged labour was clearly driven by circumstances as opposed to choice. Here, possibilities of diversification are largely hindered by land constraints and lack of requisite resources for investments. As with previous studies, evidence shows low education levels affects job opportunities whilst poor expenditure decisions condemn farmers to informal local lending system as risk strategy which includes sale of household assets, and borrowing (Ellis 2000).

On the other hand, medium category households were landed although they also faced challenges such as lack of requisite resources for investment and land development. There are attempts to diversify livelihoods through agriculture (e.g. crop production) and non-farm activities such as acquiring productive assets (e.g. hammer-mills) as well as engagement in petty trading and livestock rearing *albeit* at a limited scale – *stepping-up* (Doward et al. 2009). However, these continue to struggle within agriculture, exhibiting what Vicol (2017) characterises as “*getting ahead but also frequently going backwards*” (p.164).

The chapter shows that the better-off farmers successfully utilised sugarcane incomes to acquire physical capital (e.g. vehicles, hammer-mills), and run businesses (e.g. grocery stores, transportation) within agriculture and non-agriculture economy. These are typically land owners who invest and combine own-account farming, producing food and cash crops, rear livestock including fish farming and property development. Diverse income sources enables social expenditure, including hiring of extra labour. Evidence further suggests that these farmers are educated and work in specialised duties on plantations/estates (e.g. in maintenance and light duties) and elsewhere (e.g. as civil servants). Household decisions are more shared allowing for good planning, building into successful efforts on *stepping-out*.

It is clear that while some farmers deploy sugarcane incomes as launchpads for livelihood diversification, others face risks and challenges (Hall et al. 2017b). Diversification within agriculture highlights the centrality of land as a productive asset in rural livelihoods: building

food production and security (hanging-in), permitting engagement productive expansion (stepping-up), the value of which feeds into diversified livelihood activities (stepping-out) (Doward et al. 2009). However, these processes are never straightforward. They demand that one understands the politics of outgrower schemes, power and guiding institutional arrangements in local communities, and how these shape who does what, who gets what, who owns, and what do they do with it. Rather than straightforward, smallholders face both uptake opportunities, and barriers and challenges. Evidence shows that the main driver of sugarcane uptake among smallholders is financial capital. Natural factors such as rainfall variability, droughts and flood related challenges including price risks related to maize crop act as stressors. Previous studies in the sector report income benefits among growers (e.g. Matenga 2017; Hall et al. 2017). This research contributes to these perspectives by revealing a striking low degree of income diversification. Rather than reducing ability to withstand shocks and seasonality (Ellis 2000), limited income diversification instead drove informal local-level lending systems – *Kaloba*. Whilst increasing indebtedness among growers, *Kaloba* presented lending opportunities among local people often non-cane growers, who seemed happy to make a living on the margins of sugar value-chains (Chapter 5).

Evidence shows no claims of immediate household use of sugarcane and whether it directly enhanced *natural, physical, human or social* capital. Unlike other crops such as *Jatropha Curcas* with multiple household uses (Favretto et al. 2014), this research finds no such claims related to household use of sugarcane. Whilst financial capital from sugarcane sales is used to make improvements in physical and other types of capital, investment expansion and productive asset acquisition are confined to a few better-off farmers. As with previous studies, limited availability of human and physical capital further stifles effective exploitation of natural capital (Donavan and Poole 2014; Tobin et al. 2016). Compounding this is a lack of social organisations and networks that possibly offer wider support to local farmers.

Meanwhile institutional arrangements and huge up-front investments act as barriers to entry while investments by intermediaries make sugar-related assets less transferable to other livelihood activities. Physical infrastructure investments for sugarcane means actual access and utilisation can be exclusionary for smallholders, further hindering on-farm improvements, physical asset accumulation and opportunities for deriving livelihoods. With reference to local knowledge, capabilities and skills (human capital), evidence shows intermediaries affect the extent to which smallholders can participate in value-chain activities. Low education levels and

asymmetrical information flow in the scheme adds to this problem. Smallholder lack of necessary expert knowledge for sugarcane production affects bargaining and gains, challenging inclusion. However, whilst important, intermediaries entrench corporate power politics and shape negotiability and bargaining processes in outgrower arrangements. I have shown in Chapter 7 how corporations exploit these arrangements. One key challenge facing smallholders includes how growers can leverage their negotiation and bargaining position to call for farmer-based coordination arrangements.

The way household labour is organised, allocated and managed enables members to access wage employment but produces intra-household disputes around priorities which negatively affects productivity and again the the ability to seek wage labour. Farmers face water, land and labour constraints including low sugarcane prices, lack of transparency and limited support from management companies. Designs thus require striking a balance between resources that feed into sugarcane and those that build subsistence production. This thesis suggests clarity on local rights and farmer support is central to the achievement of livelihood goals.

More widely, in terms of vulnerability context, links, complementarities and limitations, farmers face poor rainfall patterns, floods, livestock diseases, pests and diseases, highlighting trends, hazards and elements of seasonality. Growing national and international demand for farm-lands exert land pressures for smallholders (Sitko and Chamberlin 2016). Resulting changes in local access to natural capital affects local crop production, livelihood strategies and diversity. Unpredictable, variable, low and occasionally intense rainfall patterns disrupt pre-existing farming arrangements, highlighting risks of dependency on rainfall. These were seen to catalyse sugarcane uptake among smallholders. As already highlighted, farmers face narrowing cropping patterns, reducing local food availability as well as incomes (e.g. loss of cotton) but this has been made worse by low and fluctuating cane prices. Cane price dynamics relate to wider political economy challenges of accessing secure markets (e.g. the EU) and sugar competition from countries such as Brazil which combine to give a poor market outlook in southern Africa (Dubb et al. 2016).

Clearly, alternative smallholder initiatives such as those related to subsistence play a crucial role in supporting wider livelihoods but have come under pressure due to sugarcane expansion. Chapter 6 noted how maize production including other crops parallels sugarcane cropping pattern, the latter mixing irrigation and rainfall water. The chapter also shows seasonal patterns in sugarcane coincides with subsistence production, meaning households face crucial trade-

offs of finding wage employment whilst maintaining household production. The former exacerbates labour shortages whilst the latter faces low wages and high variability in food prices. One outcome is that labour intensity and resulting shortages limit farmed areas and crop diversification as farmers prioritise sugarcane. Fragmented land-holding patterns outside schemes means most farmers cannot draw on social networks within schemes to support production or livelihoods away from schemes, thus entrenching sugarcane dependence and poor coping mechanisms. Some farmers cope by selling-off assets, forcing participants into a downward spiral of restrictive production, lower prices and poor gains.

Overall, this thesis has shown that livelihood pathways can be both a cause and an outcome of smallholder integration in contractual arrangements and value-chains. It has highlighted a crucial dimension in rural livelihoods that integration alone is insufficient in guaranteeing local wealth accumulation and ensuring sustainable livelihoods and well-being. And that despite the wider attractiveness of contractual arrangements, farmers still carry risks. A key argument is a consideration of LaSAIs and smallholder production within broader production system of crops, livestock, household investments, income and expenditure decisions (Woodhouse et al. 2017). Once again, my analysis challenges stereotypical views of smallholder initiatives as stagnant, less progressive and on the relegation battle (Collier and Dercon 2014). On the contrary, it reiterates the need to frame agrarian issues within the frames of rural land and labour dynamics and implications on social differentiation, class formation and agrarian change.

8.4.4 Agribusiness Power of Presence, Industry Practices and Claims to Sustainability

Previous studies have show how neoliberal policy developments over the past decade provide a source of power for agribusiness actors, with global governance institutions emphasising market access and increased global exports from developing countries such as those in sub-Saharan Africa (Spann 2017; Weber 2014). However, despite widespread acceptance of the deepening role of agribusinesses in agriculture, understanding the sort of power and influence they exert in national and local settings and how they shape sustainable development remains problematic. Agribusinesses shape and influence policy and institutional dynamics (Chapter 4); value-chains and smallholder participation (Chapter 5); and livelihood dynamics (Chapter 6), and is a focus of Chapter 7. Understanding agribusiness power and influence was crucial given the main reason for ‘optimism’ in the agriculture for development discourse lies in evidence of agribusiness commitment to local development and claims to sustainability. I use

this gap to reflect on my analysis of the perceptions of how an agribusiness deploys its “Power of Presence” to influence policy development and sustainability in regional and local practices, and how politics and institutional arrangements act to enhance an agribusiness influence.

Evidence presented in Chapter 7 shows that through a combination of different sorts of power interplay, an agribusiness exerts control over the governance dynamics of an agro-industry chain, whilst limiting its commitment to social and economic sustainability. Whilst state-donor-agribusiness relations were seen to dominate, possibilities of sustainable agriculture, rural and economic development are being undermined by actual agribusiness practices as exemplified in regional and local-level domains (Chapter 7). By identifying different domains at national, regional and local level through which an agribusiness power and influence is perceived, this thesis shows limits and importance of domestic institutions in framing LaSAIs as well as mediating corporate practices that will be required to enable a greater focus on sustainable agriculture and rural development. Thus, policy developments, social and political efforts; smallholder integration in value-chains; and rural livelihoods and response pathways closely relate to practices of an agribusiness, and to politics of power and the role of institutional processes.

Throughout this research, it has been shown that in Zambia, the functioning of the sugar value-chain has much to do with industry organisation as shaped by *state-donor-agribusiness* dominant relations. It also has to do with how donors and state actors deploy sugarcane to reframe national problems at the micro-level through policy support, land and water rights. This could potentially be an important finding. State institutions still retain close relationships to industry, entrenching expansion through public spending on agriculture. State-donor relations promote “*productive alliances*” between firms and smallholders through infrastructure, advertising possibilities of exploitation of land, water and labour resources for promises of jobs, national and local development. As with previous reports, this means that expressions of property rights are politically instituted in markets – and with state involvement – reshapes tenure and agrarian relations (McMichael 2012). In practice, however, firms exploit opportunities in sugarcane using two strategies. The first is through their power and influence to shape national policies such as those on public health, investment protection, labour and trade regimes. As Chapter 7 shows, that strong corporate actors negotiate sector-specific discounted minimum wages suggests state neglect of labour legislation, and is illustrative of power imbalances and influence of corporations. The second is their positioning that allows for

incorporation of smallholders in institutional arrangements that advance unequal power and bargaining relations in line with state-donor initiatives whilst ensuring their own endogenous agro-expansion. Smallholder integration into sugar value-chains relates directly to an agribusiness power and strategy as well as prevailing industry politics and institutional arrangements as outlined in chapter 5. Chapter 5 and 6 showed that one outcome has been tight corporate control over land, water, market channels and production which proves restrictive for local participation and diversified livelihoods. More widely, national politics that shape industry organisation, and firm practices act to produce near monopolies. Agribusiness domination of the market and influence over policy suggest limits to state power, affecting state-business relationships, smallholder positioning and possibilities in outgrower schemes.

Overall, donor and state actors clearly exploit power dynamics and institutional processes to promote sugarcane in relation to development objectives but efforts remain somewhat disappointing. Priorities of poverty reduction, rural and economic development seem incompatible with the way sugar has been promoted in the national context. Promotion tends to not only be narrow at the macro-level but also restrictive to wider smallholder integration at the local level, thereby producing crucial disconnects such as on claims of agriculture and rural development. Across all empirical chapters, it has been shown that outgrower schemes seem to serve as conduits not only for justifying state expenditure and reorganising sector and trade policies but also rendering land and water resources to corporate expansion – of power, politics and institutional processes.

8.5 Reflections on Integrating Local Livelihoods in Transforming Value-Chains

Each empirical chapter in this thesis draws on its own theoretical framework. Multiple theoretical frameworks were deployed in this research in order to highlight the nature and character of converging elements in LaSAIs, which are not only complex but also render such a phenomenon to multiple analysis and interpretation. Whilst the general argument for cross-scale integration of different theoretical frameworks point to increased insights on the phenomenon under investigation, maintaining the visibility of somewhat disparate theories throughout the study is not always practical, effective and straightforward. Throughout this thesis, the Global Value Chain (GVC) and the Sustainable Livelihood Approach (SLA) have been integrated and deployed to recognise power, politics and institutions shaping LaSAIs and their outcomes within the national and industry setting.

In my application, the GVC helped explore industry growth and expansion; governance and institutional structures and power dynamics in relation to production and local participation. How these shape land and labour relations and class dynamics as social differentiation drew on SLA, which was stretched to include micro-detailed analysis of household strategies and pathways. In Figure 3.1 for instance, vertical elements considered industry power relations and how they shape purchasing arrangements, and local participation. While important, these production related processes insufficiently explained resource access and availability on which smallholders draw on in their pursuit of a sustainable livelihood. In Mazabuka, smallholders mainly participate in primary production – as an avenue for market access, and income generation which also act as a conduit for wider trends, patterns (e.g. prices, quality standards, chain governance) and shocks (e.g. rainfall). Combined, these elements shape not only competitiveness of the chain but also prospects for grower participation in it. Within this view, terms and implications for smallholder integration into value-chains can only be understood from how land has been implicated in the sugarcane schemes and how these shape agrarian dynamics. While both approaches embody weaknesses, and that integrating them presents an opportunity to complement and address limitations of individual theoretical perspectives (Challies and Murray 2011), narrating these processes in a conceptually coherent fashion remains difficult.

LaSAIs as an unfolding global phenomenon driven by agribusinesses in value-chains organise and adapt within national and industry levels. This focus on industry level dynamics helps explain structures and business organisation within value-chains, providing somewhat of a *vertical* construct (Challies and Murray 2011). The application of the GVC framework in this research is clearly not global. However, this research used the core elements of the GVC to carefully tease out LaSAIs elements at different levels that helped illuminate industry structure and organisation; institutional context and chain governance dynamics as they relate to smallholder value-chain participation. The governance dynamics and institutional focus of GVCs allowed me to explore industry practices and reflect on the idea of power, politics and institutions as they relate to land and labour relations, illuminating agrarian change dynamics. The GVC processes presented value for this research by shedding light on how land has been integrated into sugar value-chains and the power dynamics and institutions shaping labour relations and value capture for local accumulation.

I realised GVC dynamics were important but insufficient in explaining how livelihoods are held together, and how land and labour relations shape processes of rural social differentiation. The horizontal focus on livelihood dynamics was lacking, despite recent efforts (Bolwig et al. 2010). Thus, the application of GVC failed to give me a sense of how land factors in livelihood strategies and aspirations in diverse ways, and distinct dynamics between land and livelihoods – a somewhat wider criticism against international political economy contemporary applications (Richardson 2013). Frameworks were needed that provided a horizontal construct, important in capturing diverse, complex, multi-dimensional portfolios of livelihoods at local level. The broader significance of the SLA is that it offered theoretical extensions into different farmer groups and how they engaged in different livelihood activities. Its strength in providing a detailed framework for analysing resources at household disposal, capabilities and choices as they exist within wider institutional, organisational and social relations added to its advantages. In isolation, however, this framework insufficiently interacts with industry, market, institutional and governance dynamics (Ellis 2000).

While politics, power and institutions as they relate to social differentiation have been central in SLA (e.g. transforming structures and processes, institutions and processes, mediating institutions and organisations, drivers to change etc.) (Scoones 2015), the SLA remained a top-down, formulaic understanding of diverse context-specific realities that shape how people attempt to sustain their lives – a broad brushstroke macroanalytical framing. However, as Pritchard et al. (2017) argue, framing and explaining top-down macro-type processes of rural social differentiation requires micro-details of strategies and decision-making for specific groups of people. These suggestions opened possibilities for the middle-ground framework, which was used to inform conceptual understanding of agrarian changes (Dorward 2009; Dorward et al. 2009). The value of this integration in this research is also that it allowed understanding of livelihoods as contingent – linked on what households are able to do, allowing a departure from instrumentalist renditions associated with SLA (Pritchard et al. 2017; Scoones 2015). The use of SLA alongside livelihood pathways analysis both in relation to industry power, politics and institutions marks a conceptual and methodological contribution to the literature on agrarian political economy and how rural livelihoods change alongside capital incursion. Previous studies discuss livelihoods in broad sense with emergent dynamics of rural social differentiation and class formation as they relate to power, politics and institutions largely ignored (Hall et al. 2017; Adams et al. 2018). The theoretical integration advanced in this PhD bridges that gap by connecting decision-making agency of households to the wider

structural contexts (Tittonell 2014; Pritchard et al. 2017). This allowed me to explore the fluidity of land and labour relations as central elements in rural livelihood transformation, which relates to diverse livelihood circumstances, aspirations and strategies, that cannot be appreciated from the ‘macroanalytical’ SLA frameworks.

However, collecting information and building a sense of livelihood strategies and pathways relied on social groups defined by focus group participants. Evidence that farmers were increasingly building livelihoods away from sugarcane schemes means that focus group participants might not always have full knowledge of assets, livelihood strategies and hence social categories of scheme members. Compounding this was the somewhat narrow and restrictive schema proposed by Dorward, which entailed folding households in three categories of *hanging in, stepping up and stepping out* as opposed to allowing flexibility of local definitions of livelihood groups and categories. As Pritchard et al. (2017) argues, Dorward’s schematic illustration fails to account for the diversity of livelihood starting points, and the multidimensionality of livelihood pathways that I identified from my fieldwork. In extension, how and why certain households devise upward livelihood trajectories while others remain or descend into more poverty remains problematic. Departing from the landed households that Dorward considers, I saw a need to introduce new categories such as those related to the landless and those that entered into labour market agreements with the better-off households as local elites. Some family members worked sugarcane plots whilst others within the same household engaged in the non-farm economy, what Pritchard labels ‘one-foot sideways.’ In its application, whilst the micro middle ground offered me an opportunity to see what sort of activities smallholders enter into, it faced challenges of how to fully appreciate the messy realities of household livelihood decision-making – why they do what they do – and how they leverage not only land-based activities but also non-farm activities – capturing the complexity of land-labour relations. Efforts are now emerging to expand Dorward’s conceptualisation to incorporate new categories such as ‘dropping out’ to reflect backward and muddling households under distress (see Mushongah 2009). In such situations, it was clear that the effectiveness of household definitions and categories as they relate to providing insights on household assets and pathways may have been reduced. One way to increase effectiveness of such categories may have been through a procedural confirmatory process that combined both focus group categories and individual household asset profile (see Pritchard et al. 2017 who have used asset profiles). More widely, some of these challenges relate to the need for longitudinal surveys that can capture household conditions, activities, land and labour relations overtime.

For poor countries advancing LaSAIs and commercialisation of agriculture such as Zambia, sustainable smallholder integration in value-chain in move to enhance value capture in local spaces must aim to support locally diversified livelihoods. Drawing from my study, sugarcane expansion among smallholders within neoliberal policy strategies that are outward looking can mean struggles for local participation and across land and labour relations. This is particularly problematic for commodities such as sugarcane that have a “large-scale bias” but are foisted as smallholder outgrower schemes. Attention must be paid to processes of rural social differentiation and what this means for agrarian change. Thus, any meaningful value capture and sustainable inclusion will require policy interventions that influence national and industry level politics, power and institutions in support of smallholders. Some of these relate to support for locally-driven smallholder initiatives and policy discourses for agriculture for development. In making such a claim am aware that there is nothing inherently egalitarian about locally-driven smallholder initiatives to raise agricultural productivity, and guarantee rural transformation, which are likely to face agribusiness power of presence that limit policy effectiveness and precipitate socio-economic differentiation (Woodhouse et al. 2016). However, the centrality of this thesis points to the need to understand the way LaSAIs and value-chain development plays out at macro level in order to enrich debate at meso and micro levels. Central to this conceptualisation is how power, politics and institutions intersect within these processes. I believe this is what this thesis is all about.

Chapter 9 Conclusions

The discussion presented above reflects on the findings from the four empirical chapters and draws lessons from the value of using multiple frameworks. The thesis as a whole engages with a variety of narratives of LaSAIs and value-chains, which are shaped in power, politics and institutional dynamics as underpinning processes. These narratives are clearly contested at different levels, and by different actors. A key challenges in LaSAIs and value-chain expansion is how to integrate multiple perspectives in a conceptually coherent manner and to draw lessons that can reflect local narratives, aspirations and realities, whilst being open to multiple possibilities and alternatives. This thesis has been grounded in an interdisciplinary case study strategy that integrates the GVC framework and the Sustainable Livelihood Approach (SLA) across multiple levels to explore the extent to which LaSAIs impact local development and rural livelihoods among sugar growers in Zambia. This thesis has shown that addressing challenges of local development and livelihoods depends on forming judgements about national experiences of LaSAIs. While there is a LaSAI visibility and drive in international policy, meeting national and local development objectives depend on the willingness of policy actors to pay systematic attention to investigating diverse initiatives and needs among smallholders, and responding to what is then revealed from their experiences and perspectives about LaSAIs, value-chain integration, livelihoods and poverty reduction.

The research presented demonstrates how multiple frameworks can be integrated as means to explore how LaSAIs play out at different levels and the value of such compatibilities. Methodologically, the mixed method research design allowed flexibility in studying diverse issues across national, industry and local levels and their interconnections. By taking a multi-level-framework approach, this research offers new insights not only in the different narratives and realities around LaSAIs, but also how difficult it is to study such a phenomenon from a single perspective. This has implications for addressing opportunities and challenges associated with LaSAIs. Studies such as this that can unpack realities at different levels and from different perspectives and set about addressing linkages between them are valuable in providing a basis from which to comprehensively understand and explore LaSAIs.

LaSAIs sustain a longstanding international development vision that capital investments in agriculture can drive the agenda for development and poverty reduction in poor countries such as those in sub-Saharan Africa (World Bank 2008; 2011; 2017). International institutions and

development practitioners encourage more and better LaSAIs (World Bank 2011), conflating foreign corporate expansion and national and local development. There can be no doubt that LaSAIs do offer opportunities for smallholders to enhance incomes and improve their livelihoods. This thesis has highlighted the dynamics of how LaSAIs play out within the national context, and examined possibilities and barriers at different levels. This is not an easy feat, especially in an environment where taking a position against foreign LaSAIs is almost heretical with different actors drawing selectively on development debates as they relate to agricultural developments in sub-Saharan Africa (World Bank 2011; 2007). Rather than take reports and statistics about the success of LaSAIs on trust, any prospective optimism at the heart of LaSAIs should account for country-specific dynamics of measuring what foreign capital really offers and then the experiences of local production, development and deprivation that arise alongside it.

Researchers in contemporary land-grabbing debates are called to engage the roles played by national actors. However, there is need to reflect critically on the sort of vision that LaSAIs implant in host countries appreciating the aspect that claims of success might implicitly conceal the unsavoury perspectives of LaSAIs and create false impressions about the nature of agriculture and development (Peters 2013). Some of these efforts point to the need to account for power, politics and institutional processes, and how they act to facilitate or constrain LaSAIs. Efforts are still needed on how LaSAIs build local visions or indeed destroy them, including how to better implement foreign investments from a national perspective. This research exposed crucial mismatches between policy possibilities at national level and livelihood expectations at local level. It shows how the policy effectiveness and possibilities of agriculture and rural development are limited by an agribusiness power of presence, shaping discourses, governance and institutional dynamics, and affecting resource access for local livelihoods.

Knowledge generated from this study can have general national and regional application. This can start by avoiding the danger of framing LaSAIs in a way that defeats opposing alternative explanations of lived local experiences. How can one be against 'FDI' in regions that have "abundant," empty," under-utilised," "marginal" land and natural resources in investment starved sectors is the frequently asked question. This thesis in no way attempts to paint LaSAIs with one broad brush of failure. Rather it advances an idea that any claims of success associated with LaSAIs requires processes of verification within national contexts and critical

identification of gains and their direction of travel. Conceptualising LaSAIs as sites of politics, underpinned by diverse power dynamics (fluidly as they might be) and institutional processes, this research has shown that outcomes of LaSAIs are complex and never straightforward.

9.1 Key Knowledge Contributions

In this thesis, contributions to the evidence and knowledge of the way LaSAIs play out and the way they impact development aspects at different levels have been made in four ways.

- The thesis provided empirical evidence on the national governance dynamics in policy and institutional processes within national politics that have insufficiently been explored in the LaSAI literature. A focus on possibilities for LaSAIs alongside competing state authorities, legal and bureaucratic competences and capacity is potentially an important contribution. This contribution points to the need for improved legal and bureaucratic competences and capacity lacking in the way LaSAIs and resources are administered across sub-Saharan Africa.
- The research has also provided detailed perspectives on how industry relations and local factors facilitate as well as limit smallholder participation in sugar value-chains. This thesis emphasised the centrality of agribusiness-state-donor relations in shaping power relations, bargaining and negotiability processes, and most importantly local participation. In conceptualising value-chains in terms of power dynamics and institutional processes, and that integration does not always improve livelihoods, and that exclusion does not always signify a problem is potentially another important knowledge contribution.
- This thesis emphasised the importance of causes and consequences of differences in the evolution, operation and integration of smallholder outgrower schemes in shaping livelihood outcomes. A crucial insight has been that smallholder outgrower schemes that link participants and other livelihood assets and options are effective in advancing progressive labour relations, promotion of diversified and sustainable livelihoods. However, livelihood outcomes, industry processes shaping smallholder participation in value-chains, national policy and governance dynamics need to consider power and institutional processes as underpinning elements and how these shape agrarian changes.
- Finally, this thesis provided crucial insights into how dominant agribusinesses exercise their power in different domains to limit smallholder participation whilst exploiting industry and national level domains to their advantage. Across sub-Saharan Africa, LaSAIs can be considered as ‘new actors’ in agriculture that exert new power dynamics

and relations for land and water resources. To understand the contributions of a LaSAI fully, it is necessary to first understand an agribusiness influence at different levels and how these play out to shape commitments to rural development and sustainability. This study provided insights on this front.

9.2 Policy Implications

The four empirical chapters have shown a number of opportunities for addressing challenges and improving outcomes of LaSAIs. A number of policy implications are highlighted here.

- Chapter 4 highlighted problems arising from highly fragmented national policy and institutions, some of which relate to lack of coordination among national stakeholders. There is scope for donor and government agencies to cooperate in asking how various actors within the national context can enhance the implementation of LaSAIs. Here the mandates, overlaps and responsibilities could be made clear and easy to follow for state institutions, including crucial decisions surrounding natural and donor resources. Clarifying mandates and authorities can help deal with the top-down nature of LaSAIs governance as well as enhance collaboration and coordination of LaSAIs at different levels. The role of the Industrial Development Corporation under the Ministry of Finance can be strengthened for this purpose and in order to create an enabling environment for the formulation and enforcement of progressive policies for successful implementation of LaSAIs.
- Chapter 5 examined industry dynamics and factors shaping smallholder participation in value-chains. The chapter revealed agribusiness expansion and industry structure can limit smallholder integration into commodity value-chains, affecting value capture at local level. Whilst smallholders can be involved in LaSAIs, there are not so many participants as one might expect or hope for given the narratives on agriculture for development, and many of those involved have limited benefits. To realise the benefits of LaSAIs, national policy developments must clearly outline the roles and expectations of LaSAIs. A blended agricultural strategy that clearly outlines the roles of smallholders in the emerging agro-vision as opposed to presenting them as part of corporate strategies – often of corporate social responsibility – is important. This will ensure that smallholders become part of the agriculture and development agenda, an element that could possibly have greater impacts at the local level. Donor and government support in local spaces should be encouraged to build good governance in farmer associations and unions, and

enhance wider consultations and strengthen capacity in farmer organisations which can then ensure smallholder groups fulfil their roles within a supportive framework, and maximise market imperatives.

- Chapter 6 addressed opportunities for rural livelihoods, and highlighted the need for stakeholders to enhance resource access among smallholders for livelihood diversification (e.g. food security, livestock production) whilst ensuring sugarcane production. This two-way strategy should ask what sort of coordination schemes deliver on economic efficiency whilst ensuring greater socio-economic development and wider transformative changes in local communities. For instance, enhancing resource access as well as preservation of parcels of land for non-sugarcane activities could greatly facilitate livelihood diversification and improve rural welfare. Outgrower schemes that not only preserve parcels of land for non-sugarcane activities and permit household production of value-chain commodities should be encouraged in order to build diversified livelihoods and improve value capture by smallholders. The role of agribusinesses, state and donor agencies as well as NGO support to local livelihoods through market linkages (e.g. for livestock and crop production) should be strengthened for this purpose. This can also include establishing social organisations which smallholders can draw on in support of their livelihoods.
- Chapter 7 highlighted how agribusiness power shapes institutional processes and outgrower arrangements, which affects the extent to which smallholders can benefit. Within this perspective, labour relations are crucial to rural livelihoods and ability for smallholders to accumulate. Workers unions and NGO actors should be encouraged in order to look into contractual arrangements, working conditions in outgrower schemes in general, and across gender dynamics. This can help address inequalities and exploitative outgrower arrangements.

9.3 Future Research

Empirical data provided in this thesis assists in the advancement of knowledge about how a LaSAI can contribute to regional, national and local development in Zambia. However, further understanding of LaSAI processes and potential outcomes within the agriculture for development discourse can greatly benefit from the following identified gaps:

- Determination of the role of smallholders within evolving LaSAIs and value-chains and how their promotion can be harmonised across other sectors. This is important in defining a clear strategy for smallholder and rural development. However, attention

must be paid to the materiality of commodity crops, e.g. sugarcane which limit transferrability of some practices to other commodities.

- Establishing how the promotion of LaSAIs and value-chains can be made alongside improvements in resource governance and smallholder participation. Finding that fine balance can make a difference between successful implementation of LaSAIs or not.
- Working to develop frameworks for supporting smallholder participation in value-chains. The prospects for agriculture and rural development in many countries in sub-Saharan Africa either for employment, promotion of diversified and sustainable livelihoods or for catalysing local economies through linkages and multiplier effects reside very centrally in the models of agricultural commercialisation. Which models delivers what outcomes and how they, for instance, shape labour regimes, land relations, livelihoods and local economies is a key question for the future. Some of these elements have been emphasised in this research.
- Determining how LaSAIs can be made to account for social-economic and cultural aspects in rural geographies is also important. Frameworks for guiding LaSAIs have tended to take a global perspective and adaptation in host nations remains challenging for various reasons. How investments can be made to be responsible across many socio-economic and cultural dimensions remains crucial for sustainability.
- LaSAIs and value chain expansion are clearly altering gender norms and relations such as those around patterns of work activities among household members. This research has shown that women are now breaking away particularly in Magobbo to work on the platforms. Efforts are needed into how this shapes household power dynamics and implications for upward social mobility.

References

- Adams, T., Gerber, J.D., Amacker, M., and Haller, T. (2018). Who gains from contract farming? Dependencies, power relations, and institutional change. *Journal of Peasant Studies*, 2018.
- Achten, W.M.J., Maes, W.H., Aerts, R., Verchot, L., Trabucco, A., Mathijs, E., Singh, V.P., Muys, B. (2010). *Jatropha: from global hype to local opportunity*. *Journ.Arid Envir.*, Vol. 74:164-165.
- ActionAid (2011). *Sweet nothings: the human cost of a British sugar giant avoiding taxes in Southern Africa*. ActionAid, Lusaka.
- Africa Water Facility (2016). *Up-scaling Smallholder Irrigation*. Appraisal Report, Lusaka.
- Aha, B., and Ayiteyb, J.Z. (2017). Biofuels and the hazards of land grabbing: tenure (in)security and indigenous farmers' investment decisions in Ghana. *Land Use Policy*, Vol.60(2017):48-59.
- Ahlerup, P. and Tengstam, S. (2015). *Do the land-poor gain from agricultural investments? Empirical evidence from Zambia using panel data*. Working Paper 624, Gothenburg University.
- Ahmed, N., Allison, E.H., and Muir, J.F. (2008). Using the Sustainable Livelihoods Framework to Identify Constraints and Opportunities to the Development of Freshwater Prawn Farming in Southwest Bangladesh. *Journal of the World Aquaculture Society*, Vol.39 (5).
- Akram-Lodhi, H. (2013). *Hungry for change: Farmers, food justice and the agrarian question*. Winnipeg:Fernwood.
- Alden Wily, L. (2012). Looking back to see forward: The legal niceties of land theft in land rushes *Journal of Peasant Studies*, Vol.39(2012):751-75.
- Alden Wily, L. (2012). *Reviewing the Fate of Customary Tenure in Africa*. Rights and Resources Institute, Washington, D.C.
- Alden Wily, L. (2013). *Enclosure revisited Putting the global land rush in historical perspective*. In Allan, T., Keulertz, M., Sojamo, S., and Warner, J. (2013). *Handbook of Land and Water Grabs in Africa Foreign direct investment and food and water security*. Routledge, London/New York.

- Amanor, K.S. (2012). Global resource grabs, agribusiness concentration and the smallholder: two West African case studies. *Journal of Peasant Studies*, Vol.39(2012):731-749.
- Amanor, K.S. (2012). Land Governance in Africa: How Historical Context Has Shaped Key Contemporary Issues Relating to Policy and Land. International Land Coalition, Rome.
- Andriamanalina, B.S and Burnod, P. (2014). Existing and potential tools to regulate land access for investors in Madagascar ‘2014 World Bank Conference on Land and Poverty’ Washington DC, March 24-27.
- Anseeuw, W., Boche M., Breu T., Giger M., Lay J., Messerli P., Nolte K. (2012). Transnational Land Deals for Agriculture in the Global South: Analytical report on the Land Matrix data base. Land Matrix.
- Arezki, R., Deininger, K., and Selod, H. (2013). What drivers the global “land rush”? *World Bank Economic Review*, Vol.29(2):207-233.
- Arezki, R.,K. Deininger and Selod, H. (2011). What drives the global land rush? Working Paper 11/251, Washington DC.
- Ashraf, N., X. Giné and D. Karlan (2009). “Finding Missing Markets (and a Disturbing Epilogue): Evidence from an Export Crop Adoption and Marketing Intervention in Kenya. “*American Journal of Agri.Econ.*, Vol.91(4):973-990.
- Atela, J.O., C.H., Quinn, Minang, P.A., Duguma, L.A.,and Houdet, J.A. (2016). Implementing REDD+ at the national level: Stakeholder engagement and policy coherences between REDD+ rules and Kenya's sectoral policies. *Forest Policy and Economics*, Vol.65(2016):37-46.
- AUC-ECA-AfDB Consortium (2010). Framework and Guidelines on Land Policy in Africa: Land Policy in Africa: A Framework to Strengthen Land Rights, Enhance Productivity and Secure Livelihoods, Ethiopia.
- Babbie, E. (2005). *The basics of social research*. Thomson Wadsworth, Toronto.
- Babbie, E. and Mouton, J. (2001). *The practice of social research*. Oxford University press, Cape Town.
- Baglioni, E. and Gibbon, P. (2013). Land Grabbing, Large- and Small-scale Farming: what can evidence and policy from 20th century Africa contribute to the debate? *Third World Quarterly*, Vol.34(9):1558-1581.

- Banaji, J. (1990). Illusions about the peasantry: Karl Kautsky and the agrarian question. *Journal of Peasant Studies*, Vol. 17 (2):288–307.
- Bair, J. (2005). Global capitalism and commodity chains: looking back, going forward. *Competition and change*, Vol.9(2):153-180.
- Barrentos, S. (2013). Corporate practices in global production networks: A socially contested terrain. *Geoforum*, Vol.44(2013):44-51.
- Barret, C.B, Bachke, M., Bellemare, M.F., Michelson, H.C., Narayanan, S., and Walker, T.S. (2012). Smallholder Participation in Contract Farming: Comparative Evidence from Five Countries. *World Development*, Vol.40 (4):715-730.
- Barrett, C. (2013). Food and Consequences: Food Security and its Implications for Socio-political Stability. In Barrett, C. (Eds.). *Food Security and Socio-political Stability*, (pp1-34). Oxford University Press, New York.
- Barrett, C.B. (2008). Smallholder market participation: Concepts and evidence from eastern and southern Africa. *Food Policy*, Vol.33:299-317.
- Bazeley, P. 2007. *Qualitative Data Analysis with NVivo*. Sage, London.
- Bebbington A. (1999). Capitals and capabilities: a framework for analyzing peasant viability, rural livelihoods and poverty. *World Development*, Vol.27(12):2021-44.
- Behrman et al. (2012). The gender implications of large-scale land deals. *Journal of Peasant Studies*, Vol.39(1):49-79.
- Bellemare, M.F. (2012). As You Sow, So Shall You Reap: The Welfare Impacts of Contract Farming. *World Development*, Vol.40(2-12):1418-1434.
- Bennett, N.J. (2016). Using perceptions as evidence to improve conservation and environmental management. *Conservation Biology*, Vol.30(3):582-592.
- Bernstein H (2006) Is there an agrarian question in the 21st Century? *Canadian Journal of Development Studies*, Vol.27 (4):449–60.
- Bernstein, H. (2009). VI Lenin and AV Chayanov: looking back, looking forward. *Journal of Peasant Studies*, Vol.36(1):55–81.
- Bernstein, H. (2010). *Class Dynamics of Agrarian Change*. Fernwood, Halifax.
- Binns, T., HILL, T. and Nel, E. (1997). Learning from the people: participatory rural appraisal, geography and rural development in the ‘new ‘South Africa. *Applied Geography* Vol.17(1997):1-9.

- Birthal, P.S., Joshi, P.K., Gulati, A. (2005). Vertical Coordination in High-Value Food Commodities: Implications for Smallholders. IFPRI Discussion Paper 85. IFPRI, Washington DC.
- Bloomfield, M.J. (2012). Is forest certification a hegemonic force? The FSC and its challengers. *Journal of Environment and Development*, Vol.21(4):391-413.
- Boamah, F., 2014. How and why chiefs formalise land use in recent times: the politics of land dispossession through biofuels investments in Ghana. *Rev. African Political Economy*, Vol.41 (141):406–423.
- Bolwig, et al. (2009). The Economics of Smallholder Organic Contract Farming in Tropical Africa. *World Development* Vol. 37(6):1094-1104.
- Bolwig, S. (2008). Integrating poverty, gender and environmental concerns into value chain analysis: a conceptual framework and lessons for action research. DIIS Working Paper 2008/16, Danish Institute for International Studies, Copenhagen.
- Bolwig, S., Gibbon, P., & Jones, S. (2009). The economics of organic contract farming in tropical Africa. *World Development*, Vol.37(6):1094-1104.
- Bolwig, S., Ponte, S., Du Toit, A., Riisgaard, L., and Halberg, N. (2010). Integrating Poverty and Environmental Concerns into Value-Chain Analysis: A Conceptual Framework. *Development Review*, Vol.28(2):173-194.
- Borras Jr, S.M. and Franco, J. (2013). Global land grabbing and political reactions ‘From Below’ *Third World Quarterly*, Vol.34(9):1723-1747.
- Borras, S. And Franco J. (2010). ‘From Threat to Opportunity? Problems with the Idea of a ‘Code of Conduct’ for Land-Grabbing’ *Yale Human Rights and Development Law Journal*, Vol.13:507-523.
- Borras, S., J.C. Franco and Chunyu, W. (2013). The Challenge of Global Governance of Land Grabbing: Changing International Agricultural Context and Competing Political Views and Strategies. *Globalizations*, Vol.10(2013):161-179.
- Borras, S., R., Hall, Scoones, I., B., White, and Wolford, W. (2011). Towards a better understanding of global land grabbing: an editorial introduction. *Journal of Peasant Studies*, Vol. 38(2011):209-216.
- Borras, S.M. and Franco, J.C. (2012). Global Land Grabbing and Trajectories of Agrarian Change: A Preliminary Analysis. *Journal of Agrarian Change*, Vol.12(1):34-59.

- Borras, S.M., Fig, D., and Suárez, S.M. (2011). The politics of agrofuels and mega-land and water deals: insights from the ProCana case, Mozambique. *Review of African Political Economy*, Vol.38(128):215-234.
- Borras, S.M., Franco, J.C., Isakson, S.R., Levidow, L., and Vervest, P. (2016). The rise of flex crops and commodities: implications for research. *Journal of Peasant Studies*, Vol.43(1):93-115.
- Bottazzi, P., A., Goguen, and Rist, S. (2016). Conflicts of customary land tenure in rural Africa: is large-scale land acquisition a driver of ‘institutional innovation’? *Journal of Peasant Studies*, Vol.43(5):971-988.
- Bourai, V.A., Bahadur, S.R., Panwa, K.M., and Mishra, K.M. (1997). Props for research PLA Notes 28: 91-92, London: IIED.
- Bowen, G.A. (2006). Grounded theory and sensitising concepts. *International Journal for Qualitative Methods*, Vol.5(3).
- Bowen, G.A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research*, Vol. 9(2009):27-40.
- Braun, von, J., Meinzen-Dick, R. (2009). 'Land Grabbing' by Foreign Investors in Developing Countries: Risks and Opportunities. IFPRI Policy Brief 13, Washington DC.
- Briones, R. (2015). Small farmers in high-value chains: binding or relaxing constraints to inclusive growth? *World Development*, Vol.72(2015):43-52.
- Brown, W. (2000) Restructuring north-south relations: ACP-EU development co-operation in a liberal international order. *Review of African Political Economy*, Vol.27(85):367-383.
- Brüntrup, M., Scheumann, W., Berger, A., Christmann, L., and Brandi, C. (2014). What Can be Expected from International Frameworks to Regulate Large-Scale Land and Water Acquisitions in Sub-Saharan Africa? *The Law and Development Review*, Vol.7(2):433-471.
- Bryceson, D.F. (2002). Multiplex livelihoods in rural Africa: recasting the terms and conditions of gainful employment. *Journal of Modern African Studies*, Vol.40 (1):1–28.
- Bryceson, D. F., and V. Jamal, eds. (1997). *Farewell to Farms: De-agrarianisation and Employment in Africa*. Aldershot, Ashgate.

- Bryceson, D.F. (1996). Deagrarianization and rural employment in sub-Saharan Africa: A sectoral perspective. *World Development*, Vol.24 (1):97–111.
- Bryman, A. 2004. *Social Research Methods*. Oxford University Press, Oxford.
- Bull, M. and Ridley-Duff, R. (2018). Towards an appreciation of ethics in social enterprise business models. *Journal of Business Ethics*.
- Burnod, P., M., Gingembre, and Ratsialonana, R.A. (2013). Competition over authority and access: international land deals in Madagascar. *Development and Change*, Vol.44(2):357-379.
- Bush, R., Bujra, J., and Littlejohn, G. (2011). The accumulation of dispossession, *Review of African Political Economy*, Vol.38(128):187-192.
- Cash, D. W., W. C. Clark, F. Alcock, N. M. Dickson, N. Eckley, D. Guston, J. Jäger, and R. Mitchell. (2003). Knowledge systems for sustainable development. *Proceedings of the National Academy of Sciences, USA*.
- Cash, D.W., Adger, N., Berkes, F., Garden, P., Lebel, L., Olsson, P., Pritchard, L., and Young, O. (2006). Scale and Cross-Scale Dynamics: Governance and Information in a Multilevel. *World.Ecol.&Soci.*, Vol.11(2):8.
- Cashore, B.W., Auld, G., and Newsom, D. (2004). *Governing Through Markets: Forest Certification and the Emergence of Non-State Authority*. Yale University Press.
- Central Statistics Office (2010). *Zambia-Population and Housing Census 2010*. Lusaka.
- Central Statistics Office (2014). *Gross Domestic Product: 2010 benchmark estimates*. Lusaka: Central Statistics Office. Living condition and monitoring branch. Lusaka.
- Challies, E.R.T (2010). *Agri-food globalisation and rural transformation in Chile: smallholder livelihoods in the global value chain for raspberries*. A thesis submitted to Victoria University of Wellington in fulfilment of the requirements for the degree of Doctor of Philosophy in Geography. Victoria University of Wellington, UK.
- Challies, E.R.T, and Murray, W.E (2011). The interaction of Global Value Chains and Rural Livelihoods: the case of smallholder Raspberry growers in Chile. *Journal of Agrarian Change*, Vol.11(1):29-59.
- Chambers, R. (1995). Poverty and livelihoods: whose reality counts? *Environment and Urbanisation*, Vol.7(1):173-204.
- Chambers, R. (1997). *Whose reality counts? Putting the first last*. Intermediate Technology Publications, London.

- Chambers, R. and Conway, G. (1992). Sustainable rural livelihoods: Practical concepts for the 21st century. Discussion Paper 296, IDS.
- Chinsinga, B. (2017). The Green Belt Initiative, Politics and Sugar Production in Malawi, *Journal of Southern African Studies*, Vol.43(3):501-515.
- Chisanga, B., Meyer, F.H., Winter-Nelson, A., and Sitko, N.J. (2014). Does the Current Sugar Market Structure Benefit Consumers and Sugarcane Growers? Working Paper 89, IAPRI, Lusaka.
- Chitonge, H., Mfunne, O., Kafwamba, D., and Kajoba, G. (2017). Hybrid land markets: monetarised customary land transactions in Zambia. *Canadian Journal of African Studies*, Vol.51(2017):123-143.
- Christiaensen, L., Demery, L., Kuhl, J. (2011). The (evolving) role of agriculture in poverty reduction-an empirical perspective. *Journal of Development Economics*, Vol.96(2011):239–254.
- Chu, J. M. (2014). *Agricultural Foreign Direct Investment in Zambia: Opportunities and Challenges for Poverty Reduction and Development: An Overview of Trends and Policies*. Oxfam.
- Chu, J.M. (2013). Creating a Zambian Breadbasket 'Land grabs' and foreign investments in agriculture in Mkushi District, Zambia. LDPI Working Paper 33.
- Clapp, J. and Scrinis, G. (2017). Big food, nutritionism and corporate power. *Globalisation*, Vol.14(4):578-595.
- Cohen, A. (2013). Supermarkets in India: struggles over the organization of agricultural markets and food supply chains. *Univ. Miami Law Review*, Vol.68(19):19-86.
- Cohen, N. and Arieli, T. (2011). Field research in conflict environments: Methodological challenges and snowball sampling. *Journal of Peace Research*, Vol 48(4).
- Cole F.L (1988). Content analysis: process and application. *Clinical Nurse Specialist*, Vol.2:53-57.
- Collier, P. and Dercon, S. (2013). African Agriculture in 50 Years: Smallholders in a Rapidly Changing World? *World Development*, Vol.63:92-101.

- Commission of the European Communities (2012). “Aid for Trade” webpage of Trade DG. <http://ec.europa.eu/trade/wider-agenda/development/aid-for-trade/>. Accessed: 08/08/2017.
- Cornwall, A. (2002). Making spaces, changing places: situating participation in development. IDS Working Paper 170, Brighton.
- Corsi, S., Marchisio, L.V., and Orsi, L. (2017). Connecting smallholder farmers to local markets: Drivers of collective action, land tenure and food security in East Chad. *Land Use Policy*, Vol.68(2017):39-47.
- Cotula, L. (2012). The international political economy of the global land rush: a critical appraisal of trends, scale, geography and drivers. *Journal of Peasant Studies*, Vol.39(3-4):649-680.
- Cotula, L. and Vermeulen, S. (2011). Contexts and procedures for farmland acquisitions in Africa: What outcomes for local people? *Development*, Vol. 54(2011):40-48.
- Cotula, L. Vermeulen, S., Leonard, R., and Keeley, J. (2009). Land grab or development opportunity? Agricultural investment and international land deals in Africa. FAO/IFAD/IIED. Rome/London.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Dalgaard et al. (2007). Danish Pork Production: An Environmental Assessment. *DJF Animal Science*, Vol. 82:1-34.
- Daly, H. E. (1991). Elements of environmental macroeconomics. In R. Costanza (Ed.), *Ecological economics: The science and management of sustainability*. Workshop 24-26 May 1990:32-46. Columbia University Press, New York.
- Daly, H. E. (1996). *Beyond growth: The economics of sustainable environment*. Boston, Mass: Beacon Press.
- Davis et al. (2014). Land grabbing: a preliminary quantification of economic impacts on rural livelihoods. *Population Environment*, Vol.36:180-192.
- Davis, K.F., D’Odorico, P., and Rulli, M.C. (2014). Land grabbing: a preliminary quantification of economic impacts on rural livelihoods. *Population Environment*, Vol.36:180-192.
- De Schutter, O. (2011). How not to think of land-grabbing: Three critiques of large-scale investments in farmland. *Journal of Peasant Studies*, Vol.38:249-79.

- Deininger, K. (2011). Challenges posed by the new wave of farmland investment. *Journal of Peasant Studies*, Vol.38:217-247.
- Deininger, K. (2013). The Global Land Rush. In Barrett, C. (Eds.). *Food Security and Socio-political Stability*, (pp95-119). Oxford University Press, New York.
- Deininger, K. and Byerlee, D. (2012). The Rise of Large Farms in Land Abundant Countries: Do They Have a Future? *World Development*, Vol.40:701-714.
- Denscombe, M. (2010). *The good research guide: for small-scale social research projects*. Open University Press.
- Dessy, S., Gohou, G., and Vencatachellum, D. (2012). Foreign Direct Investments in Africa's Farmlands: Threat or Opportunity for Local Populations? Working Paper:12-03, CIRPEE
- Di Matteo, F., Otsuki, K., and Schonveld, G. (2016). Soyabean expansion in Mozambique: exploring the inclusiveness and viability of soya business models as alternative to the land grabs. *The Public Sphere*, 2016:60-86.
- Donovan, J. and Poole, N. (2013). Asset building in response to value chain development: lessons from taro producers in Nicaragua. *International Journal of Agricultural Sustainability*, Vol.11:23-37.
- Dorward, A., Anderson, S., Bernal, Y.N., Vera, E.S., Rushton, J., Pattison, J., and Paz, R., 2009. Hanging in, stepping up and stepping out: livelihood aspirations and strategies of the poor. *Development Practice*, Vol.9(2):240-247.
- Driscoll, D.L., Appiah-Yeboah, A., Salib, P., and Rupert, D.J. (2007). Merging qualitative and quantitative data in mixed methods research: how to and why not. *Ecological and Environmental Anthropology*, Paper 18.
- Dubb, A. (2015). Dynamics of decline in small-scale sugarcane production in South Africa: Evidence from two 'rural' wards in the Umfolozi region. *Land Use Policy*, Vol.48(2015):362-376.
- Dubb, A. (2016). Interrogating the Logic of Accumulation in the Sugar Sector in Southern Africa. *Journal of Southern African Studies*, 2016.
- Dubb, A., Scoones, I. and Woodhouse, P. (2016). The Political Economy of Sugar in Southern Africa – Introduction. *Journal of Southern African Studies*, 2016.

- Dufey, A., Grieg-Gran, M., and Ward, H. (2008). *Responsible Enterprise, Foreign Direct Investment and Investment Promotion: Key Issues in Attracting Investment for Sustainable Development*. IIED, London.
- Dyer, J.C., Stringer, L.C., and Dougill, A.J. (2012). *Jatropha curcas: Sowing local seeds of success in Malawi? In response to Achten et al. (2010)*. *Journal of Arid Environments*, Vol.79(2012):107-110.
- Edelman, M. (2013). *Messy hectares: questions about the epistemology of land grabbing data*, *Journal of Peasant Studies*, Vol.40(3):485-501.
- Eisenhardt, K. (1989). *Building theories from case study research*. *Academy of Management Review*, Vol.14(4):532-550.
- Elgert, L. (2016). *'More soy on fewer farms' in Paraguay: challenging neoliberal agriculture's claims of sustainability*. *Journal of Peasant Studies*, Vol.43(2):537-561.
- Ellis, F. (1998). *Household strategies and rural livelihood diversification*. *Development Studies*, Vol.35(1):1-38.
- Ellis, F. (2000). *The determinants of rural livelihood diversification in developing countries*. *Journal of Agricultural Economics*, Vol.51(2):289-302.
- Ellis, F., 2000. *Rural Livelihoods and Diversity in Developing Countries*, Oxford University Press, Oxford.
- Ellis, K., Singh, R., and Musonda, C. (2010). *Assessing the Economic Impact of Competition: Findings from Zambia*. Overseas Development Institute, UK.
- Elo, S., and Kyngas, H (2008). *The qualitative content analysis process*. *Journal of Advanced Nursing*, Vol.62(1):107-115.
- F.A.O., 2012. *Trends and Impacts of Foreign Investment in Developing Country Agriculture. Evidence from case studies*. Rome.
- Fairbairn, M. (2013). *Indirect Dispossession: Domestic Power Imbalances and Foreign Access to Land in Mozambique*. *Development and Change*, Vol.44(2):335-356.
- Fan, S. and Saukar, A. (2006). *Public Spending in Development Countries: Trends, Determination and Impact*. IFPRI, Washington, D.C.
- FAO (2012). *Trends and Impacts of Foreign Investment in Developing Country Agriculture. Evidence from case studies*. FAO, Rome.

- FAO (2010). Agricultural investments funds for developing countries. FAO, Rome.
- FAO (2009). From Land Grab to Win-Win-Seizing the Opportunities of International Investments in Agriculture (No. 4EN). Food and Agriculture Organization of the United Nations (FAO).
- Favretto N., Stringer, L.C, Dougill, A.J. (2014). Unpacking livelihood challenges and opportunities in energy crop cultivation: perspectives on *Jatropha curcas* projects in Mali. *Geographical Journal*, Vol.180(4):365-376.
- Faye, P. (2016). Choice and power: Resistance to technical domination in Senegal's forest decentralization. *Forest Policy and Economics*, Vol.60:19-26.
- Fukinish, T. (2014). Delivering sustainable growth in Africa: African farmers and firms in a changing world. Palgrave Macmillan.
- Gaventa, J. (2006). Finding the spaces for change: a power analysis. *IDS Bulletin*, Vol.37(6).
- Gereffi, G. (1994). The Organisation of Buyer-Driven Global Commodity Chains: How US Retailers Shape Overseas Production networks. In *Commodity Chains and Global Capitalism*, eds. G. Gereffi and M. Korzeniewicz. Westport, CT: Praeger.
- Gereffi, G. (1996). Global commodity chains: new forms of coordination and control among nations and firms in international industries. *Competition and Change*, Vol.1(4):427-439.
- German et al. (2013). Contemporary process of large-scale land acquisition in Sub-Saharan Africa: legal deficiency or elite capture of the rule of law. *World Development*, Vol. 48:1-18.
- German, L., Cavane, E., Siteo, A., and Braga, C. (2016). Private investment as an engine of rural development: A confrontation of theory and practice for the case of Mozambique. *Land Use Policy*, Vol.52(2016):1-14.
- German, L., Schoneveld, G., and Mwangi, E (2011). Contemporary Processes of Large-Scale Land Acquisition in Sub-Saharan Africa: Legal Deficiency or Elite Capture of the Rule of Law? *World Development*, Vol.48:1-18.
- Gerring, J. (2004). What is a Case Study and What is it Good for? *American Political Science Review*, Vol.98(02):341-354.

- Gibbert, M., Ruigrok, W., and Wicki, B. (2008). What Passes as a Rigorous Case Study? *Strategic Management Journal*, Vol.29(13):1465-1474.
- Gibbon, P. (2003). Value-Chain governance, public regulation and entry barriers in the Global fresh fruit and Vegetable chain into the EU. *Development Policy Review*, Vol.21(5-6):615-625.
- Gibbon, P. and Ponte, S. (2005). *Trading down: Africa, value-chains and the Global Economy*. Temple University Press, Philadelphia.
- Giles, H. (2017). Review of social issues for large-scale land investment in Zambia. WIDER Working Paper 2017/42.
- Gingembre, M. (2015). Resistance or participation? Fighting against corporate land access amid political uncertainty in Madagascar. *Journal of Peasant Studies*, Vol.42(3-4):561-84.
- Glover, D. (2008). Contract farming and out grower Schemes in East and Southern Africa. *Agric.Econ.*, Vol.41(3):303-315.
- Glover, D., and Kusterer, K. (1990). *Small Farmers, big Business: Contract Farming and Rural Development*. Houndmills, Basingstoke: Macmillan Press Ltd.
- Golay and Biglino (2013). Human Rights Responses to Land Grabbing: a right to food perspective, *Third World Quarterly*, Vol.34(9):1630-1650.
- Görgen, M., Rudloff, B., Simons, J., Üllenberg, A., Väth, S. and Wimmer, L. (2009). Foreign Direct Investment (FDI) in Land in Developing Countries. (GTZ), <http://www2.gtz.de/urbanet/library/detail1.asp?number=7529>.
- Grajales, J. (2015). Land-grabbing, legal contention and institutional change in Columbia. *Journal of Peasant Studies*, Vol.42:541-560.
- Gray, D.E. (2004). *Doing Research in the Real World*. London: SAGE Publications.
- Grosh, B. (1994). Contract farming in Africa: an application of the new institutional economics. *Afric.Econ.*, Vol.3(2):231-261.
- GRZ (2006). *Fifth National Development Plan 2006-2010*. Lusaka.
- GRZ (2013a) *Zambia National Agriculture Investment Plan (NAIP) 2014-2018*. Lusaka.
- GRZ (2013b) *Strategy paper for Industrialisation and job creation through foreign and local investments*. Lusaka.

- GRZ (2016). Foreign private investment and investor perception in Zambia: Accelerating export diversification and industrialisation for inclusive growth Lusaka.
- GRZ (2017a). Seventh National Development Plan 2017-2021 Lusaka.
- GRZ (2017b). Zambia Sugar Fined K76,728,650 For Abuse of its Dominance. CPCC (12.10.2017). Accessed: <https://www.ccpc.org.zm/index.php/media-releases/news/43-press-release/168-zambia-sugar-fined-k76-728-650-for-abuse-of-its-dominance>.
- Guillemin, M., and Gillam, L. (2004). Ethics, reflexivity, and "ethically important moments" in research. *Qualitative Inquiry*, Vol.10:261-280.
- Guttal, S., Leonard, R., and Manahan, M.A (2011). Introduction: Global Land grabs: Investments, Risks and dangerous legacies. *Development*, 54, 5-11.
- Haanyika, C.M (2008). Rural electrification in Zambia: A policy and institutional analysis. *Energy Policy*, Vol.36:1044-1058.
- Hall, H. (2011). Land grabbing in Southern Africa: the many faces of the investor rush. *Review of African Political Economy*, Vol.38:193-214.
- Hall, R., M. Edelman, S.M. Borras, I. Scoones, B. White, and W. Wolford. (2015). Resistance, acquiescence or incorporation? An introduction to land grabbing and political reactions 'from below'. *Journal of Peasant Studies*, Vol.42(3-4):467-88.
- Hall, R., Scoones, I. and Tsikata, D. (2017a). Plantations, outgrowers and commercial farming in Africa: agricultural commercialisation and implications for agrarian change. *Journal of Peasant Studies*, Vol.44(3):515-537.
- Hall, R., Tsikata, D., and Scoones, I. (2017b). The pros and cons of commercial farming models in Africa. *The Conversation*, UK.
- Harris, J.M. (2000). Basic principles of sustainable development. A working paper from Global Development and Environment Institute at Tufts University, Medford.
- Harrison, E., and Chiroro, C. (2017). Differentiated legitimacy, differentiated resilience: beyond the natural in 'natural disasters.' *Journal of Peasant Studies*, Vol.44(5):1022-1042.
- Harvey, D. (2003). *The new imperialism*. Oxford University Press, New York.

- Henderson, J., Dicken, P., Hess, M., Cole, N., and Yeung, H.W.C (2002). Global production networks and the analysis of economic development. *Review of International Political Economy*, Vol.9:436-464.
- Hess, TM., J. Sumberg, T. Biggs, M. Georgescu, D. Haro-Montegudo, G. Jewitt, M. Ozdogan, M. Marshall, P. Thenkabail, A. Daccache, F. Marin, J.W. Knox (2016). A sweet deal? Sugarcane, water and agricultural transformation in Sub-Saharan Africa. *Global Environmental Change*, Vol.39:181-194.
- Hichaambwa, M., and Jayne, T. S. (2012). Smallholder commercialization trends as affected by land constraints in Zambia: What are the policy implications? IAPRI Working Paper, Lusaka.
- Hickey, S. and du Toit, A. (2007). Adverse incorporation, social exclusion and chronic poverty. CPRC Working paper 81. Chronic Poverty Research Centre, Manchester.
- Hill, P. (1986). *Development Economics on Trial: The Anthropological Case for a Prosecution*, Cambridge, Cambridge University Press.
- Hobbs, R.J., and Harries, J.A. (2001). *Restoration Ecology: Repairing the Earth's Ecosystems in the New Millennium*. *Restoration Ecology*, Vol.9(2):239-246.
- Holland, J. (2013). *Who Counts? The power of participatory statistics*. Rugby, Practical Action Publishing.
- Holmes, G. (2014). What is a land grab? Exploring green grabs, conservation, and private protected areas in southern Chile, *Journal of Peasant Studies*, Vol.41(4):547-56.
- Hopkins, T. and Wallerstein, I. (1977). Patterns of development of the modern world-systems. *Review*, Vol.1(2):11-45.
- Hopkins, T. K. and I. Wallerstein (1986). 'Commodity Chains in the World-Economy prior to 1800'. *Review*, Vol.10(1):157-70.
- Hospes, O. and Clancy, J. (2011). Unpacking the discourse on social inclusion in value chains. In: Helmsing, A.H.J., Vellema, S. (Eds.), *Value Chains, Social Inclusion and Economic Development: Contrasting Theories and Realities*. Routledge, Abingdon, Oxon:23-41.
- Howard, J.R, Tallontire, A., Stringer, L. and Marchant, R. (2015). Unravelling the Notion of "Fair Carbon": Key Challenges for Standards Development. *World Development*, Vol.70(343-356).
- Howard, J.R. (2016). *Pathways to 'Fair Carbon': Assessing Fairness in Standard Setting and Carbon Projects*. PhD thesis, University of Leeds.

- Hsieh H.F., and Shannon S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, Vol.15:1277-1288.
- Huggins, C.D. (2014). 'Control Grabbing' and small-scale agricultural intensification: emerging patterns of state-facilitated 'agricultural investment' in Rwanda. *Journal of Peasant Studies*, Vol.41(3):365-384.
- Hules, M. and Singh, S.J (2017). India's land grab deals in Ethiopia: Food security or global politics? *Land Use Policy*, Vol.60:343-351.
- Hurt, S. R. (2003). Co-operation and coercion? The Cotonou Agreement between the European Union and acp states and the end of the Lome' Convention. *Third World Quarterly*, Vol.24(1):161-176.
- IMF (2016). IMF Staff Concludes Visit to Zambia. IMF Press Release No. 16/475, Lusaka Zambia (Accessed 04/07/17: <https://www.imf.org/en/News/Articles/2016/11/01/PR16475-Zambia-IMF-Staff-Concludes-Visit>).
- IMF., 2016. Press Release: IMF Staff Concludes Visit to Zambia. Press Release:16/120 (03.18.2016).
- Jayne, T. S., Chamberlin, J., and Headey, D. D. (2014). Land pressures, the evolution of farming systems, and development strategies in Africa: A synthesis. *Food Policy*, Vol.48:1-17.
- Jayne, T. S., Chamberlin, J., Traub, L., Sitko, N., Muyanga, M., Yeboah, F. K., Kachule, R. (2016). Africa's changing farm size distribution patterns: the rise of medium-scale farms. *Agricultural Economics*, Vol.47:197-214.
- Johnson, R.B., and Onwuegbuzie, A.J. (2004). Mixed method research: a research paradigm whose time has come. *Educational Researcher*, Vol.33(7):14-26.
- Johnson, R.B., Onwuegbuzie, A.J., Turner, L.A. (2007). Towards a definition of mixed methods research. *Journal of Mixed Methods Research*, Vol.1:112-133.
- Kalaba, F.K., C.H. Quinn, and Dougill, A.J. (2013). Policy coherence and interplay between Zambia's forest, energy, agricultural and climate change policies and multilateral environmental agreements. *International Environmental Agreements: Politics, Law and Economics*, 2013.

- Kalinda, T. (2014). Concept of Poverty in a Rural Community: A Qualitative Study of the Views of Magobbo Smallholder Farmers in Zambia's Mazabuka District. *Social Science Research*, Vol.2(2).
- Kalinda, T. and Chisanga, B. (2013). Sugar Value-Chain in Zambia: An Assessment of the Growth Opportunities and Challenges. *Asian Journal of Agricultural Sciences*, Vol.6(1):6-15.
- Kaplinsky, R. (2000). Globalisation and Unequalisation: What Can Be Learned from Value Chain Analysis? *Journal of Development Studies*, Vol.37(2):117-146.
- Kautsky K ([1899] 1988). *On the Agrarian Question*. Zwan Publications, London.
- Kay, S. (2012). *Positive Investment Alternatives to Large-Scale Land Acquisitions or Leases*. Amsterdam: Transnational Institute.
- Kirsten, J. and Sartorius, K. (2002). Linking agribusiness and small-scale farmers in developing countries: Is there a new role for contract farming? *Development Southern Africa*, Vol.19(4):503-529.
- Kitzinger, J. and Barbour, R. S. (1999). Introduction: the challenge and promise of focus groups. In: Babour, R.S., and Kitzinger, J. (eds.): *Developing focus group research: politics, theory and practice*. London: SAGA Publications.
- Kleeman, L. and Thiele, R. (2015). Rural welfare implications of large-scale land acquisition in Africa: a theoretical framework. *Econ.Mod.*, Vol.51:269-279.
- Kothari, U. and Cooke, B. (2001). Power, knowledge and social control in participatory development. *Participation: the new tyranny* (2001):139-152.
- Kumar, R. (2005). *Research Methodology* (2ndEd.). SAGE, London.
- Kusiluka, M.M., Kongela, S., Kusiluka, M.A., Karimuribo, E.D., Kusiluka, L.J.M (2011). The negative impact of land acquisition on indigenous communities' livelihood and environment in Tanzania. *Habitat International* Vol.35(2011):66-73.
- Lambert, S.D. and Loisele, C.G. (2007). Combining individual interviews and focus groups to enhance data richness. *JAN Research Methodology* (2008), Blackwell Publishing Ltd.
- Land Matrix (2016). *Large-scale Land Acquisitions Profile: Zambia*. Land Matrix:www.landmatrix.org Access 16.02.17.
- Lavers, T. (2012). "Land grab" as development strategy? The political economy of agricultural investment in Ethiopia. *Journal of Peasant Studies*, Vol.39(1):105-132.

- Lavers, T. and Boamah, F. (2016). The impact of agricultural investments on state capacity: a comparative analysis of Ethiopia and Ghana. *Geoforum*, Vol.72(2016):94-103.
- Lavers, T. and Boamah, F. (2016). The impact of agricultural investments on state capacity: A comparative analysis of Ethiopia and Ghana. *Geoforum*, Vol.72:94-103.
- Lay, J., Nolte, K., and Sipangule, K. (2018). Large-Scale Farms and Smallholders: Evidence from Zambia. *GIGA Working Papers*:310/2018, Germany.
- Lee, J., Gereffi, G., and Beauvais, J. (2012). Global value chains and agrifood standards: Challenges and possibilities for smallholders in developing countries. *PNAS*, Vol.109(31):12326-12331.
- Lefebvre, H. (1991). *The production of space*. Verso, London.
- Leguizamon, A. (2016). Disappearing nature? Agribusiness, biotechnology and distance in Argentine Soybean production. *Journal Peasant Studies*, Vol.43(2):313-330.
- Lenin, V.I., (1973). *Collected works Volume 5*. Moscow. Progress Publishers.
- Little, P., and Watts, M., eds. (1994). *Living Under Contract: Contract Farming and Agrarian Transformation in sub-Saharan Africa*. Madison: University of Wisconsin Press.
- Li, T.M. (2011). Centering labour in the land grab debate. *Journal of Peasant Studies* Vol.38(2):281-298.
- Lipton, M. (2006). Can Small Farmers Survive, Prosper, or Be the Key Channel to Cut Mass Poverty? *Journal of Agricultural and Development Economics*, Vol.3(1):58-85.
- Lubungu, M., Sitko, N.J., and Hichaambwa, M. (2015). Analysis of Beef Value Chain in Zambia: Challenges and Opportunities of Linking Smallholders to Markets. Working Paper No.103, IAPRI. Lusaka.
- Lukes, S. (1974). *Power: A Radical View*. Macmillan, London. Reprinted 2004, Basingstoke: Palgrave Macmillan.
- Maertens, M. and Swinnen, J. F. M (2009). Trade, standards and poverty: Evidence from Senegal. *World Development*, Vol.37(1):161-178.
- Margulis, M.E., N. McKeon and S.M. Borras. 2013. Land grabbing and global governance: critical perspectives. *Globalizations*, Vol.10(1):1-23.
- Marshall, M. N. (1996). The key informant technique. *Family Practicem*, Vol.13(1):92-97.
- Mascarenhas, J. and D. P. Kumar (1991). Participatory mapping and modeling users' notes. *Rapid Rural Appraisal Notes*, Vol.12(1991):9-20.

- Matavel, N., Dolores, S., Cabanelas, V., (2011). Lords of the Land: Preliminary Analysis of the Phenomenon of Landgrabbing in Mozambique. *Justiça Ambiental and UNAC*, Mozambique.
- Matenga, C.R (2017). Outgrowers and livelihoods: the case of Magobbo smallholder block farming in Mazabuka district in Zambia. *Journal of Southern African Studies*, Vol.43:551-566.
- Matenga, C.R., and Hichaambwa, M. (2017). Impacts of land and agricultural commercialisation on local livelihoods in Zambia: evidence from three models. *Journal of Peasant Studies*, Vol.44(3):574-593.
- Marx, K. (1976). *Capital Volume I*. Harmondsworth, Penguin.
- Mather, C. (1996). The view from outside? Interpreting oral testimonies from rural South Africa. *South African Geographical Journal*, Vol.78:13-19.
- Mathur, V.N., Afionis, S., Paavola, J., Dougill, A.J., and Stringer, L.C. (2014). Experiences of host communities with carbon market projects: towards multi-level climate justice. *Climate Policy*, Vol.14:42-62.
- Maxwell and Wiebe (1999). Land tenure and food security: exploring dynamic linkages. *Development and Change*, Vol. 30(1999):825-849.
- Mbulo, E. (2015). EU reform impacting negatively on sugar production – Katowa Rebecca. 15th Federation of SADC sugar producers Annual Conference – Zambia - FSSD. Post Newspaper Online (Accessed:17.07.15).
- McCarthy, J.F. (2010). Processes of inclusion and adverse incorporation: oil palm and agrarian change in Sumatra, Indonesia. *Journal of Peasant Studies*, Vol.37(4):821-850.
- McKay, B. and Colque, G. (2016). Bolivia's soy complex: the development of 'productive exclusion.' *Journal for Peasant Studies*, Vol.43(2):583-610.
- McKay, B., Sauer, S., Richardson, B., and Herre, R. (2016). The political economy of sugarcane flexing: initial insights from Brazil, Southern Africa and Cambodia. *Journal of Peasant Studies*, Vol.43(1):195-223.
- McMichael, P. (2013). Land grabbing as security mercantilism in international relations. *Globalizations*, Vol.10 (1):47–64.
- McMichael, P. (2012). The land grab and corporate food regime restructuring. *Journal of Peasant Studies*, Vol. 39(3–4):681–701.

- McMichael, P. (2009a). A food regime genealogy. *Journal of Peasant Studies*, Vol.36(1):139-169.
- McMichael, P. (2009b). A food regime analysis of the world food crisis. *Agri. Hum. Value*, Vol.26:281-295.
- Merotto, D. (2017). “Zambia Jobs Diagnostic: Volume 1 - Analytics.” World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO.
- Merriam, S. B., Johnson-Bailey, J., Lee, M. Y., Ntseanem, G. and Muhamad, M. (2001). Power and positionality: negotiating insider/outsider status within and across cultures. *International Journal of Lifelong Education*, Vol.20(2001):405-416.
- Milberg, W. (2003). The changing structure of trade linked to global production systems: What are the policy implications? *International Labour Review*, Vol.143 (1-2).
- Milgroom, J. (2015). Policy processes of a land grab: at the interface of politics ‘in the air’ and politics ‘on the ground’ in Massingir, Mozambique. *Journal of Peasant Studies*, Vol.42 585-606.
- Miller, T. R., T. D. Baird, C. M. Littlefield, G. Kofinas, F. Chapin, III, and C. L. Redman (2008). Epistemological pluralism: reorganizing interdisciplinary research. *Ecology and Society*, Vol.13(2):46.
- Mizinga, F.M. (1990). Inheritance and social change among the Tonga of Southern Province of Zambia. MA Dissertation, Department of History, UNZA.
- Molle, F. (2007). Scales and power in river basin management: the Chao Phraya River in Thailand. *Geographical Journal*, Vol.173(4):358-373.
- Moreda, T., (2015). Listening to their silence? The political reaction of affected communities to large-scale land acquisitions: insights from Ethiopia. *Journal of Peasant Studies*, Vol.42 (3-4):1–23.
- Murphy, S. (2012). Changing Perspectives: Small-scale farmers, markets and globalization. Knowledge Programme Small Producer Agency in the Globalized Market. International Institute for Environment and Development. <http://ictsd.org/downloads/2012/08/changing-perspectives-small-scale-farmers-marketsand-globalisation-murphy-iiied.pdf>.
- Mushongah, J. (2009). Rethinking vulnerability: livelihood changes in southern Zimbabwe, 1986 – 2006. PhD Dissertation, University of Sussex.

- Nally, D. (2015). Governing precarious lives: land grabs, geopolitics and food security. *The Geographical Journal*, Vol.181:340-349.
- Namutowe, J. (2014). ZDA gets \$26bn FDI Pledges. *Times of Zambia* (20.08.14) Lusaka.
- Neilson, J. and Pritchard, B. (2009). *Value-chain struggles: institutions and governance in the plantation district of South India*. Blackwell Publishing, UK.
- Nelson, V. and Tallontire, A. (2014). Battlefields of ideas: changing narratives and power dynamics in private standards in global agricultural value chains. *Agric. Hum. Values*, Vol.31:482-497.
- Neves, D. and Du Toit, A. (2013). Rural livelihoods in South Africa: complexity, vulnerability and differentiation. *Agrarian Change*, Vol.13(1):93-115.
- Nhantumbo, I. and Salomão, A. (2010). *Biofuels, Land Access and Rural Livelihoods in Mozambique*. IIED. London.
- Njombo, K. (2015). ZEMA tips agro-chemicals users. *Zambia Daily Mail* (12.15.2015) Lusaka.
- Nolte, K. (2014). Large-scale agricultural investments under poor land governance. *Land Use*, Vol.38(2014):698-706.
- Nolte, K., and Sipangule, K. (2017). Land-use competition in sub-Saharan Africa's rural areas. *PEGNet Policy Brief:10/2017*.
- Nolte, K., and Vāth, S.J. (2015). Interplay of land governance and large-scale agricultural investment: evidence from Ghana and Kenya. *J. Mod. Afr. Stud.*, Vol.53(01):69-92.
- Nolte, K., Chamberlain, W., and Markus, G. (2016). *International Land Deals for Agriculture. Fresh insights from the Land Matrix: Analytical Report II*. Bern Open Publishing.
- North, D.C (1990). Institutions. *Economic Perspectives*, Vol.5:97-112.
- Oberlack, C., Tejada, L., Messerlia, P., Rist, S., and Giger, M. (2016). Sustainable livelihoods in the global land rush? Archetypes of livelihood vulnerability and sustainability potentials. *Global Environmental Change*, Vol.41(2016):153-171.
- Oberthür, S., & Gehring, T. (2006). Institutional interaction in global environmental governance: The case of the Cartagena protocol and the world trade organization. *Global Environmental Politics*, Vol.6(2):1-31.

- OECD (2010). Private financial sector investments in farmland and agricultural infrastructure. Paris: OECD.
- Ollenburger, M.H., Descheemaeker, K., Crane, T.A., Sanogo, O.M., and Giller, K.E. (2016). Waking the Sleeping Giant: Agricultural intensification, extensification or stagnation in Mali's Guinea Savannah. *Agricultural Systems*, Vol. 148(2016):58-70.
- Orbie, J. (2007). "The European Union and the Commodity Debate: From Trade to Aid." *Review of African Political Economy*, Vol.34(112):297-311.
- Osabuohiena, E.S. (2014). Large-scale agricultural land investments and local institutions in Africa: The Nigerian case. *Land Use Policy*, Vol.39:155-165.
- Oxfam (2011). *Land and Power: The growing scandal surrounding the new wave of investments in land*. Briefing Paper 151, Oxfam, London.
- Oxfam (2013). *Behind the Brands: Food justice and the Big 10 food and Beverage Companies*. Oxfam Briefing Paper:166.
- Oxfam (2016). *More than a Sugar-coated Promise? 4 Signs Africa's biggest sugar producer may be on the right track when it comes to land*. Oxfam: http://politicsofpoverty.oxfamamerica.org/2016/01/more-than-a-sugar-coated-promise-4-signs-africas-biggest-sugar-producer-may-be-on-the-right-track-when-it-comes-to-land/?utm_source=oxf.am&utm_medium=ZnYW&utm_content=redirect. (Accessed:11.01.17).
- Oya, C. (2012). Contract farming in sub-Saharan Africa: a survey of approaches, debates and issues. *Agrarian Change*, Vol.2(1):1-33.
- Oya, C. 2013. Facts, methods and assumptions on land grabs: a methodological reflection on land databases and the land grab literature 'rush'. *Journal of Peasant Studies*, Vol.40(3):501-518.
- Palerm, J., Sierevogel, T., and Hichaambwa, M. (2010). *Strategic Environmental Assessment (SEA) of the National Sugar Sector Strategy in Zambia*. AGRECO Consortium and the EU. Lusaka.
- Patton, M. (1990). *Qualitative evaluation and research methods*. 2nd Edition ed. Sage, Newbury Park.
- Pedersen, R.H (2016). Access to land reconsidered: The land grab, polycentric governance and Tanzania's new wave land reform. *Geoforum*, Vol.72(2016):104-113.

- Pegler, L. (2015). Peasant inclusion in global value-chains: economic upgrading but social downgrading in labour processes? *Journal of Peasant Studies*, Vol.42(5):929-956.
- Peluso, N., and Lund, C. (2011). New frontiers of land control: introduction. *Journal of Peasant Studies*, Vol.38(4):667-681.
- Peluso, N.L. and C. Lund. 2011. New frontiers of land control: Introduction. *Journal of Peasant Studies*, Vol.38(4):667-81.
- Penderis, S. (2012). Theorizing participation: From tyranny to emancipation. *Journal of African and Asian Local Government Studies*, Vol.1(3):1-28.
- Peters, P.E. (2013). Land appropriation, surplus people and a battle over visions of agrarian futures in Africa. *Journal of Peasant Studies*, Vol.40(3):537-562.
- Phillips, D.P. (2014). Uneven and unequal people-centered development: the case of Fair Trade and Malawi sugar producers, *Agric.Hum.Values*, Vol.31:563.
- Phiri, D., Chu, J., and Yung, K. (2015). Large-scale Land Acquisitions and Development-Induced Displacement in Zambia: Lessons from Civil Society. World Bank Conference on Land and Poverty: Linking Land Tenure and Use for Shared Prosperity March 23-27 USA.
- Polanyi, K. (1944). *The great transformation: the political and economic origins of our time.* Boston, MA:Beacon Press.
- Prowse, M. (2012). Contract farming in developing countries: a review.
- Poulton, C., Kydd, J., and Dorward, A. (2006). Overcoming market constraints on pro-poor agricultural growth in sub-Saharan Africa. *Development Policy Review* Vol.24(3):243-277.
- Poulton, C., Tyler, G., Hazell, P., Dorward, A., Kydd, J., and Stockbridge, M. (2008). *Commercial Agriculture in Africa: Lessons from Success and Failure.* World Bank, Washington, D.C.
- Pritchard, B., Vicol, M., and Jones, R. (2017). How does the ownership of land affect household livelihood pathways under conditions of deagrarianization? 'Hanging in', 'stepping up' and 'stepping out' in two north Indian villages. *Journ.Tropic.Geog.*, Vol.38:41-57.
- Rabiee, F. (2004). Focus-group interview and data analysis. *Proceedings of the Nutrition Society*, Vol.2004 (63):655–66.

- Raynolds, L.T., Murray, D.L., and Wilkinson J., eds (2007). *Fair Trade: The Challenges of Transforming Globalization*. Routledge, London.
- Reardon, T. and Barret, C.B. (2000). Agro-industrialisation, globalisation and international development: an overview of issues, patterns and determinants. *Agricultural Economics*, Vol.23(3):195-205.
- Reardon, T., Barret, C.B., Berdegue, J.A., and Swinnen, J.F.M (2009). *Agri-food Industry Transformation and Small Farmers in Developing Countries*. *World Development* Vol. 37(11):1717-1727.
- Reed, M.S., Dougill, A.J. and Taylor, M.J. (2006). Integrating local and scientific knowledge for adaptation to land degradation: Kalahari rangeland management options. *Land Degrad. Develop.*, Vol.18:249-268.
- Richardson-Ngwenya, P., and Richardson, B. (2014) Aid for Trade and African agriculture: the bittersweet case of Swazi sugar, *Review of African Political Economy*, Vol.41(40):201-215.
- Richardson, B. (2013). The global land grab: Going back to the intellectual roots of IPE is instructive for understanding today's global land politics. *speri.comment: the political economy blog*: Accessed 16/06/2018: <http://speri.dept.shef.ac.uk/2013/05/14/global-land-grab/>.
- Richardson, B. (2010). Big sugar in southern Africa: rural development and the perverted potential of sugar/ethanol exports. *Journal of Peasant Studies*, Vol.37(4):917-938.
- Robinson, O.C. (2014). *Sampling in Interview-Based Qualitative Research: A Theoretical and Practical Guide*. *Qualitative Research in Psychology*, Vol.11(1):25-41.
- Robson, C. (1993), *Real World Research*. Blackwell, Oxford.
- Rocheleau, D. (1995). Maps, Numbers, Text, and Context: Mixing Methods in Feminist Political Ecology. *Professional Geographer*, Vol.47(4):458-466.
- Rowlands J. (1997). *Questioning Empowerment: Working with Women in Honduras*. Oxfam: Oxford.
- Rowlands, J. (1995). Empowerment examined. *Development in Practice*, Vol.5(2):101-107.
- Rutten, R., Bakker, L., Alano, M.L., Salerno, T., Savitri, L.A., and Shohibuddin, M. (2017). Smallholder bargaining power in large-scale land deals: a relational perspective. *Journal of Peasant Studies*, Vol.44(4):891-917.

- Saasa, O.S. (1996). Policy Reform and Structural Adjustment in Zambia With Emphasis on Agriculture and Trade. Institute for African Studies, University of Zambia.
- Scheidel, A., and Sorman, H. (2012). Energy transitions and the global land rush: ultimate drivers and persistent consequences. *Global Environment Change*, Vol.22(2012):588-595.
- Schmidhuber, J., Bruinsma, J., and Boedeker, G. (2009). Capital requirements for Agriculture in developing countries to 20150. Expert meeting on how to feed the world in 2050. FAO, Rome.
- Schoneveld, G. C. (2014). The geographic and sectoral patterns of large-scale farmland investments. *Food Policy*, Vol.48(2014):34-50.
- Schoneveld, G.C. (2017). Host country governance and the African land rush: 7 reasons why large-scale farmland investments fail to contribute to sustainable development. *Geoforum*, Vol.83:119-132.
- Schoneveld, G.S. and Zoomer, A. (2015). Natural resource privatisation in Sub-Saharan Africa and the challenges for inclusive green growth. *IDPR*, Vol.37:(1).
- Scoones, I. (2015). Sustainable livelihoods and rural development. Fernwood Publishing, USA.
- Scoones, I., 2009. Livelihood perspectives and rural development. *Journal of Peasant Studies*, Vol.36:171-196.
- Scoones, I. (1995). Investigating Ranking and Difference: Applications of Wealth Household Survey Approaches among Farming Households in Southern Zimbabwe. *Development and Change*, Vol.26:67-88.
- Scott, G. (2002). Zambia: structural adjustment, rural livelihoods and sustainable development. *Development Southern Africa*, Vol.9(3):405-418.
- Seaquist et al. (2014). Architecture of the global land acquisition system: applying the tools of network science to identify key vulnerabilities. *Environ. Res. Lett.*, Vol.9(2014), OP Publishing, Open Access.
- Seufert, P. and Suárez, S.M. (2012). Monitoring the voluntary guidelines on the responsible governance of tenure of land fisheries and forests: a civil society perspective. Land Tenure Working Paper 22, FAO and FIAN International.
- Sexsmith, K. and McMichael, P. (2015). Formulating the SDGs: Reproducing or Reimagining State-Centered Development? *Globalizations*, Vol.12(4):581-596.

- Shete, M. and Rutten, M. (2015). Impacts of large-scale farming on local communities' food security and income levels: Empirical evidence from Oromia region, Ethiopia. *Land Use Policy*, Vol.47 282-292.
- Simmons, P. (2003). *Overview of Smallholder Contract Farming in Developing Countries*. University of New England, Australia.
- Singh, C., Dorward, P., and Osbahr, H. (2016). Developing a holistic approach to the analysis of farmer decision-making: Implications for adaptation policy and practice in developing countries. *Land Use Policy*, Vol.59(2016):329-343.
- Sipangule, K., and Lay, J. (2015). The impact of foreign large-scale land acquisitions on smallholder productivity: evidence from Zambia AGRODEP Working Paper:0011.
- Sipangule, K., Nolte, K., and Lay, J. (2016). Commercial farms in Zambia and the relationship with smallholder farms. Presentation to the '2016 World Bank Conference on Land and Poverty' Washington DC March 14-18.
- Sitko, N. J. and Jayne, T. S. (2014). Structural transformation or elite land capture?: The growth of 'emergent' farmers in Zambia. *Food Policy*, Vol.48:194-202.
- Sitko, N.J., and Chamberlin, J. (2016). The geography of Zambia's customary land: Assessing the prospects for smallholder development. *Land Use Policy*, Vol.55:49-60.
- Sivramkrisha and Jyotishi (2008). Monopsonistic exploitation in contract farming: articulating a strategy for grower cooperation. *Journal of International Development*, Vol.20(2):280-966.
- Smalley, R. 2013. *Plantations, contract farming and commercial farming areas in Africa: A comparative review*. Working Paper 55. Brighton and Nairobi: Future Agricultures Consortium.
- Smalley, R., and Corbera, E. (2012). "Large-scale Land Deals From the Inside out: Findings From Kenya's Tana Delta." *Journal of Peasant Studies*, Vol.39 (3&4):1039–1075.
- Spann, M. (2017). Politics of poverty: the post-2015 sustainable development goals and the business of agriculture. *Globalisations*, Vol.14(3):360-378.
- Starks, H. and Trinidad, S.B. (2007). Choose your method: a comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research*, Vol.17(10):1372-1380.

- Stephens, P. (2011). The global land grab: an analysis of extant governance institutions. *Inter.Aff.Rev.* Vol.20:1-18.
- Strauss, A., and Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park: Sage.
- Stringer, L.C. and Reed, M.S. (2006). Land degradation assessment in southern Africa: integrating local and scientific knowledge bases. *Land Degrad. Develop.* Vol.18:99-116.
- Stringer, L.C., A.J. Dougill, Dyer, J.C., K. Vincent, Fritzsche, F., J. Leventon, Falcaõ, M.P., P. Manyakaidze, Syampungani, S., P. Powell, and Kalaba, G. (2014). Advancing climate compatible development: Lessons from southern Africa. *Regional Environmental Change*, Vol.14:713-725.
- Sultana, F. (2007). Reflexivity, Positionality and Participatory Ethics: Negotiating Fieldwork Dilemmas in International Research. *Journal compilation*, 2007.
- Swinnen, J.F.M (2007). *Global supply chains, standards and the poor.* Wallingford:CABI.
- Tagliarino, N. (2016). 'Encroaching on Land and Livelihoods: How National Expropriation Laws Measure up against International Standards'. Working Paper. Washington, DC: World Resources Institute. Available at: <http://www.wri.org/publication/encroaching-on-landand-livelihoods>. Accessed 26.01.2017.
- Tallontire et al. (2005). Reaching the marginalised? Gender value chains and ethical trade in African horticulture, *Development in Practice*, Vol.15:3-4:559-571.
- Tarrow, S. (2005). *The new transnational activism.* Cambridge University press. Cambridge.
- Termeer, C.J.A.M., Dewulf,A., van Lieshout, M. (2010). Disentangling scale approaches in governance research: comparing monocentric, multilevel, and adaptive governance. *Ecology and Society*, Vol.15(29).
- Terry, A. and Ogg, M. (2016). Restructuring the Swazi sugar industry: the changing role and political significance of smallholders. *Southern African Journal*:2016.
- Thomas, D.R. (2006). A general inductive approach for analysing qualitative evaluation data. *American Journal of Evaluation*, Vol.27:237.
- Tiffen, M. and Mortimore, M. (1990). *Theory and practice in plantation agriculture: an economic review.* ODI, London.

- Tittonell, P. (2014). Livelihood strategies, resilience and transformability in African agroecosystems. *Agricultural Systems*, Vol.126:3-14.
- Tobin, D., Glenna, L., and Devaux, A. (2016). Pro-poor? Inclusion and exclusion in native potato value chains in the central highlands of Peru. *Rural Studies*, Vol.46(2016):71-80.
- Tsang, W.K.E. (2014). Generalizing from research findings: the merits of case studies. *International Journal of Management Reviews*, Vol.16(2014):369-383.
- Tschirley, D. and Kabwe, S. (2009). The cotton sector of Zambia. World Bank Africa Region Working Paper Series, 124.
- Twyman, C., Morrison, J. and Sporton, D. (1999). The final fifth: autobiography, reflexivity and interpretation in cross-cultural research. *Area*, Vol.31.4:313-325.
- UNCTAD (2009). World investments report 2009: transnational corporations, agricultural production and development. UNCTAD, Geneva.
- Van Alstine, J., Manyindo, J., Smith, L., Dixon, J., and Ruhanga, A.I. (2006). Resource governance dynamics: the challenge of 'new oil' in Uganda. *Resources Policy*, Vol.40:48-58.
- Van der Ploeg, J. (2010). The peasantries of the twenty-first century: the commoditisation debate revisited. *Journal of Peasant Studies*, Vol.37 (1):1–30.
- VeneKlasen, L., and Miller, V. (2002). Power and empowerment. *PLA Notes*, Vol.43:39-41.
- Vermeulen, S., and Cotula, L. (2010). Making the most of agricultural investment: A survey of business models that provide opportunities for smallholders. IIED/FAO/IFAD/SDC, London/Rome/Bern.
- Vermeulen, S., and Cotula, L. (2010). Over the heads of local people: consultation, consent, and recompense in large-scale land deals for biofuels projects in Africa. *Journal of Peasant Studies*, Vol.37:899-916.
- Vicol, M. (2017). Is contract farming an inclusive alternative to land grabbing? The case of potato contract farming in Maharashtra, India. *Geoforum*, Vol.85(2017):157-166.
- Voget-Kleschin and Stephan (2013). The potential of standards and codes of conduct in governing large-scale land acquisition in developing countries towards sustainability. *Agricultural and Environmental Ethics*, Vol.26:1157-1179.

- Voget-Kleschin, L. (2013). Large-Scale Land Acquisition: Evaluating its Environmental Aspects Against the Background of Strong Sustainability. *Journal of Agricultural and Environmental Ethics*, Vol.26:1105-1126.
- Wash, M. (2003). Teaching qualitative analysis using QSR NVivo. *The Qualitative Report*, Vol.8(2):251-256.
- Watts, M. (2012). Class dynamics of agrarian change. *Journal of Peasant Studies*, Vol.39 (1):1999-2004.
- Watson, H.K. (2011). Potential to expand sustainable bioenergy from sugarcane in southern Africa. *Energy Policy*, Vol.39(10):5746-5750.
- Weber, H. (2014). When goals collide: Politics of the MDGs and the post-2015 sustainable development goals agenda. *The SAIS Review of International Affairs*, Vol.34(2):129-139.
- Welsh, W. (2002). Dealing with data: using NVivo in the qualitative data analysis process. *Forum. Qualitative Social Research*, Vol.3(2):26.
- White, B. (1997). Agroindustry and contract farmers in upland west java. *Journal of Peasant Studies*, Vol.24(3):100-136.
- Whitified, S. (2014). Negotiating an uncertain future: A multi-sited study of narratives of Kenyan agricultural climate change adaptation. PhD thesis, Institute of Development Studies, University of Sussex. United Kingdom.
- Wolford, W., Borras, S.M., Hall, R., Scoones, I., and White. B. (2013). Governing Global Land Deals: The Role of the State in the Rush for Land. *Development and Change*, Vol.44(2):189-210.
- World Bank (2008). *Awakening Africa's Sleeping Giant: Prospects for commercial agriculture in the Guinea Savannah Zone and Beyond*. World Bank, Washington DC, USA.
- World Bank (2011). *Rising global interest in farmland: Can it yield sustainable and equitable benefits?* Washington, DC World Bank.
- World Development Report (2008). *Agriculture for Development*. The World Bank, Washington DC.
- Yengoh, G.T., Steen, K., Armah, F.A., and Ness, B. (2016). Factors of vulnerability: How large-scale land acquisition take advantage of local and national weaknesses in Sierra Leone. *Land Use Policy*, Vol.50(2016):328-340.

- Yin, R. K. (2009). Case study research: design and methods. 4th edition, Applied Social Research Method Series. Vol.5, SAGE Publishers, USA.
- Yin, R.K. (2013). Case study research: Design and methods. SAGE Publications.
- Yin, R.K. (2014). Case Study Research: Design and Methods Fifth Edition. SAGE Publications.
- Zambia Sugar Plc (2016). Annual Report. Lusaka.
- Zambia Sugar Plc 2010. Annual Report 2010. Lusaka.
- ZDA (2016a). Investment Incentives: Fiscal Incentives and Qualifying Thresholds. Access on 10.05.16 on: <http://www.zda.org.zm/?q=content/investment-incentives>.
- ZDA (2016b) 2016-2020 Strategic Planning: Transforming business for the benefit of Zambians Lusaka.
- Zoomers, A. (2008). Rural livelihoods. In: Desai, V., Potter, R. (Eds.), The Companion to Development Studies. 2nded. Oxford Press:147-151.
- Zoomers, A., and Otsuki, K. (2017). Addressing the impacts of large-scale land investments: Re-engaging with livelihood research. Geoforum, Vol.83(2017):164-171.

Appendix

Appendix 1: Ethical Approval

1.1 Ethical clearance: University of Leeds

Performance, Governance and Operations
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**ESSL, Environment and LUBS (AREA) Faculty Research Ethics Committee
University of Leeds**

17 January 2019

Dear Simon

Title of study: Large-scale Agricultural Investments and Livelihood Transformation among Sugar Producing Smallholders in Mazabuka District of Zambia
Ethics reference: AREA 14-117, response 1

I am pleased to inform you that the above research application has been reviewed by the ESSL, Environment and LUBS (AREA) Faculty Research Ethics Committee and following receipt of your response to the Committee's initial comments, I can confirm a favourable ethical opinion as of the date of this letter. The following documentation was considered:

Document	Version	Date
AREA 14-117 Manda Simon Ethical_Review_Form_V3_AD Submitted.doc	2	19/05/15
AREA 14-117 Summary of comments and changes.doc	1	19/05/15
AREA 14-117 Google Map.docx	1	19/05/15
AREA 14-117 Survey Instrument -Households.docx	1	09/04/15
AREA 14-117 Manda Simon Information Sheet.doc	1	09/04/15
AREA 14-117 Key Informant Interview Guide.docx	1	09/04/15
AREA 14-117 Interview Guide with Sugar companies in Zambia.docx	1	09/04/15
AREA 14-117 Manda Simon Consent Form.doc	1	09/04/15
AREA 14-117 Focus Group Discussion Guide.docx	1	09/04/15
AREA 14-117 Manda Simon Risk Assessment.doc	1	09/04/15
AREA 14-117 Signed Risk Assessment Sheet.pdf	1	09/04/15

Committee members made the following comments about your application:

- The consent form should be updated so that participants are made aware of the limits to withdrawal.

Please notify the committee if you intend to make any amendments to the original research as submitted at date of this approval, including changes to recruitment methodology. All changes must receive ethical approval prior to implementation. The amendment form is available at <http://ris.leeds.ac.uk/EthicsAmendment>.

Please note: You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, and other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited. There is a checklist listing examples of documents to be kept which is available at <http://ris.leeds.ac.uk/EthicsAudits>.

We welcome feedback on your experience of the ethical review process and suggestions for improvement. Please email any comments to ResearchEthics@leeds.ac.uk.

Yours sincerely

Jennifer Blaikie
Senior Research Ethics Administrator, Research & Innovation Service
On behalf of Dr Andrew Evans, Chair, [AREA Faculty Research Ethics Committee](#)

CC: Student's supervisor(s)

1.2 Ethical Clearance: University of Zambia



UNIVERSITY OF ZAMBIA
DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Telephone: +260 -1- 290258/291777 Ext. 2208
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P O Box 32379
Lusaka, Zambia

30th November, 2015

Mr. Simon Manda,
The University of Zambia
Department of Development Studies
P.O Box 32379
LUSAKA, ZAMBIA

Dear Mr. Manda,

RE: APPLICATION FOR ETHICAL CLEARANCE

With reference to your research proposal entitled:

**"LARGE – SCALE AGRICULTURAL INVESTMENTS AND LIVELIHOOD TRANSFORMATION
AMONG SUGAR PRODUCING SMALLHOLDERS IN MAZABUKA DISTRICT OF ZAMBIA"**

As your research project does not contain any ethical concerns, you have been given ethical clearance.

ACTION: APPROVED
DECISION: 30th November, 2015
EXPIRATION DATE: 29th November, 2016

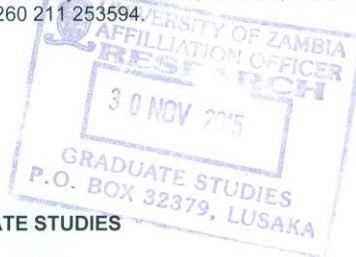
Please note that you are expected to submit to the Secretariat a Progress Report and a copy of the full report on completion of the project.

Finally, and more importantly, take note that notwithstanding ethical clearance given by the HSSREC, you must also obtain authority from the Permanent Secretary, Ministry of Education, before conducting your research. The address is: Permanent Secretary, Ministry of Education, Science, Vocational Training and Early Education, P.O Box 50095, Lusaka. Tel: +260 211 253594.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'J. Simwanga'.

Dr. J. Simwanga
**ASSISTANT DIRECTOR (RESEARCH),
DIRECTORATE OF RESEARCH AND GRADUATE STUDIES**



cc: Director, Directorate of Research and Graduate Studies
Assistant Registrar (Research), Directorate of Research and Graduate Studies

Appendix 2: Study Participants to Chapter 4⁶

Interview codes: Z = public institutions; G=research institutions; P=private-sector experts; Q=NGOs; N=farmer organisations; K=donors; and D=district/sub-district.

Code	Position/Institution	Date	Place
Ministries/departments/agencies			
Z1	Snr. Official a – MoA	29.06.15	Lusaka
Z2	Policy Analyst – MoA	04.01.16	
Z3	Coordinator b – MoA	04.01.16	
Z4	Snr. Official – MoL	15.12.15	
Z5	Officer – MoEWD/WARMA	07.01.16	
Z6	Director (Non-Mining Unit) – ZRA	22.12.15	
	Snr. Inspector – ZRA		
Z7	Investment Officer – ZDA	16.16.15	
Z8	Policy Analyst – ZDA	16.06.15	
Z9	Official – MoCTI	11.2015	
Z10	Snr. Investigators (2) – CPCC	18.12.15	
Z11	Snr. Inspector – ZEMA	14.12.15	
Z12	Engineer – MoEWD/WARMA	12.01.16	
Research think-tanks/institutions			
G1	Officer – Centre for Trade Policy&Devpt.	08.01.16	Lusaka
G2	Research Fellow, IAPRI	18.12.15	
G3	Research Fellow, IAPRI	14.06.15	
G4	Professor, UNZA	15.06.15	
Private agricultural experts/consultants			
P1	Agriculture/Sugar Expert – AnChiCon	05.01.16	Lusaka
International/national NGOs			
Q1	Officer – ActionAid	21.12.15	Lusaka
Q2	Officer – Oxfam	05.01.16	
Q3	Officer – ZLA	10.05.16	
Q4	Officer – CUTS	09.12.15	
Q5	Snr. Official – CSPR	07.01.16	
Farmer-based national bodies/organisations			
N1	Official – ZNFU	04.12.15	
N2	Official – ZNFU	04.12.15	
N3	Economist – ZNFU	15.12.15.	
N4	Officer – Musika	10.12.15	
Multilateral/bilateral institutions/donors			
K1	Official – Finnish Embassy.	18.06.15	Lusaka
K2	Agricultural Expert – AfDB	18.06.15	
K3	Agricultural Specialist – Wold Bank	16.12.15	
K4	Official – EU	10.12.15	
District/sub-district			
D1	Agricultural Officer	11.2015	Zimba
D2	Member of Parliament	11.01.16	Mazabuka
D3	Chief	27.11.16	

⁶ Respondent's names are concealed to guarantee anonymity.

Appendix 3: Participants to Chapter 5

District Level Interviews					
Code	Position/Institution	Date	Place		
D1	Officer – MoA (Zimba)	14.11.15	Zimba		
D2	Parliamentarian	11.06.16	Mazabuka		
D3	Chief*a	27.11.16			
D4	Chief*b				
D5	Official *a	08.01.16			
D6	Official*b	06.15			
D7	Officer, Municipal Council	12.15			
D8	Officer, Community Development	26.06.15			
D9	Officer, MoCTA	27.11.16			
D10	Officer – SWASCO	16.01.15			
D11	Representatives – DATF	19.01.16			
D12	Officer, Planning Department	16.01.16			
D13	Agricultural Officer	01.16			
D14	NZP+ representative	22.06.15			
D15	Manager (FNB)	28.06.15			
Sugarcane Companies and Service Providers					
ZaSPlc1	Senior Marketing officer, ZaSPlc	06.01.16	Mazabuka		
ZaSPlc2	Senior Manager (Smallholder), ZaSPlc	06.15			
ZaSPlc3	MCGT representative (ZaSPlc)	06.15			
Kaleya Smallholders Company Limited					
SDKa	Senior Official	14.11.15	Kaleya		
SDKb	Officer (Finance)	19.01.16			
SDKc	Officer (Smallholder)	19.01.16			
SDKd	Officer (KaSCOL)	17.11.15			
SDKe	Field Supervisor	26.11.15			
Nanga Farms Plc					
SDMa	Manager	20.01.16	Mazabuka		
SDMb	Officer (HR)				
Interviews, Group Discussions and Household Case Studies: Kaleya					
SDK1	KASFA representative (1)	06.15	Kaleya		
SDK2	KASFA representatives (2)	13.11.15			
SDK3	Teacher (St. Clement Basic School)	19.01.16			
SDK4	Original farmer	01.16			
GDK1	Farmer Group Discussion – Mixed	06.15			
GDK2	Farmer Group Discussion – Community representatives	13.01.16			
GDK3	Group Discussion – Women	01.16			
GDK4	Group Discussion – Youths				
Household Case Studies					
	Household Case studies:	12.15			
	Better-off Category:				
CSK1	SDK: Household 1				
CSK2	SDK: Household 2				
	Medium Category				
CSK3	SDK: Household 1				
CSK4	SDK: Household 2				
	Poor Category:				
CSK5	SDK: Household 1				
CSK6	SDK: Household 2				
Magobbo Scheme					
SDM1	Settlement Committee Representative		21.01.16		Magobbo
SDM2	Farmer Group Discussion – Mixed		06.15		
SDM3	Group Discussion – sugarcane Committee	02.16			
SDM4	Group Discussion – Community Leaders				
SDM5	Group Discussion – Women				

SDM6	Group Discussion – Men		
SDM7	Group Discussion – Youths		
SDM8	Interview – Cretaker		
SDM9	Interview non-cane grower(1)	18.01.16	
SDM10	Interview non-cane grower(2)		
SDM11	Interview – Teacher (Magobbo Basic School)	01.16	
Household Case studies:			
	Better-off Category:	02.16	
CSM1	Household 1		
CSM2	Household 2		
	Medium Category		
CSM3	Household 1		
CSM4	Household 2		
	Poor Category:		
CSM5	Household 1		
CSM6	Household 2		
Other interviews and Discussions			
X1	Manager (Kafue Sugar Plc)	28.01.16	Mazabuka
X2	Manager (Greenbelt)		
X3	Group Discussion – Association representatives (Manyonyo Sugarcane Project)	27.06.15	
X4	Manager (Manyonyo)	29.06.15	
X5	Official (MoA)	29.06.15	Lusaka
X6	National Coordinator (MoA)	04.01.16	

Appendix 4: Participants to Chapter 6

District Level Interviews					
Code	Position/Institution	Date	Place		
D1	Officer – MoA (Zimba)	14.11.15	Zimba		
D2	Parliamentarian	11.06.16	Mazabuka		
D3	Chief*a	27.11.16			
D4	Chief*b				
D5	Official *a	08.01.16			
D6	Official*b	06.15			
D7	Officer, Municipal Council	12.15			
D8	Officer, Community Development	26.06.15			
D9	Officer, MoCTA	27.11.16			
D10	Officer – SWASCO	16.01.15			
D11	Representatives – DATF	19.01.16			
D12	Officer, Planning Department	16.01.16			
D13	Agricultural Officer	01.16			
D14	NZP+ representative	22.06.15			
D15	Manager (FNB)	28.06.15			
Sugarcane Companies and Service Providers					
ZaSPlc1	Senior Marketing officer, ZaSPlc	06.01.16	Mazabuka		
ZaSPlc2	Senior Manager (Smallholder), ZaSPlc	06.15			
ZaSPlc3	MCGT representative (ZaSPlc)	06.15			
Kaleya Smallholders Company Limited					
SDKa	Senior Official	14.11.15	Kaleya		
SDKb	Officer (Finance)	19.01.16			
SDKc	Officer (Smallholder)	19.01.16			
SDKd	Officer (KaSCOL)	17.11.15			
SDKe	Field Supervisor	26.11.15			
Nanga Farms Plc					
SDMa	Manager	20.01.16	Mazabuka		
SDMb	Officer (HR)				
Interviews, Group Discussions and Household Case Studies: Kaleya					
SDK1	KASFA representative (1)	06.15	Kaleya		
SDK2	KASFA representatives (2)	13.11.15			
SDK3	Teacher (St. Clement Basic School)	19.01.16			
SDK4	Original farmer	01.16			
GDK1	Farmer Group Discussion – Mixed	06.15			
GDK2	Farmer Group Discussion – Community representatives	13.01.16			
GDK3	Group Discussion – Women	01.16			
GDK4	Group Discussion – Youths				
Household Case Studies					
	Household Case studies:	12.15			
	Better-off Category:				
CSK1	SDK: Household 1				
CSK2	SDK: Household 2				
	Medium Category				
CSK3	SDK: Household 1				
CSK4	SDK: Household 2				
	Poor Category:				
CSK5	SDK: Household 1				
CSK6	SDK: Household 2				
Magobbo Scheme					
SDM1	Settlement Committee Representative		21.01.16		Magobbo
SDM2	Farmer Group Discussion – Mixed		06.15		
SDM3	Group Discussion – sugarcane Committee				
SDM4	Group Discussion – Community Leaders	02.16			

SDM5	Group Discussion – Women		
SDM6	Group Discussion – Men		
SDM7	Group Discussion – Youths		
SDM8	Interview – Cretaker		
SDM9	Interview non-cane grower(1)	18.01.16	
SDM10	Interview non-cane grower(2)		
SDM11	Interview – Teacher (Magobbo Basic School)	01.16	
Household Case studies:			
	Better-off Category:	02.16	
CSM1	Household 1		
CSM2	Household 2		
	Medium Category		
CSM3	Household 1		
CSM4	Household 2		
	Poor Category:		
CSM5	Household 1		
CSM6	Household 2		
Other interviews and Discussions			
X1	Manager (Kafue Sugar Plc)	28.01.16	Mazabuka
X2	Manager (Greenbelt)		
X3	Group Discussion – Association representatives (Manyonyo Sugarcane Project)	27.06.15	
X4	Manager (Manyonyo)	29.06.15	
X5	Official (MoA)	29.06.15	Lusaka
X6	National Coordinator (MoA)	04.01.16	

Appendix 5: Participants to Chapter 7

Interview codes: Z = public institutions; G=research institutions; P=private-sector experts; Q=NGOs; N=farmer organisations; K=donors; and D=district/sub-district.

Code	Position/Institution	Date	Place
Ministries/departments/agencies			
Z1	Snr. Official a – MoA	29.06.15	Lusaka
Z2	Policy Analyst – MoA	04.01.16	
Z3	Coordinator b – MoA	04.01.16	
Z4	Snr. Official – MoL	15.12.15	
Z5	Officer – MoEWD/WARMA	07.01.16	
Z6	Director (Non-Mining Unit) – ZRA	22.12.15	
	Snr. Inspector – ZRA		
Z7	Investment Officer – ZDA	16.16.15	
Z8	Policy Analyst – ZDA	16.06.15	
Z9	Official – MoCTI	11.2015	
Z10	Snr. Investigators (2) – CPCC	18.12.15	
Z11	Snr. Inspector – ZEMA	14.12.15	
Z12	Engineer – MoEWD/WARMA	12.01.16	
Z13	Director – Nutrition Commission	18.12.16	
Research think-tanks/institutions			
G1	Officer – Centre for Trade Policy&Devpt.	08.01.16	Lusaka
G2	Research Fellow, IAPRI	18.12.15	
G3	Research Fellow, IAPRI	14.06.15	
G4	Professor, UNZA	15.06.15	
Private agricultural experts/consultants			
P1	Agriculture/Sugar Expert – AnChiCon	05.01.16	Lusaka
P2	CEO, Nutri-Aid Zambia and Value Chain Expert	15.06.15	
P3	Sugar Distributor	15.12.15	
P4	Senior Director – Trake Kings	15.12.15	
International/national NGOs			
Q1	Officer – ActionAid	21.12.15	Lusaka
Q2	Officer – Oxfam	05.01.16	
Q3	Officer – ZLA	10.05.16	
Q4	Officer – CUTS	09.12.15	
Q5	Snr. Official – CSPR	07.01.16	
Farmer-based national bodies/organisations			
N1	Official – ZNFU	04.12.15	
N2	Official – ZNFU	04.12.15	
N3	Economist – ZNFU	15.12.15.	
N4	Officer – Musika	10.12.15	
Multilateral/bilateral institutions/donors			
K1	Official – Finnish Embassy.	18.06.15	Lusaka
K2	Agricultural Expert – AfDB	18.06.15	
K3	Agricultural Specialist – Wold Bank	16.12.15	
K4	Official – EU	10.12.15	
District/sub-district			
D1	District Agricultural Officer	14.11.15	Zimba
D2	District Agricultural Officer		Mazabuka
D3	Member of Parliament	11.01.16	
D4	Commercial Bank Manager	23.06.15	
D5	Senior Manager (Smallholder), ZaSPlc	06.15	
D6	MCGT representative (ZaSPlc)	06.15	
D7	SWASCO Officer	D7:15.03.18	
Sub-district			

Code	Position/Institution	Date	Place
D7	Chief	27.11.16	
D8	Manyonyo group discussion (Scheme representatives)	27.06.15	

Appendix 6: Data Collection Tools

6.1 Information Sheet

Project title:

Large-scale Agricultural Investments and Livelihood Transformation among Sugar Producing Smallholders in Mazabuka District of Zambia research project

Invitation:

You are being invited to take part in a research project: Large-scale Agricultural Investments and Livelihood Transformation among Sugar Producing Smallholders in Mazabuka District of Zambia. Before you decide it is important for you to understand why the research is being conducted and what it will involve. Please take time to read the following information carefully and feel free to discuss it with either the researcher or others if you wish. Ask us if there is anything that is unclear or if you would like more information. Take time to reflect and decide whether or not you wish to take part in this research project.

Purpose:

We are conducting this study in order to understand and explain how rural livelihoods are transformed as a consequence of large-scale agricultural investments among rural sugar producing households in Mazabuka district of Zambia. Four specific objectives are used to guide this purpose:

1. To explore and understand specific policies, institutions and processes shaping large-scale agricultural investments in the sugar sub-sector of Zambia.
2. To understand and explain the evolution and current configuration of the sugar value chain in Zambia.
3. To investigate how large-scale agricultural investments and value chain development for sugar affects livelihood aspects for rural households in Mazabuka district of Zambia
4. Integrate objectives 1-3 by analysing and explaining how large-scale agricultural investments and sugar value chains can be structured to ensure livelihood benefits for smallholders are optimised in Zambia.

Participant selection:

You have purposively been selected to participate in this study. Selection took into account the researcher's judgement about your ability to provide relevant data to the study considering your position, nature of work, and experience. We anticipate at least 17 expert interviews at national level and 13 in Mazabuka district –the focus of the study. Meanwhile, we further expect 270 survey questionnaires and about 16 Focus Group Discussions at community level in Mazabuka district with farmer groups.

Voluntary participation:

Participation in this study is completely voluntary. If you decide to participate, you will be given this information sheet to keep and be asked to sign a consent form. Even if you decide to participate now, you may change your mind and discontinue your participation at any point in the study. You may also choose not to answer questions for any reasons you might have without necessarily telling us why. Once you choose to discontinue or not to respond to specific questions, no negative consequences shall be placed on you.

Procedures:

Participation in this study will involve answering questions related to large-scale agricultural investments, sugar value-chains and rural livelihoods. These will include policy processes and institutions guiding large-scale agricultural investments and sugar value-chains in the case of semi-structured interviews and livelihood elements in the case of smallholders. We anticipate that expert interviews will require 45 minutes, and 60 minutes for survey questionnaires. An additional 60 minutes in the case of focus group discussions is further expected. Respondents are free to either request recording or note taking during data collection process. Whereas semi-structured interviews and focus group discussions will involve general exploratory questions, survey questionnaires will generally involve collection of quantitative data on livelihood asset and intra-household dynamics. You must be knowledgeable about policy processes and practices shaping large-scale agricultural investments and sugar value-chains at national/district level to participate in expert interviews; and a cane or non-cane grower in target communities to participate in household survey questionnaires and Focus Group Discussions.

Risks and benefits:

The study involves minimal risks. **Participants might feel** distressed, discomfort and inconveniences associated with relatively longer data collection processes. Some participants might find certain questions a little bit sensitive and thus upsetting. Although there are no immediate benefits for those participating in the project, it is hoped that the study will present an opportunity for smallholders to tell their story about rural livelihoods, how these interact with large-scale agricultural investments and what this means for policy. It is hoped that an opportunity emerges to explore how large-scale agricultural investments and sugar value-chains can be structured and governed in Zambia and benefits optimised among participating small-scale farmers. It is further hoped that recommendations that will emerge from the study present value for policy making and practice at national and district level in Zambia in general as the country endeavours to reduce rural poverty and agricultural transformation.

Confidentiality and anonymity:

All information and specific responses that will be collected about you during the course of this study will be kept anonymous and confidential. Direct or indirect identifiers that might be associated with you will be removed. You will thus not be able to be identified in any of reports or publications of the study. Only the researchers involved in this study and the people providing research oversight will have access to the information you provide. Collected information will immediately be secured in safe location and any electronic information will immediately be loaded on secure University system for managing data.

Research Funders:

This research is being funded by the British Council through the Commonwealth Scholarship Commission in the United Kingdom.

Final remark:

Thank you for taking time to read through this information sheet.

Contact for further information:

If you have any questions about this research, you can contact the principal investigator, Manda Simon at pt10s2m@leeds.ac.uk.

Appendix 6.2: National Level Data Collection Guide

Expert Interview Guide (Government Ministries, Department, Agencies)

Initials of interviewer	Interview #	Date of interview	Starting time	End time	Location

A: Basic details:

A1.	Ministry/department of agency	
A2	Year of establishment	
A4	Respondent	
A5	Designation/position	
A6	Physical address	
A7	City/Town	
A8	Email address:	

B: Policies, trends in agricultural and sugar investments

B1: Main functions of your ministry/department/agency (e.g. investments promotion, land allocation etc). What are your functions or duties?

B2: What are your priorities as a ministry/department/agency and why? Or what would you characterise as the key most area of your ministry/department/agency?

B3: Do you have influence on land access and utilisation? Explain the ways in which you exert this influence.

B3.1: How do agro-investors invest and access land in Zambia?

B3.2 Key players/institutions guiding land access and use in: Agriculture b) sugar sub-sector?

B3.3: Why is the government encouraging LaSAIs? Incentivising sugar expansion? (probe: food and energy; poverty reduction)

B3.4: Who are the key actors and institutions in investment/agricultural promotion? What issues are required of potential agro-investors? How are these defined? [who participates, who decides on them?]

B4: How would you describe trends in large-scale agricultural investments in Zambia?

a) How would you describe trends in sugar agricultural investments in Zambia?

b) What are the key policies, processes, institutional provisions that make Zambia attractive to:
i) LaSAIs (ii) Sugar investments

c) Different incentives offered to large-scale agricultural investors:

i. Generally

ii. Specific to the sugar sub-sector in particular

iii. Why are agricultural investments being encouraged? What are the broader government plans or priorities?

d) Describe growth of the sugar sub-sector in Zambia

e) What range of factors do you think explains growth of sugar sub-sector in Zambia? [When prompted: e.g. easy access to land, trade/tax incentives etc].

f) What are some of the factors you think might have played an influential role in constraining growth of the sugar sub-sector in Zambia?

B4.1: What are the key policies that guide:

a) LaSAIs

b) Sugar investments

c) How are these defined? What are the considerations?

d) How can these policies be better structured to optimise the outcomes for growth and poverty reduction among smallholders?

B4.2: What are the key institutions guiding:

a) LaSAIs b) Sugar investments

b) How can these policies be better structured in order to optimise the outcomes for growth and poverty reduction among smallholders?

B4.3: What have been major challenges associated with:

- a) Agricultural investment promotion
- b) LaSAIs in Zambia
- c) Sugar investments in particular

C: Investments and Firm Guidelines

C1: Where are most investments coming from? Into which commodities? What are the drivers?. How significant are Chinese and Brazilian investments in agriculture? Are there existing programs/plans to acquire Brazilian technology and expertise in biofuels/bioethanol

C2: Any regional sources of LaSAIs?

C2: Legal and policy provisions for coordinating and organising LaSAIs? How are these enforced?

- a) Are there challenges to this enforcement, coordination and organisation?

C3: Do agro-investments guidelines in the sugar sub-sector or in general make reference to standards? What are these standards? (National and International).

C3.1: How do you ensure agricultural expansion whilst mitigation negative impacts of such expansion?

C3.2: Do you perceive agribusiness power and influence across agriculture generally and sugarcane in particular? In what ways are these sorts of power and influence expressed and perceived?

D: Future Direction

D1: How do you think LaSAIs can be well structured to ensure growth and rural development?

D2: Who do you consider key players/stakeholders in the sugar sub-sector?

Appendix 6.3: Industry Data Collection Guide: Sugar Companies/Service providers/Processors/Buyers

Initials of interviewer	Interview #	Date of interview	Starting time	End time	Location

A: Company details:

A1.	Name of the company	
A2	Year of establishment	
A3	Name of owner(s)	
A4	Respondent	
A5	Designation/position	
A6	Address	
A7	City/Town	
A9	Email address:	
A10.	Company ownership	
A11.	Number of employees and distribution on categories	Number
a).	Total number of employees (permanent and casual)	
b).	Permanent staff	
c).	Permanent female employees	

Firm-smallholder/service provider relationships

B1: Drivers to sugarcane investment in Zambia?

B1a). Main business area (main product lines/areas)

B2: Land acquisition. Processes of acquiring land for estate/smallholder production.

B3: How are local small-scale sugar producers or service providers organised and linked to your company? What contractual arrangements do you have with: 1). Service providers 2). Small-scale cane producers? How are these determined/defined?

B4: Specific requirements for smallholders or service providers as input providers? (terms and conditions, agro-practices, quality controls).

B5: Impact of your company on local livelihoods.

4B4a). Equal opportunities for all (e.g. in terms of employment?)

B5a). In ensuring sustainable agricultural cultivation, what steps has your company put in place?

C: Drivers of, and barriers to success of the company

C2: Factors driving company/industry growth.

C3: Factors constraining company/industry growth.

C4: Organizational and physical assets differentiating your company from other companies in the industry?

C5: National and international standards (or certifications) the company adheres to (e.g. Zambia Bureau of Standards). Policy guidelines shaping firm practices.

E: Markets and Networks of the Company

E1: Product and market distribution: domestic, regional and the rest of the World?

E2: How significant are local inputs to your production? Quality of inputs you receive from other firms or smallholders as part of the supply chain? What are the major challenges and opportunities? How can this be better structured and organized so that inputs from other small firms/smallholders can meet your expectations?

E3: Terms and conditions for smallholder supply.

E4: Support schemes/programs for smallscale producers linked directly or indirectly to your company?

F: State-Business Relations (regulations, policies and business associations)

F1: Describe state-business relationship in Zambia? Convergences and Divergences?

F2: Are there trade incentives (for import/export or for sourcing local inputs in your business area? Have you been granted any?

F3: Industry or trade related regulations and effects on business?.

F4: Key players/stakeholders in the sugar sub-sector?

Appendix 4: District Data Collection Guide

KII: District/Government Departments Guiding Questions:
<ol style="list-style-type: none">1. Your position and role in the district?2. Major development challenges facing the district (e.g. land, water, infrastructure, seasonal workers)3. Role of agriculture in the local economy (e.g. incomes, livelihoods etc)4. What is your opinion about: 1) sugar production in general in the district? 2). Sugar growing smallholders? District-business relations?5. Specific formal processes aimed at guiding sugar production in the district (either at small-scale farming level or company level)? How are these enforced? Which ones are prioritized?6. Major challenges and opportunities for smallholders associated with sugar production?7. Positive or negative impacts of sugar growing in the district, in sugar growing communities and among cane-growers themselves8. Challenges and opportunities for the district in general associated with sugar production9. Perceived power and influence of an agribusiness in the district (probe specific areas/cases)10. How important is the sugar industry in the region?11. How might district-agribusiness relations be improved?12. Specific farmer social groups or NGOs working to support smallholders in the area of value-chain agriculture?

Appendix 6.5: Sub-District Level Interview Guide

<p>Objectives:</p> <ol style="list-style-type: none"> 1. To explore and understand the factors affecting farmer's participation in sugar as a livelihood enhancement strategy in rural Zambia 2. To understand and explain how large-scale agricultural investments and value-chain development for sugar affects household and community livelihood aspects in rural Zambia?
<p>Human Capital (Skills, knowledge, capabilities) (15 Minutes)</p> <ol style="list-style-type: none"> a. How do people participate in sugar value-chains? (as weeding, cane cutters, suppliers, irrigators etc?) b. Any training in what they do? Education levels? Who provides these trainings? c. Labour demand in the year? d. What is the source of technical advice on sugar production? On what do farmers rely on as their source of technical advice? e. Does the company help with information and advice? How? Who provides technical advice on sugar production? Market information? Avenues for training (with ZasPlc, service providers, or independent training opportunities?) f. The role of service providers? How are they engaged? By who? What are their conditions? Who gives them? g. Are you happy with these conditions? h. Do you consider yourself knowledgeable and equipped around the business of sugar production?
<p>Social dimensions (10 Minutes)</p> <ol style="list-style-type: none"> a. Social groups exist in the communities (e.g. churches, clubs, cooperatives etc)? which ones are you member to? b. Describe reciprocity among households? c. Social cohesion among households or community members? d. Negative or positive aspects of sugar production? (Across women, men and succession, sharing of proceeds) e. Grievance mechanisms? Through whom can members of your community present these needs? f. Are your opinions respected in the scheme (e.g. running of farmer groups, social institutions) i. Participation of women and children in productive activities. In which new productive activities (on-farm and off-farm) have women participated most?
<p>Natural dimensions (15 Minutes)</p> <ol style="list-style-type: none"> a. Water availability, access and utilisation (water sources/points in the community) b. Availability, access and utilisation of eco-system services (changes overtime; what has changed; internal and external factors) c. Land (quality of land, environmental sustainability) <ol style="list-style-type: none"> a. Generally who is renting or selling land in the community? What are the conditions? (prices, sharecropping etc) b. What is the extent of informal land transactions? Sales prices? Any disputes? c. Have you recently bought, sold or tented land? d. Issues of renting in and renting out land e. Quality of rented land (fertility? Do you need to apply fertiliser)? f. Costs of buying? Terms and conditions of renting? g. What is it used for (crops/animals)? Which is your most important crop now? Why? d. Role of district in land allocation for investments and people? e. Role of traditional leaders in land allocation for investments and people? f. Do you sometimes feel you have tenure insecurity since sugar production was introduced? g. What do you sell, and what is for your own consumption? Where do you sell your produce? What prices do you receive for your other crops? Are these prices variable or stable?
<p>Physical dimensions (10 Minutes)</p> <ol style="list-style-type: none"> a. Do you think there have been changes to physical infrastructure since sugar crop was introduced in this community? Road, bridges <ol style="list-style-type: none"> a. Public transport b. Telecommunications network c. Electricity supply d. Water supply

- e. Irrigation facilities
- f. Banking services
- g. Drainage systems (are these better than before? Flooding cases?)
- b. What other areas do you think need improvements?
- c. How is infrastructure set up? To aid sugar production or business enterprise and market functioning?
- d. Look for physical evidence of enterprise in the community; transect walks, observations etc.

Financial dimensions (15 Minutes)

- a. What range of farm and off-farm IGAs do people engage in?
- b. What do women engage in? What do men engage in? Which activities are pursued? Any multiple functions to it?
- c. Non-Farm IGAs (significance to rural HHs?); why do they consider non-farm incomes? (determinants)
- d. Access to credit facilities?
 - a. Have you or your family sold any land in the past? Who to? Why?
 - b. Are you able to borrow money against this land?
- e. When do you have most income – at what time of year?
- f. Is it possible to find work around here? When, where, doing what?
- g. Perceptions around commodity prices in the community
- h. Insights into factors that enhanced or affected asset building at HH level? (e.g. poor incomes, transport costs, prices, family burdens, debts etc)
- i. What are some constraints that impede livelihood enhancement in this community?
- j. During the past three years, what activities were reduced or abandoned or indeed enhanced as a result of sugar production?
- k. In which productive activities (on-farm and off-farm) has the household depended on in the past three years?
- l. Do you think that generally your financial situation has improved as a result of adopting sugar production?

Institutional dimensions (15 Minutes)

- a. Relationships with service providers (institutions that guide sugar production: MCGA or MCGT; ERC; ZaSPIC. etc)
- b. Supply chain relationships with service providers; institutional arrangements and costs of transactions/ how are prices communicated? By whom? Through whom? How have prices change overtime?
- c. What arrangement do you have with the buyer? Do you have an advance contract?
- d. Who has responsibility for the various tasks in the sugar plot (planting, pruning, spraying harvesting etc.)?
- e. Does the company/buyer require any specific practices on the farm? What are they? How easy are they to follow?
- f. What inputs are required to produce sugar? Where do you get them? How easy are they to organise?
- g. What sort of support do you receive from your service provider? Are you happy with this?
- h. What aspects of sugar production does the service provider consider as good/bad practices in sugar production among smallholders?
- i. Skills on cooperative governance

Appendix 6.6: Household Survey Tools

Household Survey Instrument (Cane growers)

Initials of interviewer	Questionnaire #	Date of survey	Starting time	End time	Location

A: Background information

Kindly provide the following background information about your household.					
A1: Household ID		A2: Name of HH		A3: Sex	
				A4: Age	
A5: Marital status of the HH head		A5: household size (number of household members)		A5.1: Male	A5.2: Female
A4: Respondent name		A4.1: Relationship to A2		A4.2: Sex	A4.3: Age
A5: Other present at interview		A5.1: Relationship to A2		A5.2 Sex	A5.3: Age
A6: What is your main occupation?	1). Agriculture 2).Business 3). Other (specify)		A7: Marital status of the respondent		
A8: Name	Position in the HH 1= Husband 2= Wife 3 =daughter/son 4= Other relative 5= Non-relative	Sex	Age	Education (Grade)	Literacy 1= read only 2= Write only 3= Read and write 4= Neither
A9: Number of school-aged children/dependants					
	Primary level	Secondary level	University level		
Attending school now					
Stopped					

B: Crop production, diversification and asset acquisition

B1: Main source (s) of livelihoods before and after you started growing sugar? Tick and rank according to importance (1= very important, 2= Important, 3= Less important)				
	Before you started growing sugar		After you started growing sugar	
	Tick	Rank	Tick	Rank
1= Own farming				
a) Crop production				
b) Livestock production				
c) Mixed farming				
2. Non-farm				
a) Petty trading (e.g. tuntamba)				
b) Food/cash for work				
c) Food aid				
d) Safety net (e.g. cash transfer)				

e) Remittance (e.g. child working elsewhere)				
f) Other businesses (specify) _____				
3. Hired farm worker				
4. Other) (specify) _____				
B2: What crops have you grown before? What crops do you grow now? (crop diversification)				
	Before	Now		
1. Maize				
2. Cotton				
3. Beans				
4. Pumpkin				
5. Groundnuts				
6. Sweet potatoes				
7. Cabbages				
8. Other (specify)				
B3: How much land is used to grow sugar cane? (circle accordingly)				
1. 0-5 ha	5.5-10 ha	Above 10 ha	Other (specify)	
B4: What facilities do you have for growing sugar?				
1.	2.	3.	4.	
5.	6.	7.	8.	
9. How easy are these facilities to organise?				
1. Very easy	2. Very difficulty	3. Difficult to tell/I don't know		
B5: How much land was/is allocated to the following crops?			Then	Now
1. Maize				
2. Cotton				
3. Beans				
4. Pumpkin				
5. Groundnuts				
6. Sweet potatoes				
7. Cabbages				
8. Other (specify)				
B6: Can you easily change land allocated to sugar to other uses?				
1. Very easy to change land-use from sugar to other crops				
2. Very difficult to change land-use from sugar to other crops				
3. Cannot tell/ know				
B7: Land for food crop production has:				
1. Increased				
2. Decreased				
3. Remained the same				
4. Difficult to tell/don't know				

5. Other (specify)	
B8: What sort of assets do you have? (Tick where applicable)	
1. Iron sheet roofed house	
2. Thatched house	
3. Bed	
4. Mattress	
5. Radio	
6. TV set	
7. Mobile phone	
8. Bicycle	
9. Plough	
10. Hoe	
11. Ox-cart	
12. Cattle	
13. Pigs	
14. Goat	
15. Poultry	
16. Water pump/point	
17. Other (specify)	

C: Participation and processes in sugar production

C1: How long has your household participated in growing sugar?		
C2: What factors influenced you to start growing sugar? (Tick and rank importance: 1= Very important, 2= Important, 3= Less important)		
	Tic k	Rank
1. Food insecurity		
2. Low incomes		
3. Drought (shortage of rainfall)		
4. Pressure from friends/others		
5. Pressure from family		
6. Availability of idle land		
C3: From whom did you hear about prospects of sugar production?		
	Tic k	Rank
1. Fellow farmers		
2. Sugar cane service providers (e.g. Magobbo or Kaleya)		
3. Sugar cane buyers/processors (e.g. Zambia Sugar)		
4. Village administration		

5. Other (specify) _____		
C4: What did you do in order to start growing sugar?		
	Tic k	Rank
1. Pay someone		
2. Register with local scheme		
3. Rely on social connection with key people organizing sugar production		
4. Other (specify) _____		
C5: How were you made aware about prospects of growing sugar?		
1. Local NGOs		
2. Local government departments		
3. Fellow farmers		
4. Service providers/sugar growing companies		
5. Other (specify)		
C6: What did the sugar service providers/buyers/processors do or enter into in order for you to consider growing sugar? (probe conditions attached and how they were made aware of these)		
	Tic k	Rank
		1=Fulfilled, 2=Not fulfilled, 3=Somehow fulfilled. 4= Difficult to tell
1. Promised employment		
2. Promised good incomes		
3. Promised food security		
4. Promised agricultural support		
5. Other (specify) _____		
C7: Do you have any member of your household working on plantations or sugar estates?		Yes No
C8: Did you undergo/have you undergone any training before and/or after starting growing sugar?		
	Before/nature of training (e.g. agricultural practices, market information)	After/nature of training (e.g. agricultural practices, market information)
1. As sugar producing farmers		
2. As employees of a sugar growing company		
3. As a sugar producing community		
4. As farmer group leader		
5. Other (specify)		
C9: Who made the decision to start growing sugar in your household?		
1. The head of household together []	[]	3. Wife and husband and

2. Shared household decision among all household members []		4. Other (specify)	
[]			
C10: Generally, what challenges/costs did you face/incur in starting to grow sugar scheme?			
1. Direct challenges/costs		2. Indirect challenges/costs (e.g. transport)	
C11: What is your opinion about processes of starting to grow sugar? [circle accordingly]			
1= Very easy 2=Fairly easy 3= Very difficult 4= difficult/difficult to tell			

D: Sugar output, markets and market linkages challenges and pathways

D1: Now kindly tell us about your production and price estimates in the past three years			
	2013 (Monthly X times harvested)	2014 (Monthly X times harvested)	2015 (Monthly X times harvested)
production estimate (tons):			
Estimated prices/ton (ZMK)			
Researcher to calculated:			
Estimated annual production			
Estimated annual income			
What main inputs do you need in order to succesfully produce sugar?			
1.	2.	3.	
4.	5.	6.	
How do you organise these? Rank these accordingly: 1=Less important 2= Quite important 3= Very important			
1.	Tick	Rank	
2. Buy on your own			
3. Covered in contractual agreements			
4. Borrowed with a view to repay later			
5. Other (specify)			
Would you be in position to organise your own inputs if service providers/other discontinue input supplies to your household?		Yes	No
D2: Where do you sell your sugar harvest?		Tick	Rank importance (1=Less important 2= Very important 3=Difficult to tell/don't know)
1. Sell via a service provider			
2. Direct to the processor			
3. Other (specify)			
D2.1 Who decides where to sell your sugar?			
1. You as a farmer			
2. Scheme committee			
3. Contract arrangements			

4. Other (specify)	
D3: What are your means of transporting your harvest to the market place?	
Own transport	
Hired transport	
Hired labour	
Family labour	
Collected by the service provider	
Other (specify)	

D4: What THREE main specific firm practices does the service provider/buyer/processor require on your farm or on sugar production in general? (e.g. reduced/no livestock, soil, seeds, tools)	
1.	
2.	
3.	

D5: In your opinion, are these requirements:	
Category	Comment (Why do you say so?)
1. Easy to follow	
2. Difficult to follow	
3. Cheap to adopt	
4. Expensive to follow	
5. Other (specify)	

D6: Mention three most market related challenges that you face or have faced before in gaining market access of sugar? Rank them: 1= Frequently faced 2=Not frequently faced 3= Faced only once in a while		
	Tick	Rank
1. High transportation cost		
2. Problems of storage		
3. Low/fluctuating output prices for the harvest		
4. High input prices		
5. Unclear transaction costs		
6. Other (specify)		

D7: Kindly state the five factors that you consider to be most influential in constraining the further growth of your household in terms of sugar production, with 1=most important, 2=second most important, 3 third most important, 4=fourth most important and 5=fifth most important factor.		
Factors	Rank	How have you dealt with these factors?
Weak managerial capabilities at household level		
Lack of qualified man power (labor) within the household		
Limited access to technology		
Limited access to information		
Lack of adequate financial resources		
Low market prices		
Stringent farm practices required by the buyer/processor		
Competition is restricted by dominant schemes/farmers		
High input costs undermine ability to compete		

Non-existing and/or incapable business associations/farmer organisations		
Poor services from service providers/buyers/processors		
Lack of support from local NGOs		
Poor Infrastructure e.g. roads		
Other, kindly state		

D8: How long have you been a member of this scheme?	
What kinds of support does your membership to this scheme bring to your household?	
1. Inputs	
2. Guidance on farm practices	
3. Technology	
4. Training opportunities	
5. Market specific information e.g. prices	
6. Other (specify)	

D9: Kindly state THREE most important support schemes/cooperatives/organisations you are a member and those that guide and support sugar production among smallholders in your area? Then kindly add whether you/your household benefitted from the support, the importance of the support scheme as well as the relevance of these schemes/organisations to your household?

Names of support scheme/organisation/cooperatives	Nature of support offered to smallholders (e.g. inputs, training)	Support your household received	Importance to household growing needs (1 less important -5 very important)	Relevance to household sugar growing needs (1 (very limited-5 very high extent)

D10: Do you participate in these schemes/cooperatives/organisations? Yes No

D10.1 If yes, indicate the nature of participation

Scheme/organisation/cooperatives	Length of participation	Nature of participation	Importance

D10.2 Do you think you have any influence on processes in these organisations within your area? Yes No

D10.3 If yes, kindly explain in what ways. If no, explain why you think so (probe effectiveness of leverage or otherwise specific elements considered barriers to smallholder influence within these systems?)

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D10.4 If NO to question D10.2, to what extent do the following factors hinder your participation? (1=To a larger extent, 2=To a lesser extent, 3=No influence at all. Tick Rank

	Tick	Rank
1. Age		
2. Gender relations (e.g. because its male biased)		
3. Intra-household negotiation (e.g. choice)		
4. Difficult entry/participation requirements		
5. Distance		
6. Trade-offs and conflict		
7. Other (specify)		

E: Production, land and land-use dynamics and household responses

E1: How much land is/was available, accessible and utilized? In relation to large-scale agricultural investments and sugar growing (Acreage ha/acre)						
Then			Now			
Available	Accessed	Utilized	Available	Accessed	Utilized	
E2: How much land do/did you have? What was/is the legal status of this land?						
Then			Now			
Legal status						
Customary land			Customary land			
Statutory land			Statutory land			
Other (specify)			Other (specify)			
E3: Of the land you have/had access to, how was it acquired?						
1. Given by the chief						
2. Given by the headman						
3. Given by relatives						
4. Inherited						
5. Purchased without title						
6. Purchased with title						
7. Rented						
8. State land given to the farmer						
9. Other						
E4: Land-uses before and after you started participating in growing sugar			Indicate in ha/acres			
			Then		Now	
1. Cultivated by the household						
2. Rented						
3. Grazing land						
4. Other (specify)						
E5: What improvements have you made to your land since you started growing sugar?						
1. Built secure shelter						
2. Built other building (e.g. poultry house)						
3. Erected own water point						
4. Connected household to electricity						
5. Other (specify)						
E6: What is your opinion about land availability, accessibility and utilization for your household in relation to growing sugar?						
1. Has reduced						
2. Has increased						
3. Has remained the same						
4. Difficult to tell/don't know						
E7: How have you responded to these dynamics of land availability, accessibility and utilization?				Tick		Rank

1. Reduce crop production		
2. Reducing number of livestock		
3. Bought extra land		
4. Rented		
5. Sharecropping		
6. Relocated		
7. Other (specify)		
E8: In what ways have land-use dynamics affected your way of life?	Tick	Rank
1. Reduced food production (including gardening)		
2. Reduced livestock		
3. Reduced incomes		
4. Reduced access to water		
5. Reduced to eco-system services (e.g. fruits and natural foods from the forests)		
6. Other (specify)		
E9: Do you have plans or have thought about buying/acquiring more land in the future?	Yes	No
E10: On what do you intend to use this land for? Rank factors accordingly: 1= Very Important 2= Important 3=		
1. Production on food crops		
2. Production of cash crops		
3. Grazing land		
4. Cattle rearing		
5. To carter for growing household size		
6. Other (specify)		
E11: Do you/did you have access to irrigation services/opportunities for irrigation e.g. gardening?	Then	Now
E12: Compared to before you started growing sugar, the irrigation and access to water has:		
1. Increased		
2. Decreased		
3. Not changed		
4. Not applicable		
E13: Do you have adequate access to water when you need it?	Yes	No
E13.1 If NO, what do you attribute this to?		
E14: How have you responded to these dynamics of irrigation and access to water?		
1. Developed own water points		
2. Access distant water points		
3. Reduced/stopped gardening		
4. Other (specify)		

F: Income sources, expenditure and expenditure decisions

F1: Has any of your household member/s worked outside your farm in the past year or conducted business?					Yes	No
F1.1: If yes, tell us about the nature of their work, how long they worked and estimated incomes						
Nature of work	Category	How many are working	Period they worked	Estimated monthly income	Household contribution [Yes/No]	
Full-time	On other farms					
	Non-agricultural					
Part-time	On other farms					
	Non-agricultural					
Business						
Nature of business	Within community					
	Outside the community					
F2: What would you consider as your normal sources of income					Then	No w
1. Selling cash sugar						
2. Selling food crops						
3. Selling poultry						
4. Selling cattle						
5. Selling other animals						
6. Petty trading						
7. Other (specify)						
F3: How much do you earn from each of the said sources of income per year? [estimate from past year]					In Zambia Kwacha	
1. Selling cash sugar						
2. Selling food crops						
3. Selling poultry						
4. Selling cattle						
5. Selling other animals						
6. Petty trading						
7. Other (specify)						
F4: Who keeps the money in your household?						
1. Husband						
2. Wife						
3. Either husband or wife						
4. Other (specify)						
F5: Who makes expenditure decisions in your household?						
1. Husband only						
2. Wife only						
3. Both husband and wife						
4. Shared household						

5. Other (specify)		
F6: What are the areas where expenditure decisions are mostly shared?	Tick	Rank
1. Food		
2. Education		
3. Health		
4. Investment		
5. Asset acquisition		
6. Savings		
7. Gifts		
8. Other (specify)		
F7: What areas does woman (wife) participate in making expenditure decisions? Rank: 1=Not very often 2=Quite often 3=Very often	Tick	Rank
1. Food		
2. Education		
3. Health		
4. Investment		
5. Asset acquisition		
6. Savings		
7. Gifts		
8. Other (specify)		
F8: How do you use your income? After listing, kindly rank accordingly. [Give respondent/s 20 marbles and ask them to share them among the items they say they use the cash for, giving more stones to the most important etc.]		
	Tick	Rank
1. Food		
2. Education		
3. Health		
4. On farm up-grading		
5. Buying poultry		
6. Buying goats/pigs		
7. Buying cattle		
8. Income generating activities		
9. Buy phones		
10. Building/repairing your house		
11. Extended family		
12. Church		
13. Saving		
14. Gifts		
15. Debt repayment		

16. Other (specify)					
F9: In your opinion, do you have any new obligations since you started growing sugar that you never had before? [probe new ones)				Yes	No
What assets have you specifically bought with incomes from sugar? (e.g. farm tools, radios, sofas)					
1.	2.	3.	4.		
5.	6.	7.	8.		

G: Well-being and Intra-household dynamics

G1: What things do you need in order to be happy? Rank whether the listed element is: 1= Necessary 2=Not necessary 3= Very necessary

No.	Need	Scale	Need	Scale
1.			31.	
2.			32.	
3.			33.	
4.			34.	
5.			35.	
6.			36.	
7.			37.	
8.			38.	
9.			39.	
10.			40.	
11.			41.	
12.			42.	
13.			43.	
14.			44.	
15.			45.	
16.			46.	
17.			47.	
18.			48.	
19.			49.	
20.			50.	
21.			51.	
22.			52.	
23.			53.	
24.			54.	
25.			55.	
26.			56.	
27.			57.	
28.			58.	
29.			59.	
30.			60.	

G2: Considering yourself, how satisfied are you with actual needs attainment? Rank on satisfaction scale: 0= Don't have 1=Bad 2=Fair 3=Good

No.	Scale	Scale
1.		31.
2.		32.
3.		33.
4.		34.
5.		35.
6.		36.
7.		37.
8.		38.
9.		39.

10			40		
11.			41.		
12.			42.		
13.			43.		
14.			44.		
15.			45.		
16.			46.		
17.			47.		
18.			48.		
19.			49.		
20			50.		
21.			51.		
22.			52.		
23.			53.		
24.			54.		
25.			55.		
26.			56.		
27.			57.		
28.			58.		
29.			59.		
30			60		
G3: Considering all the resources at your disposal, do/can you get the following goals? Rank on a resource scale: 1= Never 2= Sometimes 3=Often (or a lot of time)					
No.	Goal				Scale
3.	To have sufficient food				
	To have improved household nutrition				
4.	To have sufficient incomes				
5.	To have good protective shelter				
6.	To educate children				
7.	To have access to good health services				
8.	To have a good relationship with everyone in the family				
9.	To have adequate clean water				
10	To have adequate sanitation				
11.	To have good protective shelter				
12.	To be economically secure				
13.	To have increased productive assets				
14.	To make sufficient investments				
15.	To have a planned/predictable future				
16.	To be a respected member of the family				
17.	To be a respected member in the society				
18.	To be a valued member in the community				
19.	To build livelihood diversification (e.g. more fall-back strategies)				
20	To become more livelihood resilient				
G4: What would you consider to be enabling or preventing factors as they relate to your goals					
	1. Lack of good incomes that meets your demands				
	2. Lack of good market opportunities (e.g. prices)				
	3. Reducing access to land				
	4. Poor social networks within the community				
	5. Poor government support				
	6. Other (specify)				

G5: Now tell us about how satisfied you are with existing large-scale agricultural investments and your participation in sugar production. Using a scale of 1-3, indicate the extent to which you agree: 1= Agree 2= Neither agree nor disagree 3= disagree		
1.	The quality of life of my household is improving	
2.	The quality of life in the community as a whole is improving	
4.	I am relating better with my spouse than before	
5.	I am relating better with other members of the community	
6.	I am now a respected member of the community	
7.	I am not a valued member of the community	
8.	The number of meals my household eat has increased	
9.	I am confident that my children/dependants will continue school	
10.	The nutritional status of my household has improved	
11.	Health status of my family has improved	
12.	I am now able to support other people in the community	
13.	I am now able to remit resources to family members, relatives etc.	

H: Household coping strategies

H1: Does your household have access to adequate amount of food all year round?		Yes	No
H1.1: If NO, what do you consider your important strategies to overcome food shortages?			
		Tick	Rank
1.	Cutting number of meals		
2.	Choosing to give the little food to children only		
3.	Choosing to give the little food to the head of the household only		
4.	Borrowing food		
5.	Borrowing money in order to buy food		
6.	Receive assistance from neighbours		
7.	Receive assistance from relatives		
8.	Remittances from someone (e.g. child) working in town/elsewhere		
9.	Do piece-works (involvement in off-farm activities)		
10.	Do piece works (involvement in non-farm activities)		
11.	Migrate to urban areas to seek new pathways		
12.	Migrating to other areas within the district		
13.	Praying and hoping the situation changes		
14.	Sale of household assets		
15.	Sale of livestock		
16.	Food aid		
17.	Surviving on fruits and other edible products from the forest		
18.	Other (specify)		
Compared to before you started growing sugar cane, your household food security position have generally:			
1= Greatly improved 2= Somewhat improved 3= Remained the same 4= Somewhat deteriorated			
5= Greatly deteriorated 6= Difficult to tell/don't know			
H2: Compared to before you started growing sugar, indicate average number of meals per day:			
	Number of meals per day		
Before			
Current			

H3: What household livelihood shocks have you experienced in the past year? Indicate how the household responses for each experienced shock/stress		
Shocks/stress	Frequency/year	Household responses
1. Death of bread winner		
2. Bereavements		
3. Being stolen from/theft		
4. Loss of crops		
5. Natural disasters (e.g. flooding, droughts)		
6. Loss of land		
7. Other (specify)		
H4: Are changes made to the following elements as a coping strategy in response to livelihood shocks?		
	Specify	
1. Food consumption (e.g. reducing number of meals)		
2. Access to education (e.g. asking certain members to stop schooling)		
3. Access to health services		
4. Household economic responses (e.g. selling off assets)		
H5: During difficult times, how likely are you to receive assistance from outside? Rank 1= Less likely 2= Difficult to tell/don't know 3= Most likely		
From your neighbours/members of the community?		
From your relatives?		
From members of the community		
From organisations your are a member		
Other (specify)		

I: Views, perceptions and opinions about large-scale agricultural investments and sugar production

The following summative rating requires that you give your views and opinions about LaSAIs, participation in sugar and livelihood changes. Respond according to five possible options: 1= Strongly agree 2= Slightly agree 3 Don't know/undecided 4= Slightly disagree 5= Strongly disagree	
1. We received adequate training and information about sugar production before I/we commenced production.	
2. We received adequate training and information about sugar production during the period we started growing sugar	
3. People's views and opinions were heard and properly responded to before participating in sugar production	
4. People's views and opinions are being heard and properly responded to during sugar cane production.	
5. Terms and conditions for producing and selling sugar to service providers/buyers/processors are clear and straight forward.	
6. I have an influence on the terms and conditions for growing and selling sugar.	
7. I am free to produce and sell the sugar to any buyer/processor/buyer	
8. Given your household situation before, sugar cane production was the only feasible crop available that you could start growing.	

9. Growing sugar has led to more asset acquisition than before.	
10. Participation in sugar production has improved household food security than before.	
11. Participation in sugar production has improved household incomes than before.	
12. Participation in sugar production has improved household access to land	
13. Participation in sugar production has improved household access to eco-system services than before.	
14. Participation in sugar production has negatively affected food production than before	
15. Participation in sugar production has led to livelihood diversification than before.	
16. Participation in sugar production has led to more planned spending and expenditure decisions than before.	
17. Participation in sugar production has led to more household shared decision making than before.	
18. Participation in sugar production has led to more household responsibilities than before (e.g increased demands from relatives or community).	
19. There are more social and organisation support received for growing sugar than before.	
20. Participation in sugar production has enhanced good relations and support in the community	
21. There are plenty of opportunities (e.g. employment) for women in sugar cane production schemes	
22. Women's voices are being heard and well responded to in sugar cane schemes	
23. Opportunities for growing sugar are open to both men and women.	
24. Growing sugar remains a good business than what you grew before	
25. I am happy with the business of growing sugar	

Appendix 6.7: Sub-district Data Collection Tools

Focus Group Discussion Guide

To begin after Transect walks that will point to: crops being grown; natural capital; location of specific resources.

FGDs with Sugar Producing Participants: Men and Women Combined
Discussion Issues
Quality of Life
<ol style="list-style-type: none"> 1. What things do we need to have and do in order to live well in this community? (List as many as possible) 2. Which of these are the most important? (Participants should rank these either by voting or using stones).
Oral history/time lines
<ol style="list-style-type: none"> 1. How did we get where we are today? [Probe main historical events, way of life/livelihoods] Using a large piece of paper, let participants indicate major historical events.
Sugar growing and scheme participation in the community
<ol style="list-style-type: none"> 1. How long has the community grown sugar? How did ideas of growing sugar change to become actual sugar project? What are/were the motivations? 2. How is sugar produced? Scheme organisation? 3. How were sugar growing households selected to join these schemes? 4. Livelihood impacts of sugar growing in this community [probe land access, production, incomes, food security, do they feel less vulnerable to livelihood shocks] 5. How are terms of engaging service providers/buyers/processors defined? How have these changed overtime? In what ways do farmers influence these processes and outcomes? How is information shared? Who shares? <p>7a) Are there buyer practices you would consider bad/coercive/detrimental to livelihoods? (e.g. unfair payments?)</p> <p>7b) Are you able to refuse/avoid these? Why? (probe ability to make own informed local decisions)</p> <p>7c) How do you consider your participation and representation in this intermediaries? Accountability? Monitoring whats going on? Are you happy with overall governance? How can these be better structured to ensure you are happy with these intermediaries?</p> <ol style="list-style-type: none"> 6. Are there any grievance mechanisms for those who are not happy with these terms of engagement? Describe how they work? 7. Key actors influencing decisions around sugar growing? [Probe: individuals, intermediaries and district level actors].
Wealth ranking/Social/Resource mapping.
<ol style="list-style-type: none"> a. Wealth categories (Proportional pilling as households) (Probe local/household characteristics/categories for wellbeing) b. Key land marks/resource points/areas: villages/where people live, schools, clinics, churches, boreholes, dams, shopping centres etc. c. An organizational map should aim to show different active institutions in the community/area [e.g. government, NGOs, CBOs, Churches, traditional leaders, political leaders etc.
Main problems in the community/vulnerable groups
<ol style="list-style-type: none"> 1. What are the main problems faced by this community? 2. Which of these ate the most important/crucial ones? 3. What are the different vulnerable groups/individuals in the community? 4. Which of groups are most affected by the problems highlighted? 5. What coping strategies do households utilize to deal with livelihood shocks (start first by getting a list of livelihood shocks)? (Past 3 years)

Appendix 6.8: FGDs with Sugar Producing Participants (Men or Women ONLY)
Quality of Life
<ol style="list-style-type: none"> 1. What things do we need to have and do in order to live well in this community? 2. Which of these are the most important? (Participants should rank these either by voting or using stones.
Sugar growing and scheme participation in the community
<ol style="list-style-type: none"> 1. How are women/men engaged in sugar production? (as labour, as employees, as committee members). 2. How do/did households decide on growing sugar? What is the role of men different from women in sugar production? 3. Are there specific challenges to growing sugar peculiar to men/women in this community? 4. Challenges/opportunities associated with the way smallholders are organized that present challenges/opportunities to men different to women or vice versa. <p>4a). Concerns around:</p> <ol style="list-style-type: none"> 1. Loss of land? 2. Employment opportunities (how equitable?) 3. Representation (is there limited representation for women different from men?) 4. Apportioning of sugar cane plots in the scheme? 5. Changes to local customs/culture (e.g. women participation?) [Probe: how these affect local beneficiation processes] <ol style="list-style-type: none"> 5. Do arrangements guiding scheme engagements/contracts present challenges to men different from women or vice versa?
Household coping strategies and intra-household dynamics
<ol style="list-style-type: none"> 1. What are the livelihood related shocks experienced in this community? 2. Which groups in the community are most affected by these shocks? 3. Coping strategies for households during livelihood shocks (start first by getting a list of livelihood shocks) [4. As a coping strategy, are there changes made to: <ul style="list-style-type: none"> • Household food consumption as a coping strategy? • Household education? • Household health seeking behaviour? • Household assets (e.g. selling)? 5. What is the role of women different from men when household experience these shocks? How are these roles defined/determined? 6. How has participation in sugar production affected: <ul style="list-style-type: none"> • Household material well-being? • Household relational well-being? • Household goals and aspirations?
Labour, Food and Income Calendars
<ol style="list-style-type: none"> 1. Distribution of food throughout the year 2. Distribution of income throughout the year 3. When is there most demand for labour throughout the year?
Social support networks
<ol style="list-style-type: none"> 1. Social support opportunities available for community members (Government, NGOs, private actors etc). 2. Employment opportunities in this community? How easy/difficult is it to get employment in this area? 3. Local traditions and practices regarding helping each other and sharing in times of need? Do women and men have different roles and relations in this regard? 4. Do people receive support from the community/friends/neighbours when they need support? In what circumstances is support rendered? How common is this? 5. Do people receive support from religious institutions? What is normally received and what are the procedures? 6. Are there pre-existing community savings and credit mechanisms? How do these work? Have these changed overtimes and why?
Main problems in the community/vulnerable groups
<ol style="list-style-type: none"> 1. What are the main problems faced by men/women in this community? 2. Which of these are the most important/crucial ones? 3. How do men/women deal with these problems?

Appendix 6.9: FGDs with Non-Sugar Producing Participants (Men or Women ONLY)	
Quality of Life	
1.	What things do we need to have and do in order to live well in this community?
2.	Which of these are the most important?
3.	What do you think you need to have in order to achieve these? What pathways are open to them? Which ones are blocked? Why and how?
4.	Have your relationships with sugar growing individuals/households changed? How? How has this affected you?
Knowledge on sugar growing and scheme participation in the community	
6.	How do/did households decide NOT to grow sugar?
7.	Challenges to growing sugarcane.
8.	Challenges/opportunities associated with the way smallholders are organized
9.	Selection of sugarcane growers in the community
10.	Incentives sugar producing households/individuals receive that you don't receive for being a non-cane grower?
11.	What do you think about the way people were selected to participate in sugar schemes?
12.	Any complaints or concerns about sugar production in this area?
Household coping strategies and intra-household dynamics	
7.	Main economic activities and sources of income for non-cane growers
8.	What do you use the cash for?
9.	How are household spending decisions made about cash income?
10.	Livelihood related shocks experienced among non-cane growers. Groups most affected by these shocks
11.	Coping strategies for households during livelihood shocks
12.	As a coping strategy, are there changes made to: <ul style="list-style-type: none"> • Household food consumption as a coping strategy? • Household education? • Household health seeking behaviour? • Household assets (e.g. sale of assets)?
13.	What is the role of women different from men when household experience these shocks? How are these roles defined/determined?
Labour, Food and Income Calendars	
14.	Distribution of FOOD throughout the year
15.	Distribution of income throughout the year
16.	When is there most demand for labour throughout the year?
Social support networks	
17.	Social support opportunities for non-cane growers (e.g. Government, NGOs etc).
Main problems in the community/vulnerable groups	
3.	Main problems faced by this community
4.	Which of these are the most important/crucial ones?
5.	How do men/women deal with these problems?