

**An assessment of contractual arrangements for agricultural market access in
South Africa: A smallholder's perspective**

by

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DECLARATION

I, Anold Derembwe, declare that this dissertation, which I hereby submit for the degree of MSc (Agric) Agricultural Economics at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other institution.

Signature:.....

Date: May 2015

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ABSTRACT

Smallholder farmers in South Africa have historically been precluded from the mainstream agricultural markets owing to various factors, chiefly, a non-existent enabling environment and lack of support from the government and/or relevant agencies. The post-1994 changes in the economy, and in particular in the agricultural industry, brought about the phenomenon of preferential procurement and contractual arrangements in agricultural value chains. Most agribusinesses and supermarkets in South Africa procure agricultural products under contractual arrangements. Recent studies and literature indicate that contractual arrangements are considered an ideal institutional arrangement for fostering market access for smallholder farmers. However, there has not been growth in incidences of sustained contractual arrangements between agribusiness, supermarkets and smallholder farmers in South Africa. Owing to this, it is imperative to investigate the nature of existing contractual arrangements, their salient aspects and the types of smallholder farmers actively participating in certain arrangements.

This study aims at investigating the types of contractual arrangements in which certain smallholder farmers are engaged and analysing characteristics of these farmers. Furthermore,

trajectories of smallholder farmers who participate in contractual arrangements were analysed in order to establish factors that enable their involvement. Contractual arrangements were categorised according to the general outline, contract conditions, roles of contractors and farmers, conflict resolution, and the advantages and disadvantages that arise from these arrangements.

The study employed a geographic approach and focused on smallholder farmers and agribusinesses in the Tzaneen area. A total of 36 farmers and 4 agribusinesses were interviewed during the survey. The study employed both structured and semi-structured questionnaires for farmers and agribusinesses, respectively. In addition to farmers and agribusinesses, representatives from the Department of Agriculture and the Land Bank were consulted in order to corroborate responses from farmers and agribusinesses. In order to make suitable inferences, relevant literature on contract farming and smallholder farmers was explored. This helped to better understand various contractual arrangements, participation of smallholder farmers, and the most feasible ways in which contractual arrangements can be employed as tool for inclusion of smallholder farmers in agricultural markets.

The results of this study indicated that agribusinesses prefer to initiate contractual arrangements with smallholder farmers that have access to land and certain production infrastructure. There is a positive relationship between farmers' ownership or access to land and suitable infrastructure and their involvement in contractual arrangements. It should be noted that ownership of equipment and other machinery on the part of smallholder farmers did not have a major impact on their likelihood of participating in contractual arrangements. Smallholder farmers were drawn to most contractual arrangements for many reasons, including market reliability and guaranteed payment following deliveries of produce.

Although smallholder farmers who participated in contractual arrangements earned considerably high revenues from disposal of their produce through the contractors' channels, there were cases of late payments and reduced expected incomes. In the broiler chicken management contractual arrangement, a number of the participating smallholder farmers indicated that the contractor, Bushvalley, did not always pay within the agreed 30-day period and in some instances, the grading and subsequent pricing of their broiler birds was 'deliberately' stringent, thereby

lowering prices and revenues. Producer prices for commodities in contractual arrangements varied, and in most cases were lower than spot market prices that could be fetched by the commodities of similar quality in the local market and elsewhere. However, it is important to note that farmers were satisfied by the fact that producer prices in contractual arrangements remained constant and stable within a production season or period, thereby allowing them to plan the financial management of their farming businesses.

This study established that although there are various factors that determine successful participation of smallholder, external support in various forms from both the government, private and non-governmental organisations was crucial in enabling contractual arrangements. In cases where external support was provided, smallholder farmers entered into and participated in contractual arrangements without difficulties. Thus, this study suggests that relevant external support is an important form of intervention for fostering contractual arrangements and thereby helping smallholder farmers to access agricultural markets. This study further recommends that the government should play an important role in providing an enabling environment through deliberate policies and regulations that foster contractual arrangements and enable smallholder farmers in various sectors to access suitable agricultural markets.

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ACRONYMS

AgriBEE	Agricultural Black Economic Empowerment
APOL	Agro-processors of Limpopo
ARDC	Agricultural Rural Development Cooperation
BTC	Belgian Technical Cooperation
CA	Collective Action
CASP	Comprehensive Agricultural Support Programme
CF	Contract Farming
DAFF	Department of Agriculture, Fisheries and Forestry
DBSA	Development Bank of Southern Africa
DC	Distribution Centre
EU	European Union
FDI	Foreign Direct Investment
GAP	Good Agricultural Practices
GDP	Gross Domestic Product
LCP	Letaba Citrus Processors
LDA	Limpopo Department of Agriculture
LIBSA	Limpopo Business Support Agency
LimDev	Limpopo Economic Development Enterprise
LRAD	Land Redistribution for Agricultural Development
LSF	Large-Scale Farmer
LTGA	Limpopo Tomato Growers Association
KZN	KwaZulu-Natal
NGO	Non-Governmental Organisation
NAMC	National Agricultural Marketing Council
NDA	National Department of Agriculture
NIE	New Institutional Economics
OG	Out grower
PTO	Permission to Occupy

SAFE	South Africa Fruit Exporters
SHF	Smallholder Farmer
SPSS	Statistical Package for Social Scientists
SSF	Small-Scale farmer
TSB	Transvaal Sugar Company
WTO	World Trade Organisation

CHAPTER 1

INTRODUCTION

1.1 Background

The dual agricultural system that prevailed in South Africa prior to 1994 did not equitably service all farmers.¹ The skewed provision of government support meant that not all farmers could reach agricultural markets: established commercial farmers, who were mostly white people and prime recipients of state support, had better access to agricultural markets than smallholder farmers (SHF) or small-scale farmers (SSF),² who were mostly black people (Louw, Jordaan, Ndanga & Kirsten, 2008). Subsequent to the post-1994 political system transformation, substantial policy reforms were enacted which fostered the integration of the South African economy into the global economy. Participation in the global economy necessitated the introduction of policy initiatives that embraced trade liberalisation and/or market liberalisation. Thus, the South African agricultural sector became exposed to agro-industrialisation or restructured agri-food markets and this brought with it new market prospects for farmers, as well as challenges, especially for the SHFs. Most SHFs lack the capacity to access the evolving agricultural markets and cannot sustain their participation in particular supply chains (Berdegue, Bienabe, & Peppelenbos, 2008; Digal & Proctor, 2008). Thus, despite the opportunities created by the industrialisation of agriculture and liberalisation, South African SHFs remain prone to exclusion from agricultural markets (Sartorius, 2003).

Market liberalisation curtailed the involvement of government in public investments. Government investment in marketing infrastructure and market facilitation, and in input and technical services provision, dwindled progressively, giving room for increased private stakeholders' participation (Reardon *et al.*, 2008). However, private stakeholders' activities were and are not as vibrant as anticipated, owing to lack of incentives, weak institutions and perceived lurking risks; free market failure ensued and is prevalent (Kirsten & Sartorius, 2002a; Reardon *et*

1 Apartheid policy extended constant generous support to mostly white farmers who became commercially established, while most black farmers did not receive the same level of support, remained incapacitated, and mostly subsistence producers.

2 A small-scale farmer is one whose scale of operation is too small to attract the provision of services he or she needs to be able to significantly increase his or her productivity (Kirsten & van Zyl, 1998). The terms 'smallholder farmers' (SHF) and 'small-scale farmers' (SSF) will be used interchangeably in this study.

al., 2008; Dorward, Kirsten, Omamo, Poulton & Vink, 2009; Kirsten, Karaan & Dorward, 2009). This further compounds the possibility of marginalisation of many resource-poor SHFs.

Trade liberalisation exposed South African farmers to international markets and world prices. Without government support, in the form of direct subsidies, affordable credit finance and market interventions (i.e. marketing boards, fixed producer prices and readily available market information), the domestic agricultural market has been largely influenced by world markets, leaving farmers to compete in the open market (Reardon & Barret, 2000). Imports of agricultural commodities can reduce the demand for local produce and thus lower producer prices fetched by South African farmers. Exporting farmers are exposed to more stringent standards of quality and safety in developed countries' food markets (Reardon *et al.*, 2008). Under such a dynamic agricultural marketing system, participation of SHFs is limited.

The transformation of agricultural markets in South Africa, as in many countries, has led to a shift from traditional spot and wholesale markets to modern, centralised procurement systems (Reardon *et al.*, 2008; Reardon & Timmer, 2005; Louw *et al.*, 2008). Agribusinesses partaking in food processing and retailing have increased investments in the sector to enhance coordination of supply and redistribution of consignments in order to satisfy the consumers' growing demand for quality and healthy food without incurring exorbitant transaction costs. This has been spurred by the increasing urban population, high per capita disposable incomes across gender and race, new and constantly evolving consumer requirements/expectations, and heightened awareness of health aspects (Reardon *et al.*, 2005; Reardon & Huang, 2008; Louw *et al.*, 2008). Despite the increase in the number of supermarkets and their spread into most parts of South Africa in the early 2000s, many of them have resorted to establishing their own food distribution centres (DCs) with a few large-scale farmers and other preferred suppliers, who satisfy their stringent standards and consistency requirements, being the source of their stock (Reardon *et al.*, 2005; Reardon & Huang, 2008).

In order to meet the demand for volume, consistency and quality, many agribusinesses have entered into formal and non-formal agreements with their suppliers–farmers. This institutional innovation has given rise to vertical coordination in the form of contracts and market linkage

arrangements.³ Contract farming (CF) or out-grower (OG) schemes⁴ enable supermarkets and agribusinesses to specify and agree on aspects of quality, grades, quantity and prices with farmers prior to production. The farmer(s) and the buyer commit to provide a specific agricultural commodity/product, and to buy the supplied commodity/product, respectively (Likulunga, 2005). However, contractual arrangements are diverse and most of these fall into three non-mutually exclusive categories viz: (i) market specification, (ii) resource-providing, and (iii) production management contracts (Box 1.1, below). Furthermore, the stipulations which are typically made in many CF arrangements are described in Box 1.2, below.

Box 1.1: Categories of contract farming arrangements

- (i) Market Specification (or marketing) contracts are pre-harvest agreements that bind the firm and the farmer to a particular set of conditions governing the sale of the crop. Price, quality, quantity and time are often specified. Although, under this contract, the farmer is assured of the market and maintains most of the decision rights over farming activities and farm assets, he or she bears most of the production risk
- (ii) Resource-providing contracts oblige the contractor to supply key inputs, extension services and/or credit in return for a marketing agreement. The cost of inputs is recovered upon product delivery. Such contracts may also be coupled with production-management
- (iii) Production-Management contracts confine the farmer to a particular production method and/or practices and specified input regimes, in return for a marketing agreement or resource provision. The contractor oversees most of, or the entire, production process

Source: Adapted from Key & Runsten (1999); Minot (1986)

³ These include the provision of credit or farming inputs linked with output disposal/procurement thereafter.

⁴ Contract farming (CF) or out-grower schemes (OG) can be defined as comprising an agreement between one or more farmer(s)/producer(s) and a processing and/or trading/marketing firm(s) (contractor) for the production and supply of agricultural commodities/products, with conditions arranged in advance at (non) predetermined prices (Baumann, 2000; Eaton and Shepherd, 2001; Bijman, 2008, among others). In some cases, a contracting firm may also operate a large farm or “nucleus estate” in order to supplement the supplies from contracted farmers (Minot, 1986).

Box 1.2: Provisions often found in contract farming arrangements

- the duration of the contract
- the quality standards to be employed
- quality control (when, how, who is responsible, who pays)
- the quantity that the farmer is obliged or allowed to deliver
- the cultivation practices required by the contractor
- the timing of the delivery
- packaging, transport and other delivery conditions
- price or price determination mechanism (such as fixed prices, flexible prices based on particular (spot) markets, consignment prices, or split prices)
- technical assistance
- procedures for paying farmers and reclaiming credit advances
- insurance
- procedures for dispute resolution

Source: Bijman (2008)

Although contract farming is increasingly becoming the preferred way of procurement, and is seemingly inclusive and advantageous to all farmers, high transaction costs are a major disincentive for agribusinesses in contracting with SHFs (Key & Runsten, 1999; Bolwig, Gibbon & Jones, 2008). Resource-providing contractual arrangement schemes are deemed to be a potent way of incorporating SHFs into modern agricultural markets, but the lack of economies of scale on the part of SHFs, poor proximity of companies to SHFs, inconsistent supplies, low quality produce, and holding up and shirking, all render such arrangements undesirable and non-viable to contractors (Reardon *et al.*, 2008; Key & Runsten, 1999). Therefore, in most instances, dominant market players have tended to favour suppliers who can ensure large volumes and consistent quality in the long run so as to minimise risks of supply failure, and contain transport and monitoring costs (Louw *et al.*, 2007).

To substantiate the exclusion of SHFs from agricultural markets in South Africa, a study by Reardon and Huang (2008) established that, as of February 2008, Freshmark (i.e. Shoprite/Checkers) procured eighty-five per cent of their tomatoes directly from commercial farmers, ten per cent from wholesale markets, and only five per cent from small farmers. Pick 'n Pay procured seventy per cent of tomatoes directly from commercial farmers, twenty-five per cent from wholesale markets and only five per cent from small farmers. Supermarkets appeared to resort to SHFs only to meet gaps in the supply from their main suppliers (Reardon &

Huang, 2008); a higher proportion of SHFs produce is therefore confined to local markets, with brokers/middlemen and hawkers being the main buyers.

1.2 Problem Statement

Smallholder farmers are a numerically superior component of the South African farming sector, but are insignificant suppliers to the agricultural food markets. Although they are fewer in number than SHFs, commercial farmers command the higher share of the agricultural food markets. The dual structure of the agricultural sector, which was initially entrenched by the pre-1994 government legislation, promoted this skewed state of farmers' participation in the agricultural markets (Sartorius, 2003). The fact that the State extended limited support to SHFs (mostly black), as compared with their contemporary-large scale farmers (LSF) (mostly white), has introduced a latent, systemic, barrier to SHFs' potential to produce and satisfy market requirements.

Reduced public investment in the agricultural sector, liberalised and dynamic agricultural markets, poor infrastructure, lack of credit finance, poor farming skills and the increasingly stringent food quality standards present significant barriers to the incorporation of SHFs into modern agricultural markets (Reardon & Barret, 2000). SHFs are, in most cases, sparsely located, and produce small and inconsistent commodity volumes; furthermore, many supermarkets and agribusinesses do not procure from them in order to circumvent incurring high transaction costs (Gabre-Madhin, 2009; Lyne & Poulton, 2009). These buyers prefer to form contractual arrangements with large-scale commercial farmers who have the capacity to supply large and consistent volumes of quality commodities. SHFs are thus more likely to be excluded from modern agricultural markets (Minot, 1986).

Kirsten and Sartorius (2002a) suggest that utilising contractual arrangements, instead of individual economies of scale, could provide the mechanism for the survival of SHFs. Bolwig, Gibbon and Jones (2008) highlight the increased interest in contractual arrangements induced by rising concerns of possible exclusion of SHFs from modern value chains, both for exports and for high-value products disposed of on domestic markets. Although contractual arrangements might be one way of helping SHFs enter restructured agricultural markets, capital and cash-flow

bottlenecks, and lack of access and/or capacity to adopt technological innovations form common barriers (World Bank, 2007). Insecure land tenure, poor access to credit attributable to a lack of formal collateral, and high interest rates further compound the SHFs' market access dilemma (Reardon, 2008).

AgriBEE legislation aimed at promoting black farmers (mostly SHF) encourages preferential procurement on a scorecard basis to meet the compliance and contribution to economic transformation required from agribusinesses and supermarkets (Berdegue *et al.*, 2008). This is, however, not coupled with the requisite financial and technical support needed to enable SHFs to meet the high standards required by agribusinesses and supermarkets. SHFs lack the capacity to respond to constant market changes and meet the buyers' – often inflexible – conditions, hence their likely exclusion from agricultural markets.

To this end, it becomes necessary to analyse how to promote conditions which are propitious for effective contractual arrangements and the efficacy of contractual arrangements as a tool to incorporate SHFs into agricultural markets. There are limited public–private stakeholder partnerships in the agricultural sector which might serve as an important vehicle for SHF inclusion. However, there is need for the state to provide incentives or create an environment enabling profitable private stakeholder participation. The involvement of donor agencies and non-governmental organisations (NGOs) in promoting SHF farmers is not sound; the improved participation of such organisations is paramount and may anchor the state's efforts. Although CF may not be the panacea to SHFs' exclusion, it is crucial that cost-effective and sustainable ways of linking them to agribusinesses be promulgated.

1.3 Purpose Statement

The study aims to explore the form and importance of existing contractual arrangements between farmers and agribusinesses and supermarkets; analyse the extent to which these arrangements are developed, and the share of SHFs in these arrangements. It is also crucial to determine the drivers behind the formation and the conditions necessary for success and/or failure of contractual arrangement schemes. An in-depth comprehension of contractual arrangements will pave the way for formulating appropriate strategies and policy instruments needed for securing better access to

agricultural markets for SHFs: pro-poor policies can be designed with due consideration of incentives and disincentives for agribusinesses and supermarkets to contract with SHFs.

1.4 Research objectives

This study seeks to assess the different types of contractual arrangements engaged in by farmers in South Africa; to scrutinise and understand their aspects, implications and potential for fostering inclusion of SHFs in agricultural markets. The study attempts to ascertain the efficacy of contractual arrangements under specific circumstances with a view to finding ways of enhancing and replicating such arrangements among SHFs in the country.

The specific objectives of the study are to:

- Identify and characterise the different forms of existing contractual arrangements for different commodities/products and estimate the number and types of farmers involved in contractual arrangements; establish factors that promoted these farmers' engagement in contractual arrangements;
- Establish features and terms of the different contractual arrangements;
- Analyse who the farmers involved in contractual arrangements are: their types and trajectories;
- Identify the determinants of farmers' participation in contractual arrangements;
- Highlight main/pertinent aspects that make contractual arrangements with SHFs effective and sustainable;
- Solicit views, opinions and ideas on contractual arrangements from agribusiness firms, supermarkets, farmers' associations/organisations, financial institutions and the Department of Agriculture with respect to integration of SHFs into agricultural markets;
- Identify the policy and institutional innovations vital for contractual arrangements that can facilitate integration of SHFs into agricultural markets;
- Propose recommendations on potential contractual arrangements, including pertinent policy instruments, for different farming enterprises under different farmers' circumstances.

1.5 Research questions

This study will, in the context of the above objectives, endeavour to answer the following questions:

- What forms of contractual arrangements are SHFs most likely to engage in?
- What are the major determinants of (or barriers to) SHFs' participation in contractual arrangements?
- Can any type of a farmer, engaged in any commodity and production systems, enter into contractual arrangements, or are there thresholds and conditions, for example in terms of productive investment, land assets, and non-land assets such as irrigation systems, net sheds or greenhouses and pack houses?
- Can general models of contracting which are adapted to SHFs be developed?
- Which are the critical success factors to turn contracting into a tool for SHFs' inclusion in agricultural markets?
- Is collective action important for successful contractual arrangements between agribusinesses and supermarkets and SHFs?
- Do current agricultural, land and related policies, and institutions, facilitate contractual arrangements and hence the integration of smallholder farmers into agricultural markets?
- Can contractual arrangements promote the inclusion/integration of smallholder farmers into agricultural markets?

1.6 Research Hypotheses

The central hypothesis of the study is that SHFs can increase their participation in agricultural markets through contractual arrangements. While the general trends of restructured agricultural food markets have possible exclusionary effects on SHFs, it is also argued that there is scope for markets to provide viable market opportunities for SHFs.

The specific hypotheses:

1. SHFs participating in contractual arrangements have better access to agricultural markets, credit finance, production inputs and technical services, and can achieve higher net returns per unit output than their non-contracted contemporaries can;
2. Smallholder farmers that engage in collective action and are affiliated to farmers' organisations/unions/cooperatives are more likely to participate in contractual arrangements than individual farmers do.
3. Lack of access to productive assets – land, irrigation facilities, storage facilities and farm machinery – coupled with low and inconsistent yields, limits participation of SHFs in contractual arrangements.

1.7 Importance and benefits of proposed study

Overall, it is envisaged that the outcomes of this study will enhance knowledge of the implications of different types of contractual arrangements for SHFs and their potential to foster access to agricultural markets, increase farm incomes and improve their enterprises.

The following should also directly benefit the agricultural sector:

- **Improved support for SHFs:**

Lack of market access is stressed as being one of the major constraints for SHFs in South Africa. By assessing the potential of contract farming to redress this constraint, and generating knowledge for designing SHFs' tailor-made contracting arrangements, this study will attempt to provide guidelines on how to better target private and public support for integration of SHFs in agricultural markets. From a careful examination of the pros and cons of contractual arrangement schemes, generalisations will be drawn about the conditions under which contractual arrangements might help integrate SHFs. Contribution to the on-going debate on how

restructured agri-food markets can provide viable market opportunities for SHFs will be an essential outcome.

- **Public policy recommendations:**

This study also aims at providing recommendations for policymaking aimed towards increasing and securing SHFs' market access through adapted contracting models. Findings from this study could form the basis for policy-making advisors to undertake informed *ex ante* appraisals, drawing on lessons from farmers' experiences in different contractual arrangements schemes.

- **Capacity building:**

Research papers which can be utilised to help build capacity on critical development issues in the agricultural sector by the departments of agriculture, service providers, donor agencies, non-governmental organisations (NGOs), agribusinesses and other interested stakeholders will be produced.

1.8 Delimitations

The proposed study is set broadly within the context of contractual arrangements between smallholder farmers and agribusinesses, as well as supermarkets. Although the study focuses mainly on smallholder farmers, the survey incorporated large-scale farmers in order to reach a comprehensive and exhaustive conclusion on agricultural markets. Contractual arrangements in farming, as comprising an institutional innovation for facilitating access to agricultural markets for farmers, will be assessed from the perspective of a smallholder farmer.

Agribusiness companies, supermarkets, and small- and large-scale farmers were the prime respondents for this study. A greater number of contracted farmers than non-contracted farmers were interviewed. Key informants from the Department of Agriculture and major suppliers of credit finance for farmers were also interviewed. A diversity of contractual arrangements was analysed in order to establish salient aspects that render certain arrangements effective and relevant for smallholder farmers.

Literature regarding contract farming in general, and more specifically on experiences in South Africa, were consulted for this study. Several previous studies highlighted aspects of restructured markets which exacerbate the plight of SHFs with regard to market access under coordinated value chains. To this end, this study focussed on aspects of contractual arrangements relevant to SHFs and made inferences on the best methods that might be employed to enable their participation in agricultural markets.

The survey for this study was carried out in the Tzaneen municipal area of the Mopani District in the Limpopo Province of South Africa.

1.9 Outline of study

This study is comprised of six chapters. The next chapter entails a review of relevant literature on contractual arrangements in smallholder farming. This literature is drawn mostly from previous observations and studies in South Africa and other relevant contemporary countries. The third chapter describes the research design and methodologies employed: sampling procedures; data collection methods; constraints and analysis methods. Chapter Four presents a comprehensive typology of contractual arrangements identified in Tzaneen, and subsequently, Chapter Five details the characteristics of smallholder farmers participating in different contractual arrangements. The study ends with Chapter Six which summarises the findings and presents policy recommendations based on lessons drawn from the study. In addition, an indication of relevant areas of further research is included.

CHAPTER 2

South African agriculture and agricultural markets: An overview

2.1 Introduction

In spite of the steady decline in its contribution to the gross domestic product (GDP) (i.e. from about twenty per cent in 1911 to a current low of between three and five per cent), agriculture has remained an important source of food, employment and a major net earner of foreign currency for the nation (NAMC, 2008; NDA, 2001; NDA, 2008). This figure is relative to other sectors of the economy and is also attributable to the general shifting of emphasis from primary (i.e. agriculture and mining) to secondary and tertiary sectors of the economy by role players (Byrines, 1996; Kirsten, Edwards & Vink, 2007; NAMC, 2008). Farmers procure and employ new technology and inputs in order to confer efficiency and viability on their operations. Thus, farming creates a reliable market for modern technology and input-developing upstream industries. Many downstream industries (i.e. processing, packaging, distribution and retailing) in South Africa derive important raw materials from the agricultural sector. Hence, agriculture fosters backward and forward linkages which have a catalytic impact on development in the economy. To this end, Kirsten and Vink (2003) put the combined contribution of the agro-industrial sector to the GDP at an estimated thirteen per cent.

South Africa's agricultural sector is comprised of about 39 982 commercial farmers (Stats SA, 2007) and 1.3–3.5 million smallholder farmers (NDA, 2008). Despite their numerical superiority, smallholder farmers (mostly black) have access to fourteen per cent of agricultural land, while their commercial counterparts (mostly white) utilise about eighty-six per cent of the agricultural land (NDA, 2001; NDA, 2008). Notwithstanding the land ownership disparity, a number of factors, including the restructuring of agricultural markets, render smallholder farmers' production relatively insignificant: only five per cent of the total marketed agricultural production is supplied by smallholder farmers, as compared with ninety-five per cent from the commercial farmers (NDA, 2001; NDA, 2008).

2.2 South African Agricultural Markets

In South Africa, despite the post-1994 political and economic reforms, most agricultural products were disposed of under a statute-regulated environment until 1998 (Kirsten & Sartorius, 2002a). A regulated agricultural and food market meant that farmers, agribusinesses, consumers and other relevant stakeholders were isolated and cushioned from world market forces. Farmers enjoyed generous support from the government in the form of direct subsidies, subsidised credit and guaranteed/fixed producer prices for agricultural products. Agricultural commodity producer prices were set pre-season and marketing was single-channel oriented, through marketing boards.

Policy reforms, including the Marketing of Agricultural Products Act, No 47 of 1996, entrenched a deregulated agricultural marketing system in line with liberalisation of international trade based on the WTO Marrakech Agreement of the GATT of 1994 (Kirsten & Sartorius, 2002a). Under a deregulated system, the state's direct support to farmers and market interventions were gradually reduced and/or removed. Quantitative restrictions which acted as protection against an influx of agricultural imports were replaced by tariffs, hence exposing the domestic agricultural markets, and its role players, to dynamic global market forces.

2.2.1 Agro-industrialisation, deregulated markets, agribusinesses and farmers in South Africa

Under a liberalised trade environment, the South African agricultural sector became responsive to international trends of transformation of agri-food industries and markets. Changes in procurement, processing, distribution, and wholesaling and retailing, which entailed consolidation, specialisation/differentiation, organisational and institutional innovations, impacted (positively and negatively) on farmers. Although the restructuring process commenced gradually in the 1980s, several factors spurred on changes in the 1990s and post-apartheid era South Africa (Reardon & Huang, 2008). Shifts in both political and macroeconomic policies, including trade liberalisation and deregulation of agricultural markets, together with urbanisation and growth in population densities, led to an increase in disposable incomes, and changing consumer preferences have anchored the transformation of the agri-food industry (Reardon & Huang, 2008; Winter, 2007). Commensurate investment of local capital, instead of foreign direct

investment (FDI) especially in retail and agro-processors' expansion, has sustained the South African agri-food industries (Reardon & Huang, 2008). This increased investment has enabled the proliferation of supermarkets, including corporate supermarket chains, in South Africa in order to cater for the general population and specific market segments (Reardon & Huang, 2008; Winter, 2007; Louw, Jordaan, Ndanga & Kirsten, 2008).

Agro-processors and supermarkets have evolved in many ways in order to meet the requirements of consumers under the deregulated agricultural marketing system. Sourcing or procurement strategies of agricultural commodities/products were revamped, prompting a shift from traditional spot markets and wholesalers to modern centralised systems (Louw *et al.*, 2008; Berdegue *et al.*, 2008; Reardon *et al.*, 2008; Winter, 2007; Reardon & Timmer, 2005). Centralised and regional procurement replaced decentralised and local procurement systems in order to ensure sound coordination in supply channels (Reardon *et al.*, 2008).

Major supermarkets have dedicated distribution centres (DCs) which procure and distribute agricultural commodities/products to all their retail outlets in the country, thus precluding possibilities of local procurement. In order to differentiate their merchandise and maintain their market share, supermarkets employ private grades and standards, as preferred by their consumers (Reardon *et al.*, 2008). Private standards and grades are also meant to ensure food quality and safety in cases where public standards are deemed inadequate or missing (Reardon *et al.*, 2008). Procured commodities/products are subjected to inspection according to the private standards and grades at DCs, as outlined by supermarkets. To ensure the aforementioned, traceability and consistent supply of required volumes, agro-processors and supermarkets have initiated vertical coordination mechanisms, such as contractual arrangements and market inter-linkages. These modern procurement systems present an array of opportunities and challenges to South African farmers, especially the SHFs.

Modern agricultural markets may offer premium producer prices for farmers' produce that meets the set, stringent private grades and standards. High prices may become an incentive for farmers to embark on non-traditional farming enterprises, adopt requisite new technologies, learn their employment and improve farms' productivity. Thus, farmers' skills and knowledge are improved. In cases where contracting agro-processors and supermarkets provide the farmers with inputs,

finance and technical management, this can result in efficient and profitable production units. Guaranteed access to commodity/product markets, at pre-set producer prices, enables farmers to make informed farm production plans that can help attain viability. Above all, contractual schemes and market inter-linkages may assist farmers to circumvent “free” market bottlenecks introduced by information asymmetries, poor or absent credit markets, poor access to loan finance, low farming/management skills, and volatile output markets.

In order to satisfy agro-processors and supermarkets’ stringent private standards, farmers may be compelled to revamp their farming enterprises by investing in new technologies (Reardon *et al.*, 2008; Kirsten *et al.*, 2002; Louw *et al.*, 2008). In some cases, it has been observed that in order to engage in contractual arrangements, some agro-processors and supermarkets require farmers to have certain non-land assets, such as irrigation systems, net sheds/green houses, tractors and pack houses (Louw *et al.*, 2008; Kirsten & Sartorius, 2002a, 2002b). Thus, farmers may need certain threshold farm investments to enable them to partake in contractual arrangements; this may be a deterrent for less-endowed, asset-poor individuals in entering into contracts. Many smallholder farmers in South Africa constitute this group and are therefore highly likely not to partake in contractual arrangements, hence their possible exclusion from modern agricultural markets. This situation is prevalent in most parts of South Africa, especially in the former homeland⁵ areas where many SHFs reside, despite the state’s AgriBEE policy initiatives and development assistance programmes being aimed at “emerging farmers”.

Despite the afore-stated expansion of supermarkets in South Africa, it suffices to note that there has been a parallel increase in the development of the “informal” market channels, especially for fresh fruit and vegetables (Madevu, 2007). Retailing in fresh produce mirrors the dual economic system of South Africa, where a sophisticated developed economy and a developing economy co-exist. Fresh produce product markets in South Africa consist of a relatively small number of large traders with dominant market share on one hand, and a relatively large number of small traders, on the other hand (NAMC, 2002). This “informal” market is generally prevalent in areas where supermarket retail outlets are absent or sparsely situated. These areas include parts of rural regions (especially in former homeland areas), townships, taxi ranks and train stations.

⁵ Homeland, also known as Bantustan, refers to area demarcated for habitation by black people in South Africa in line with the apartheid policy prior to 1994

Traditional independent stores, such as general dealers and cafes, as well as “spaza” shops, street vendors, hawkers and tuck shops at the one end of the retail sector, to road/street corner stalls at the other end of the retail sector, constitute the “informal” market (Madevu, 2007). These can serve as alternative markets for farmers, especially SHFs, whose produce may not satisfy the stringent standards set in modern agricultural markets.

2.3 Contractual arrangements and smallholder farmers in South Africa

The predominance of the restructured market phenomenon in the South African agri-food markets compels agro-processors and supermarkets to use enhanced coordination mechanisms (mainly vertical coordination, as shown in Box 2.1 below) in order to meet consumer needs, efficiently and optimally.⁶ Under the deregulated or free market environment prevailing in South Africa, agro-processors and supermarkets compete to acquire and maintain viable market shares. With reduced, to non-existent, state support programmes for producers and market intervention, there arises need for alternative initiatives by agri-food industry stakeholders. Thus, many agro-processors and supermarkets have developed mechanisms with which to effect control over the volumes, grades and quality, as well as the frequency, of procured agricultural commodities/products. A variety of contractual arrangements has been employed as the most important vertical coordination mechanism to sustain profitable commodity/product value chains. In most of these arrangements, agro-processors and supermarkets have certain levels of control or ability to monitor the whole commodity/product value chain, from the farm to the factory or DC, and the eventual delivery to the consumer.

⁶ Agro-processors and supermarkets strive to minimise transaction costs and maximise the capacities of specific modern technological food processing and handling facilities in order to realise expected revenue (Reardon & Barret, 2000; Bolwig, Gibbon & Jones, 2009; Bijman, 2008).

Box 2.1: Definition of vertical coordination (VC)

- VC entails the combination of one firm's activities with another firm that performs different but related activities in producing outputs from available inputs.
- VC links supply and demand with respect to product quantity, quality, location, price and time of delivery.
- Although spot markets are one form of VC, CF is will be considered as the most important form of VC in this study. This will be regarded the form of VC between agribusinesses (processors or marketers) and farmers contracted to supply a specific agricultural commodity/product.

Source: Sartorius (2003); Minot (1986)

In spite of the value-chain coordination imperative, in some cases contractual arrangements have been spurred on by donors', NGOs' and governments' initiatives to promote economic growth in South Africa, as obtains in many African economies (Glover, 1987; Little, 1994; Bijman, 2008; World Bank, 2007).

Many contractual arrangement schemes allow processors and retailers to specify details of volumes, varieties, time and quality standards of commodities/products that producers/farmers are expected to deliver. Through contractual arrangement schemes, supermarkets are able to mitigate transaction costs, and ensure consistency of supply and control of their inventory (Louw *et al.*, 2008).

2.3.1 Examples of contracting schemes of SHFs in South Africa

In light of the stringent requirements for grades, standards and volumes, many SHFs in South Africa are faced with possible exclusion from modern agricultural markets. Notwithstanding the reasons cited for the possible exclusion of SHFs from agricultural markets, notable long-standing cases of contractual arrangements with SHFs exist in South Africa's sugar, tea and timber sub-sectors. Sugar and timber growing companies, the Transvaal Sugar Company (TSB) and Sappi, respectively, contract with SHFs in Mpumalanga, KwaZulu-Natal and the Eastern Cape provinces (Kirsten & Sartorius, 2002a; Porter & Phillips-Howard, 1997). In their study, Kirsten & Sartorius (2002a) established that TSB and Sappi had contractual arrangements with 1000 and

15000 SHFs, respectively. TSB, Sappi and contracted SHFs operate according to pre-determined and agreed upon specifications, which are briefly outlined below in Box 2.2.

Box 2.2: TSB and Sappi Contract specifications

TSB sugar contract

TSB's supply contract with SHFs is based on a cane delivery agreement. TSB undertakes to supply SHFs with inputs and technical management expertise through its agricultural division. Specific conditions and obligations of the contracting parties (TSB and the SHF) are outlined in a comprehensive specification contract. TSB's supply division coordinates farmers' cane harvesting and delivery. The producer price paid out to the contracted SHFs is arrived at after delivery and crushing/processing of the cane. The South African Sugar Association specifies the grower-miller (TSB) split from proceeds that accrue from processed sugar and these form the basis for pricing.

Sappi timber contract

Sappi's Forests division enters into special timber purchasing agreements with SHFs referred to as the Project Grow Agreement. This purchasing agreement indicates the location of the SHF, duration of contract, tonnage of timber to be delivered to the mill, the farmers' expected annual tonnage and the price to be paid for the tree species that will be delivered by the farmers. Sappi extends financial and technical assistance to SHFs. Interest-free loans are provided for planting, maintenance and weeding the timber fields. Seedlings are also provided to SHFs. On their part, SHFs are expected to have requisite permits, licence and statutory authority to grow timber from the Department of Water Affairs, the National-Provincial Environmental Authority, and the Department of Agriculture. SHFs are expected to adhere to Sappi's stipulated timber growing and husbandry practices, to harvest timber at indicated times and specified ages, as well as delivering it to the company's mill.

Source: Survey interviews

2.3.2 Sustainability of contractual arrangements

Although there are few documented cases highlighting the performance of contractual arrangements between SHFs and agribusinesses in South Africa, available literature indicates pertinent issues that impact on sustainability: (i) collective action, (ii) property rights, (iii) asymmetric power relations, (iv) contract manipulation and (mis)trust, (v) equity, (vi) delayed payments, (vii) asset specificity, and (viii) contract flexibility and alternative production possibilities.

(i) Collective action (CA)

Collective action is an important strand of NIE, and was advanced by the Mancur Olson line of reasoning (Olson, 1965, 1971). Olson postulated that common interests within a group would not motivate participants to further those interests if some members had the opportunity to ‘free ride’ on the efforts of those who provide the collective goods (Olson, 1971).

Collective action occurs when individuals cooperate as a group in order to solve a shared problem. Although CA incurs transaction costs (which if too high, may prevent it from successfully taking place), the transaction costs (negotiation costs, information costs, monitoring and enforcement costs) associated with CA are often low. CA can be employed by SHFs if they aggregate themselves in the form of associations aimed at promoting production and marketing of agricultural produce. Group economies of scale can be achieved when farmers engage in CA, thereby lowering transaction costs. It is feasible for agribusinesses to contract groups of SHFs as they incur low costs of exchange: contractors do not have to deal with numerous smallholder farmers, but rather with only one organisation of smallholders. CA may also support CF by channelling and supporting (e.g. by providing legitimacy) technical assistance needed to help producers increase product quality and uniformity.

Farmer organisations are a formal expression of collective action: they may help provide many services to farmers that are critical for successful market access. Cooperatives and farmer organisations are important institutional arrangements in merging small farmers and enhance their bargaining power in liberalised agricultural markets (Kherallah & Kirsten, 2002; Eaton *et al.*, 2008).

(ii) Property rights

The property-rights theory was developed by Grossman and Hart in 1986 and stems from the assumption that all contracts are incomplete and that ‘lock-in’ or ‘hold-up’ may develop when investments are relationship-specific (Hart & Moore, 1990; Gabre-Madhin, 2009). Ownership of particular assets may prevent ex-post lock-in or hold-up, because the owner of an asset is in a good position to bargain over the deployment of that asset.

The nature of rights which SHFs have over land and assets has a bearing on their farming activities. Ownership of land and other durable assets can serve as the means (collateral) for farmers to access credit finance from banks and elsewhere. If SHFs have freehold tenure of their assets, including land, they can access production finance, thereby putting them in an advantageous position to access agricultural markets. Freehold landholders have opportunities to make and implement decisions about farming activities. It is feasible for such farmers to engage in long-term contracts through embarking on fruit production, timber farming and animal rearing.

(iii) Asymmetric power relations

Contractual arrangement schemes which involve well-established big firms and SHFs raise questions regarding contracting parties' positions of power to influence decisions or terms of agreements. Watts (1994) noted that firms retain most of the power and use this to sway decisions to their advantage, thereby disadvantaging the already vulnerable SHFs. SHFs are often left in compromising positions as they do not command as much power to advocate for consensus or outcomes beneficial to them. This skewed power situation has the potential for reducing the benefits expected to accrue to SHFs involved in contractual arrangements.

(iv) Contract manipulation and (mis)trust

Skewed power relations, and scantily communicated contract terms and specifications, as well as a general lack of comprehension of the possible consequences of some contract clauses by SHFs, enable firms to alter terms in cases where it benefits them. Firms may subject produce supplied by SHFs to more stringent grades and standards than previously specified in the contractual agreement: hence SHFs' produce fetches prices lower than that agreed upon or prevailing in the market. Resource-providing firms may raise prices for inputs, thereby reducing the SHFs' returns. SHFs, in many situations, do not have the immediate means with which to remedy such tendencies and this may lower their trust in the firms and their contracts. Some SHFs may resort to activities such, as side selling and holding-up, thereby rendering the chances for continuity of CF schemes low.

(v) Equity

Smallholder farmers utilise their land to produce contracted crops or livestock for the duration of the contractual arrangement. In some cases, the binding terms of contractual arrangements may translate into loss of control of the land asset on the part of the farmers. Thus, smallholder farmers may become mere providers of labour or quasi-hired labour. In cases of contractual arrangements with extended durations, SHFs may not be able to utilise their land for purposes other than production of the contracted crop or livestock, even when the particular enterprises may not still be profitable and viable (Baumann, 2000). Without equity, SHFs are not able to make decisions regarding alternative land use purposes in order to improve their situations.

(vi) Delayed payments

Although contractual arrangements may stipulate payment dates following delivery of produce by SHFs, some firms may not always adhere to the dates. Withholding or delaying payment could have beneficial effects for the firms, but negative consequences with regard to SHFs. By delaying payments, firms may earn interest on money that was supposed to be in the coffers of the SHFs. On the other hand, SHFs, who in most cases experience constant budget shortfalls, may suffer cash flow problems: this may impact negatively on other farming activities and life processes. In some instances, SHFs may resort to borrowing money from other credit providers, thereby incurring more debt which can hamper their access to credit finance for future production. In addition, SHFs may resort to shirking and holding up as means of circumventing repeated delays in payment by firms, thereby impacting negatively on the efficacy of the contractual arrangements (Eggerston, 1990).

(vii) Asset specificity

In addition to committing their land to contracted crops, fruits or livestock, SHFs often need to acquire, construct or install other non-land productive assets suited to particular enterprises (Porter & Phillips-Howard, 1997; Glover, 1987; Key & Runsten, 1999; Kirsten & Sartorius, 2002a). Such non-land assets, such as specialised and automated broiler chicken houses, dairy

milking parlours and greenhouses, require high capital funding and may not be readily transformed for uses other than those they would have been originally designed for.

Contractual arrangements schemes which require SHFs to invest in highly specific assets make it difficult for contracted SHFs to opt out of such arrangements, even when they are no longer profitable nor suit their entrepreneurial goals. Early exit from contractual arrangements associated with high asset specificity may mean that the SHFs bear losses of future revenue with which they should recoup invested funds. The fact that specific assets may not be compatible with different farming activities may translate into huge losses in instances where the contracting firms decide to terminate contractual arrangements (Kirsten & Sartorius, 2002a).

(viii) Contract flexibility and alternative production possibilities.

Smallholder farmers involved in contractual arrangements schemes may face cases of inflexibility owing to contract clauses or related to the crop, fruit or livestock that they are contracted to produce. In some schemes, SHFs may not be allowed to dispose of excess or rejected produce to other outlets, from which they might recoup their costs of production. Stringent grades or standards may be applied to delivered produce, even in cases where the produce falls short because of adverse exogenous factors such as frost bite or hail damage. In such cases, SHFs may suffer huge losses, as they cannot divert produce to alternative markets where they may fetch good prices.

Contractual arrangements schemes in which SHFs are engaged to grow patented crops/livestock may not give SHFs any other option but to supply the produce to the contracting firm. Contracted produce may require specialised processing: SHFs may supply such produce only to the contracting agro-processors.

Involvement in contractual arrangements may not leave room for SHFs to partake in production of crops/livestock enterprises, other than those contracted. This may create situations in which contracted SHFs become highly dependent on the contract and/or the contractor. Without alternative production possibilities, SHFs are exposed to high risks of income loss in cases of failure of the contracted crop/livestock enterprise.

2.3.3 Alternative market options for smallholder farmers

Although formal contractual arrangements may be a preferred and effective institution which can foster inclusion of SHFs in restructured agricultural markets, there are numerous alternative forms of arrangements that offer alternative marketing options to the farmers. Louw *et al.* (2007) illustrate (Figure 2.1 below) the various strategies that are employed by SHFs to provide them possible access to the supply chain in restructured agricultural markets.

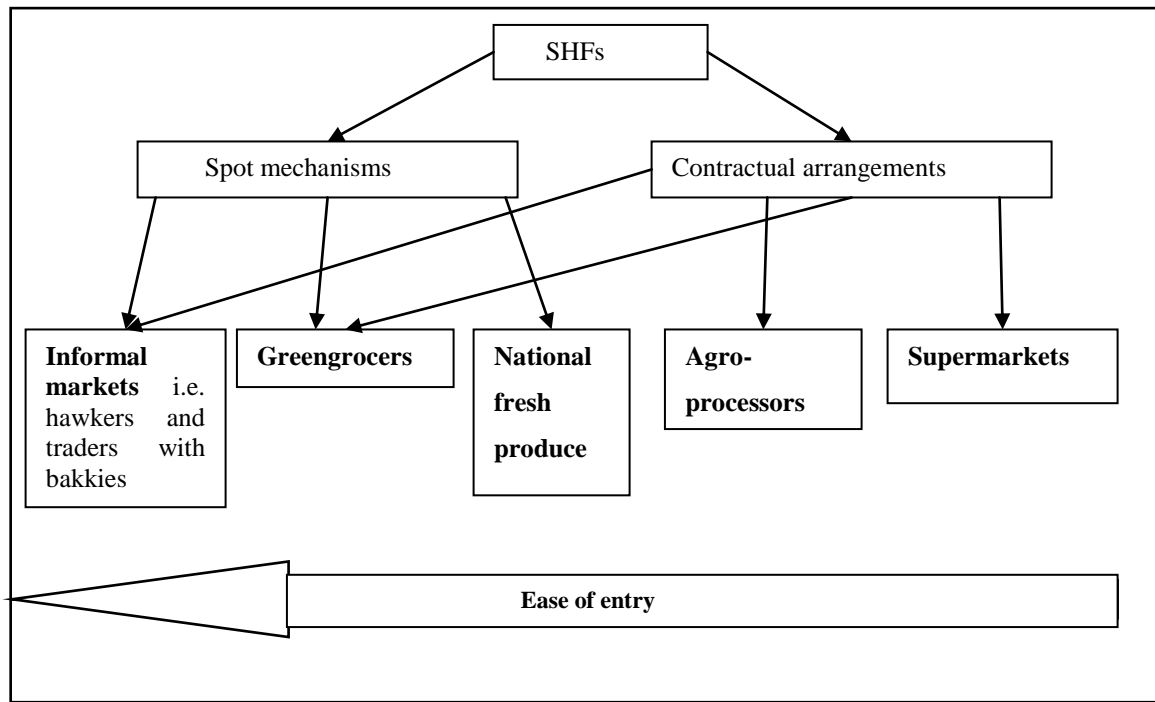


Figure 2.1: Marketing options for SHFs

Smallholder farmers can explore five possible market channels, as indicated in Figure 2.1 above; the feasibility of entry into each of the channels increases as one moves from contractual to spot market strategies. It is highly feasible for SHFs to partake in traditional markets and thus they are often confined to these options. Case studies in Limpopo, Mpumalanga and Western Cape have highlighted progressive marketing strategies aimed at integrating SHFs into restructured agricultural markets. Spar supermarkets in Giyani and Thohoyandou, as well as the Thandi Fruit project’s arrangements with Capespan, have indicated feasible marketing arrangements with SHFs from surrounding communities (Berdegue, 2008).

The feasibility of entering into restructured market channels by SHFs is lowered by a number of factors previously referred to in this paper. Chiefly, the diseconomies of scale synonymous with many individual SHFs' operations render them undesirable suppliers to the profit seeking agro-processors and supermarkets (Key & Runsten, 1999; Bijman, 2008). High transaction costs are usually incurred by contracting firms in searching for potential SHFs; costly provision of inputs, credit finance and extension services limit the formation of contractual arrangements. Risks of supply shortfalls caused by enterprise failure, shirking, holding-up and poor quality produce militate against the expected benefits of contracting with SHFs for agribusinesses and supermarkets, which may compound their aversion to dealing with SHFs.

Despite the deterrents to contractual arrangements schemes between SHFs and agribusinesses and supermarkets, several notions, based on *ex ante* analyses of previous schemes, have been put forward to increase the chances of successful contracting. Kirsten and Sartorius (2002b) suggest that the following measures are necessary in order to facilitate the success of SHF contracts:

- Proper screening of prospective contracting farmers
- Consideration of country-specific historical and institutional legacies that have shaped local conditions in designing contractual arrangement schemes
- Incorporation of mutual asset-specificity between SHFs and contracting companies so as to deter untimely exit and ensure stable and sustainable contractual arrangements
- Optimisation of the location and concentration of SHFs in relation to the firm's location and other logistical factors so as to avoid side-selling (shirking) by SHFs
- Enhancement of mutual trust and good management of contractual relations. This helps preclude high incidences of contract manipulation by firms, distrust by SHFs and power and equity asymmetries
- Contract negotiations should consider SHFs' interests: farmer organisations and cooperatives may serve to represent farmers' interests well
- Improving farmers' access to inputs, services and facilities, literacy levels, and business skills, and better conflict resolution mechanisms, as well as infrastructure development, are crucial.

2.4 Advantages and disadvantages of contractual arrangements

Prior to making decisions on the promotion or adoption of contractual arrangements as a viable institutional arrangement to enhance SHFs' access to agricultural markets, it is important to comprehend the possible pros and cons. Little (1994) contends that expectations of the potential of contractual arrangements (in developing countries) could have been perceived unrealistically high, owing to the widespread interest exhibited by donors and agencies of development. Theoretical frameworks and *ex post* analyses of contract schemes indicate that there are benefits that can accrue to both farmers and agribusinesses (agro-processors, retailers, etc.), notwithstanding the costs accompanying their engagement in these arrangements. Above all, CF is considered as a mechanism to allocate risk between farmers and agribusinesses, a solution to market failure, and as an institutional arrangement to mitigate transaction costs (Dorward *et al.*, 1998; Key & Runsten, 1999; Eaton & Shepherd, 2001; Dorward, 2001; Kirsten & Sartorius, 2002; da Silva, 2005).

2.4.1 Advantages to smallholder farmers

Contractual arrangements allow SHFs to circumvent the barriers to entry into non-traditional industrial crop and animals sectors. SHFs which partake in contractual production have high chances of accessing important information, modern technology, inputs, farm management skills, technical expertise and marketing channels (Little & Watts, 1994; Sartorius, 2003; Kirsten & Sartorius, 2002b).

In some contractual arrangements, firms extend working capital and credit finance to bolster farmers' activities: this is one of the most important gains of contractual arrangements for SHFs who are often confronted with absent credit markets, high interest rates and lack of acceptable forms of collateral security.

Access to modern technology, adequate inputs and relevant management expertise can enable SHFs to lower costs of production, increase enterprise yields and hence achieve higher returns (Watts, 1994).

The fact that contractual arrangements provide ready markets, with relatively fixed producer prices, for contracted agricultural produce to SHFs, helps mitigate marketing risks and stabilise farmers' incomes (Key & Runsten, 1999; da Silva, 2005; Kirsten & Sartorius, 2002b).

2.4.2 Disadvantages to smallholder farmers

SHFs' involvement in CF schemes is often dwarfed by asymmetries of power between individual farmers and agribusinesses (Porter & Phillips-Howard, 1997; da Silva, 2005). Most of the disadvantages facing SHFs stem from the fact that agribusinesses have an advantageous position to influence the terms of contracts.

Agribusinesses have been cited for unscrupulous tendencies, such as manipulation of contractual terms to suit their business plans or safeguard/maintain expected returns if market circumstances change. In instances where prevailing market prices are substantially different from previously agreed in the contract, contractors may force renegotiation or may simply reject delivered produce. Contractors might claim non-conformity of produce to quality standards as a disguise for not accepting delivery (contractual hold-up). Without potent contract enforcement mechanisms, SHFs are vulnerable to such behaviour and often suffer losses.

Resource-providing contractors may disadvantage SHFs by manipulating prices of inputs, thereby inflating the final cost that the farmers have to incur when paying back at the end of the production period (Bijman, 2008). For example, poultry contractors may alter (upwards) the prices of feeds supplied to the farmers and thus increase the farmers' costs of production, hence reducing their expected income.

Engagement in contract schemes that require SHFs to acquire/invest in new technology such as productive assets specifically for the contracted commodity may be detrimental: in cases where the contract lapses (not renewed) or the contractor defaults, SHFs are exposed to high risks of income loss (Kirsten & Sartorius, 2002b). Production risk is exacerbated by tendencies of some SHFs to totally diversify out of traditional crops and depend only on non-traditional contracted crops.

Contract prices paid to contracted farmers are not always superior to those prevailing in spot markets: SHFs may suffer loss of income *in lieu* of reduced marketing risk conferred by contracting and the increased market power of the contractor (Kirsten & Sartorius, 2002b). High capital costs, input costs and management skills associated with contracted crops may not auger well for contracted SHFs when open markets for the same crops exist (Key & Runsten, 1999; Glover, 1987; Little, 1994). That contracted SHFs are obliged to deliver the contracted crop to the contractor, at prices that may be less than those in spot markets, may translate into loss of income for the farmers.

Contracting has the potential to compromise the autonomy of farmers. Loss of flexibility in choices of farming activities owing to the binding nature of contracted enterprises makes it difficult for farmers to adjust production mixes in order to benefit from market opportunities.

Buyers and other transacting partners with which SHFs have developed linkages prior to contracting may be severed. Once broken, and abandoned for long periods of time, the traditional linkages may be difficult to re-establish subsequent to exiting from contractual arrangements (da Silva, 2005).

Repeated planting of the same contracted crop in the same piece of land (i.e. monoculture) by SHFs may reduce land use capability and thus productivity in future years. Proliferation of certain pests, originally alien to the environment, may also expose the farmer to disease problems, thereby incurring high costs for pest control on future enterprises (da Silva, 2005).

2.4.3 Advantages to agribusiness firms

The general hypothesis pertaining to benefits that accrue to agribusinesses from contractual arrangements hinges on transaction cost reduction, asset specificity, quality control and reduced uncertainty with regard to the supply consistency.

Contractual arrangements allow for more synchronised procurement and redistribution of agricultural produce and products. This helps firms circumvent costs associated with spot markets; contracting firms can influence production by providing resources and technical

expertise in order to ensure quality produce. The consistent use of quality inputs by contracted farmers reduces the risk of incurring dissatisfied consumers.

The fact that contracting firms often have relatively stronger bargaining positions in contractual arrangements entails that they can influence favourable farmer commodity prices (Delgado, 1999). Lower producer prices will serve to increase the gains of firms.

Contracting with SHFs can be advantageous to agribusiness firms in developing countries, such as South Africa, where the incorporation of SHFs into agricultural markets is a government developmental goal (Binswanger *et al.*, 1993; Watts, 1994; Little, 1994).

In countries where access to productive land is limited by legislation or high land prices, agribusinesses can use contract farming with local farmers to circumvent this constraint and secure constant supplies of commodities for their processing and export ventures (Key & Runsten, 1999; da Silva, 2005).

Efficient supply chains and economies of scale realised by agribusinesses through contracting make them less risky borrowers and so access to credit finance and subsidies is improved, since financial institutions' willingness to lend money is increased (da Silva, 2005).

2.4.4 Disadvantages for agribusiness firms

Although contractual arrangements can be regarded as a transaction cost-reducing institutional arrangement, engaging with SHFs means that firms are often faced with a sizeable number of sparsely located farmers: firms may be forced to hire more personnel/experts to deal with the farmers. Distribution of inputs and collection of produce from numerous and sparsely located farmers translates into high logistical costs, and hence high transaction costs. It is under such circumstances that some firms would contract with a few large-scale commercial farmers instead of SHFs in order to avoid high transaction costs (da Silva, 2005; Louw *et al.*, 2006; Key & Runsten, 1999; Bijman, 2008).

Contractual arrangements are prone to the risk of holding-up and/or shirking by both contractors and farmers. Contracted farmers may divert contracted produce to other markets, such as spot

markets, when prices are perceived to be higher than the contract ones. The presence of such alternative markets and lack of contract enforcement mechanisms compound the firms' disadvantages.

Shirking by misuse or diversion of supplied inputs, in resource providing contracts, to other non-contracted farming activities or selling may reduce the productivity of contracted enterprises, thereby lowering the volumes expected by the firm. Contracting firms which provide resources and support services to farmers are compelled to internalise costs associated with such transactions.

The binding nature of contractual arrangements may make it difficult for firms to procure agricultural produce from alternative suppliers when prices are lower and quality is superior. In cases where the agricultural markets are in glut (high supply and lower prices) or when imports are relatively cheaper, contracting firms may not take advantage of these developments as they are bound by contractual obligations (Bolwig & Gibbon, 2009; da Silva, 2005).

The latent view that contractual arrangements may be a form of exploitation of poor farmers by profit-seeking firms may tarnish the corporate images of firms engaged in schemes. Unforeseen conflicts arising from differences with farmers and negative effects of contracted operations on the environment may have unfavourable repercussions for the firms' corporate image (da Silva, 2005).

2.5 Summary

The transition of the South African agricultural industry from a controlled to a liberal system and the perpetuation of the dual nature in which established commercial farmers remained preferred suppliers resulted in widespread strategic supplier arrangements for procurement of agricultural commodities by agribusinesses and supermarkets. This status quo has promoted the development of high product standards by agribusinesses and retailers in order to satisfy consumer preferences, thereby precluding most smallholder farmers from participating in the agricultural markets, owing to their inability to satisfy the high product standards and expected continuous supply. In order to confer guaranteed supplies of required products, at the right time and volumes, vertical

coordination and integration have become pronounced and commonplace in agricultural value chains. To this end, contractual arrangements have been established to facilitate the interaction between farmers and agribusinesses and preclude risks and uncertainties prevalent in agricultural markets. Alas, these developments have indiscriminately excluded most smallholder farmers from participating in these contractual arrangements since they lack production techniques and the ability to continuously supply sizeable product volumes. Developments in the agricultural markets in South Africa indicate that contractual arrangements are not homogeneous and cannot be invariably employed to promote access to markets. Therefore, it is important that pertinent aspects of contractual arrangements should be analysed in line with characteristics of smallholder farmers.

CHAPTER 3

Research methodology

3.1 Introduction

The study entailed the empirical research of different contractual arrangements identified in South Africa. Aspects of contractual agreements were analysed on the basis of new institutional economics (NIE) notions: transaction-cost economics, collective action, and property rights were employed in comprehending the variation in contracts for different commodities between farmers and contractors (i.e. agribusiness companies and supermarkets).

3.2 Research/study area

The research was carried out in the Greater Tzaneen Municipality under the Mopani District of the Limpopo province. The municipality lies in the former homeland area of Gazankulu and is predominantly rural, with the greater proportion of the population being dependent on small-scale farming. Large-scale farming operations are also a significant component of Tzaneen's economic activities.

Tzaneen is one of the agricultural hubs of the province: the area experiences a subtropical climate with ideal conditions for different farming activities. Although the area is a known for tropical fruit production, various field crops and vegetables form part of important enterprises in both small-scale and large-scale farming communities. In order to circumvent water shortages, most farmers in the study area utilise different irrigation systems to meet crop/fruit water requirements. In addition to water drawn from an irrigation canal, running through the farming area from the two dams and a perennial river (Ebenezer dam, Tzaneen dam and Letaba river), most farmers have boreholes to supplement their water needs. Some farmers utilise earth dams and bulk water tanks as reservoirs to collect water (water harvesting) during the rainy season and retain it for future use.

Findings from previous research, "Regoverning markets" (Louw *et al.*, 2006) and "Agrarian system diagnosis" (Anjuere & Boche, 2009), information obtained from the Limpopo departments of agriculture (i.e., provincial and municipal offices) and the researcher's

preliminary visits established the presence of several agribusinesses (agro-processors, commodity packaging and export companies, abattoirs, cattle auctioneer, nursery propagators and farm management concerns) and supermarkets in Tzaneen.

The agribusinesses found in the study area include agro-processors: Tiger Brands, APOL, Letaba Citrus Processors, Peppadew International, Miami Canners, and a number of atchar-making factories; commodity packaging and export companies: Capespan, Lona, and Westfalia (packaging for Woolworths); one broiler chicken abattoir: Bushvalley farms; cattle auctioneer: Vleissentraal Bosveld; nursery propagator and farm management concern: Du Roi; supermarkets: Pick 'n Pay, Fruit and Veg, Shoprite and Spar.

Information indicating the presence of different forms of formal and informal marketing arrangements between agribusinesses and some farmers was also obtained.

3.3 Sampling procedure

- **Selection of respondents/farmers**

The selection of farmers and agribusinesses (processing firms and supermarkets) was drawn from the entire area of Tzaneen. This was done in order to reach the different agribusiness concerns, supermarkets and farmers engaging in different contractual arrangements in the study area. The absence of reliable statistical information on small-scale farmers in South Africa, as well as the difficulties in obtaining responses from agribusinesses, necessitated a geographic approach. The inclusion of different agribusiness companies and supermarkets dealing with farmers helped to capture the diverse characteristics of existing contractual arrangements.

Although small-scale farmers were the focus of this study, large-scale farmers were also included in the sample in order to make a comprehensive conclusion on farmers' characteristics and to understand the major constraints of exclusion of some from the agricultural markets.

Interviews were conducted with key informants from the provincial and municipal offices of the departments of agriculture and these helped to identify agribusinesses, processing firms and

supermarkets, as well as some of the contracted and non-contracted farmers. Interviews were conducted with agribusiness companies, processing firms and supermarkets to establish their suppliers/farmers. Identities (and contact details) of the farmers and the types of existing marketing arrangements were ascertained: the numbers and the location of farmers with or without contractual arrangements were established.

Respondent farmers with contracts were selected randomly from the study area: in cases where farmers contracted to a company were few, all farmers were considered as respondents. In cases of cooperative farms, interviews were held with a few member farmers in order to establish the types and variation of farmers. Non-contracted farmers were selected randomly in the same areas (or close to) as those where contracted farmers were found. The interviewed farmers also helped to identify other non-contracted farmers who own irrigation facilities and dispose of their produce to various buyers. The procedure that was followed in selecting respondents from the study area is shown below (Figure 3.1).

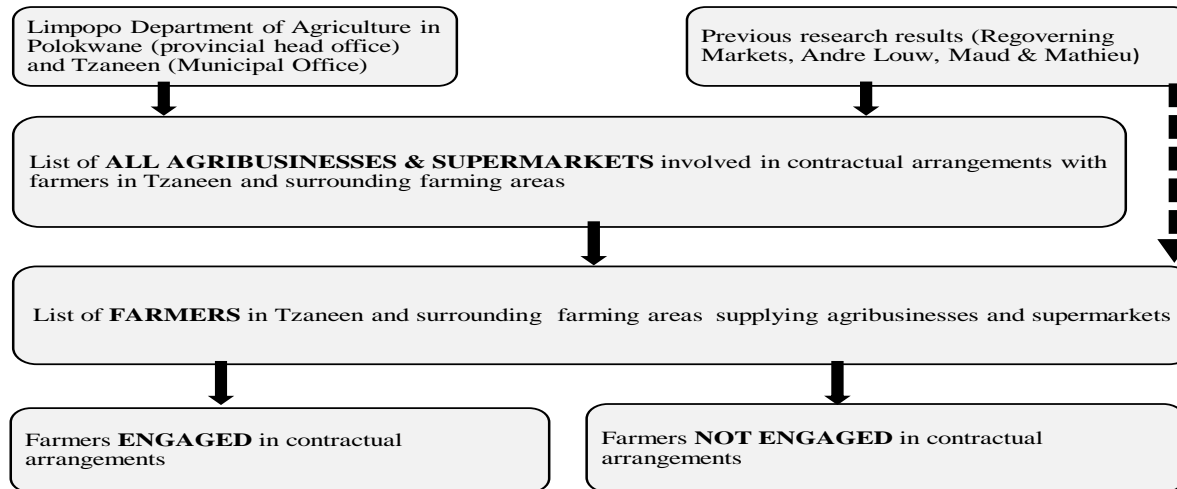


Figure 3.1: Respondent selection procedure

The numbers of contracted farmers engaged with the different companies who were interviewed are indicated below (Table 3.1). The location of these farmers is indicated below (Figure 3.3).

Table 3.1: Numbers of contracted farmers interviewed

Agribusiness	Total number of farmers contracted in Limpopo	Farmers interviewed
Peppadew International	80	10
Bushvalley Farms	15	9
Woolworths	-	4
Lona	-	3
APOL	250	2

In total, thirty-six farmers, among which there are three cooperatives, were interviewed. The numbers and location of the respondent farmers and the companies are indicated below (Table 3.2).

Table 3.2: Agribusinesses and location of respondent farmers

Name of company supplied	Number/code of respondent	Contract Yes=1, No=0	Commodity
Spar	1	0	Vegetables
Woolworths	2	1	Organic vegetables
Spar, Fruit & Veg	3	0	Vegetables
None	4	0	Vegetables
None	5	0	Vegetables
Spar, Fruit & Veg	6	0	Vegetables
APOL	7	1	Tomatoes
Capespan	8	1	Citrus-kumquats
Bushvalley Farms	9	1	Broiler chicken
Bushvalley Farms	10	1	Broiler chicken
Bushvalley Farms	11	1	Broiler chicken
Woolworths	12	1	Organic vegetables
Bushvalley Farms	13	1	Broiler chicken
Bushvalley Farms	14	1	Broiler chicken
Bushvalley, Woolworths	15	1	Broiler chicken & organic vegetables
Peppadew International	16	1	Peppadew
Bushvalley Farms	17	1	Broiler chicken
Bushvalley Farms	18	1	Broiler chicken
Peppadew International	19	1	Peppadew
Lona, Du Roi	20	1	Citrus-oranges
Lona	21	1	Citrus-oranges
Peppadew International	22	1	Peppadew
Choppies,	23	1	Vegetables
APOL	24	0	Tomatoes
APOL	25	0	Tomatoes
Tiger Brands, Checkers	26	1	Vegetables
APOL	27	1	Tomatoes
APOL	28	1	Tomatoes
Peppadew International	29	1	Peppadew
Spar, Fruit & Veg	30	0	Vegetables
Peppadew International	31	1	Peppadew
Bushvalley Farms	32	1	Broiler chicken
Peppadew International	33	1	Peppadew
Woolworths	34	1	Organic vegetables
Peppadew International	35	1	Peppadew
Lona, Du Roi, Peppadew	36	1	Citrus, peppadew

3.4 Data collection methods

A qualitative analysis of various contractual agreements required the gathering of empirical data from the delineated area of study. Structured and semi-structured questionnaires were used for this purpose: personal interviews were employed to obtain data from farmers, agribusiness companies and supermarkets, with and without contractual arrangements.

The semi-structured questionnaire was used to obtain lists of farmers, their location and corresponding specific arrangements from agribusinesses. Subsequently, the structured questionnaire was used to interview farmers chosen randomly, as obtained from the agribusiness companies', processing firms' and supermarkets' lists.

In addition to the structured and semi-structured questionnaires, informal interviews were conducted with key informants from the department of agriculture, ABSA, Land Bank and CARE International. Farming experts in the aforementioned organisations were interviewed to obtain information regarding farming activities, farmers, commodity markets and operations of agribusiness companies in the study area. In particular, interviews with ABSA and Land Bank provided the researcher with insights into the feasibility of farmers' access to credit finance, based on the banks' policies and farmers' different circumstances with regard to commodities and markets/value chain, land and non-land asset endowment as collateral.

3.5 Outline of data analysis

Subsequent to capturing all data in SPSS, the following analyses were carried out using descriptive statistics.

3.5.1 Descriptive analysis of types of contracts

Types and characteristics of contracts found in the area of study were analysed in order to ascertain their variation and suitability for different farmers. Terms of contracts, commodities involved in each contract and their pros and cons were established from both the farmers' and contractors' perspectives.

3.5.2 Descriptive analysis of the types of farmers

The types and major characteristics of farmers involved in contractual arrangements were analysed in order to comprehend the ease with which a farmer could access contracts. Trajectories of these farmers and their bearing on fostering contractual arrangements were also ascertained: farmers' backgrounds, their farming activities and their impact on contractual arrangements were established.

3.5.3 Descriptive cross analysis of types of farmers and contracts

This analysis was done in order to link the types of contracts/contractors and types of farmers found in the area of study. The main characteristics linking certain farmers to particular types of contracts were ascertained.

3.6 Summary

The prevalence of contractual arrangements between smallholder farmers and agribusinesses is not pronounced in South Africa. This study deliberately focused on a specific geographic area, as informed by previous research and outcomes of engagement with organisations and individuals in Tzaneen. Tzaneen and the surrounding areas present a variety of agricultural enterprises and of interests of several agribusinesses and supermarkets which actively procure from farmers producing in the region. This study employed a geographic sampling approach in order to capture most of the contractual arrangements between farmers and agribusinesses, and in particular smallholder farmers in the Tzaneen area. The sampling procedure that was followed for the survey and the data analysis method to be employed have been outlined in this chapter.

CHAPTER 4

Typology of contracts

4.1 Introduction

Over the course of this study, five types of formal (written) contracts were identified between farmers and buyers. In addition, informal (unwritten) contractual arrangements between a few large-scale farmers and some atchar factories, a juice factory and fresh produce markets' buying agents were also identified. However, very little information was obtained on the informal contracts since farmers and buyers regard their arrangements with high confidentiality.

Most buyers engaged in informal arrangements indicated that they procure from large-scale mango and citrus farmers only when the fruits are well established: expert buyers from companies scout for farmers with potential to supply large quantities of good quality fruits and enter into gentlemen's agreements with these. These agreements are short-term (ending when the farmer has been paid for any delivered quantity of fruit). Farmers indicate the quantities of fruit that they can possibly supply and the buyers state the probable producer price or price range. Since these arrangements are not written, both parties, farmers and buyers, are under no strict obligations to honour them. Most of the informal contracts are seasonal and non-relational: these agreements do not often recur in successive seasons. Letaba Citrus Processors (LCP) is one of the most important buyers involved in informal arrangements: in addition to produce from its own farms, LCP procures fruits from a few large-scale farmers.

This section will scrutinise the different aspects of identified contractual arrangements and provisions with respect to commodities. All aspects will be outlined in order to distinguish the general categories of contractual arrangements. Table 4.1 below outlines the contracts and their corresponding major characteristics.

Table 4.1: Types of formal contracts and their major characteristics

Major characteristics	Resource management for deep litter broiler chicken production contracts	Production management and market specification contracts	Production specification and market specification contracts	Organic vegetables (certification) contracts	Production management and export specification contracts
Input provision	X	X			
Provision of credit for production		X			
Provision of technical assistance	X	X			X
Management of production	X	X			
Specifications	X	X	x	X	X
Price fixed in advance	X	X	X	X	X
Formal (written) agreement	X	X	X	X	X
Seasonal/annual agreement		X	X	X	X
Long-term agreement	X				
Generic form of contract	Resource providing contracts (total integration)	Production management contracts	Production management contracts	Market specification contracts	Production management and market specification contracts

Based on their characteristics, the five types of contractual arrangements identified in the study area (Table 4.1) fit into three major types of contracts, and a combination thereof, as observed in production management and export specification contracts, cited in the literature review. In general, the three broad forms of contractual arrangements are: (i) resource providing, (ii) production management, and (iii) market specification contracts.

The profiles of farmers engaged in the above-mentioned contractual arrangements is indicated below (Table 4.2). All the farmers engaged in broiler production are large-scale and own farms individually. In cases where cooperatives are involved in contract farming, the number of small-scale farmers engaged increases on membership basis. In such cases, collective action brought about by cooperative farming would translate into increased numbers of farmers engaged in contractual arrangements.

Table 4.2: Profiles of farmers engaged in contractual arrangements

Profile aspect	Resource management for deep litter broiler chicken production contracts	Production management and market specification contracts	Production specification and market specification contracts	Organic vegetables (certification) contracts	Production management and export specification contracts
Number of farmers contracted	9	10	3	4	1
Type of farm	Individual	Individual (7)	Individual (1)	Individual	Individual
		Cooperative (3)	Cooperative (2)		
Type of farmer	Large-scale	Small-scale (1), (60*)	Small-scale (45*)	Small-scale (1)	Large-scale
		Large-scale (4)	Large-scale (1)	Large-scale (3)	
Commodities	Broiler chicken	Peppadew	Citrus	Organic vegetables	Kumquats

*small-scale farmers are cooperative members

4.2 Overview of contracts

This section will give in-depth detail about the different types of contractual arrangements identified in the study area over the period of this research. The contracted commodity and specific activities in each arrangement are outlined. Terms of identified contractual arrangements will be outlined. The specific details of all terms and responsibilities of both the farmer and buyer will be included.

4.2.1 Resource management for deep litter broiler chicken production contracts

Figure 4.1, below, outlines the linkages between the farmers and the contractor, as well as other relevant stakeholders in the broiler chicken contract.

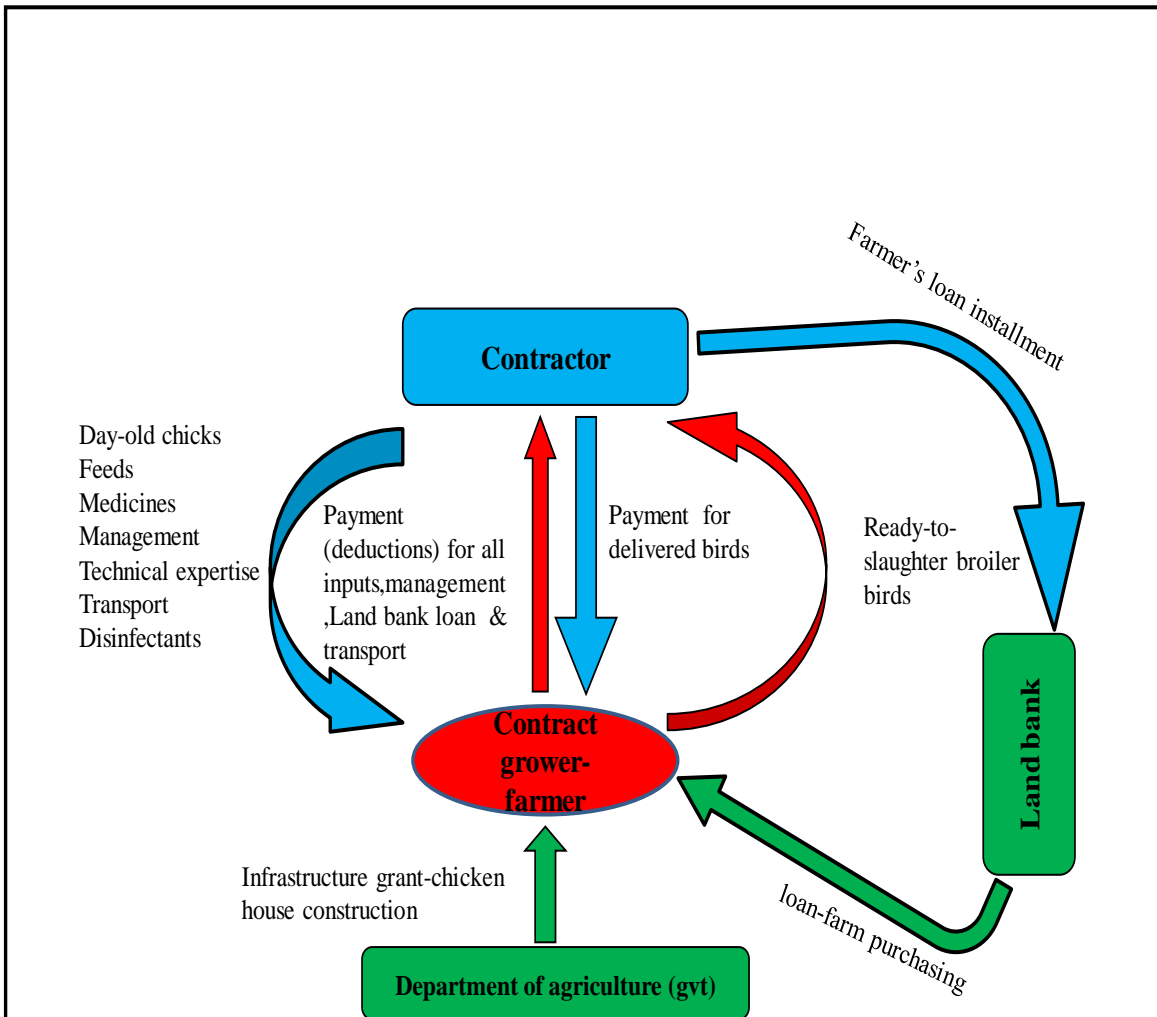


Figure 4.1: Flow of inputs and out in the broiler chicken production contract in Tzaneen

Nine respondent farmers are contracted to rear broiler chickens for a company specialising in production of broiler chicken, slaughtering and/or processing (abattoir) and marketing thereof. Since 2007, Bushvalley farms, in Tzaneen, has contracted farmers for a duration of five years that might be renewed/extended, based on the farmers' (enterprise) performance and the willingness of either party. The contractor required farmers to have environmentally controlled and automated (computer-programmed) broiler chicken houses prior to signing the contract.

The broiler chicken contract was initiated by the Limpopo department of agriculture in a bid to assist land reform beneficiary farmers. The department requested Bushvalley farms to provide production expertise, slaughtering and marketing services for broiler-chickens to selected

farmers. Through the Land Bank, the department of agriculture provided funds (grants) for the construction of environmentally controlled broiler chicken houses for 15 selected farmers. Bushvalley farms provided the specifications used in construction of the chicken-houses and each house carries 40 000 birds per production cycle of six weeks. The Land Bank provided Bushvalley farms with a “special” loan to expand their abattoir’s capacity in order to cater for the extra numbers of ready-to-slaughter broiler birds from the 15 farmers. All contracted farmers acquired land through loans from the Land Bank under the land redistribution programme (i.e. LRAD and CASP).

Box 4.1, below, outlines the characteristics of Bushvalley farms and their importance in the broiler chicken production contract:

Box 4.1: Bushvalley farms

- company started in 1989 in Tzaneen: specialises in broiler-chicken and citrus farming,
- Bushvalley farms owns the largest commercial broiler-chicken abattoir in Tzaneen,
- owns slaughtered/dressed-chicken outlet stores,
- the company’s chicken is marketed under a brand name called “select”,
- provides all inputs (day-old chicks, feeds, and medicines) to contracted farmers; manages the production process and buys all ready-to-slaughter birds from the farmers,
- strains of broiler birds produced: Cobb 500, Ross 308 and Arbor Acres,
- company has well-established linkages with hatcheries and feed companies,
- company does the catching of ready-to-slaughter birds and provides transport to the abattoir,
- company cleans and disinfects chicken houses before the arrival of every next batch of day-old chicks,
- the contractor charges farmers for all inputs and services provided and the total cost is deducted before payment at the end of each cycle.

Source: Survey data

4.2.1.1 Terms of the contract

a) Marketing: transport, grading, pricing and payment

According to the out-growers' contract, farmers are obliged to deliver all ready-to-slaughter broiler birds at the end of each growing cycle of about six weeks (42 days). Ready-to-slaughter broiler birds are expected to have an average weight of 2 kg. The contractor provides transport for broiler birds from all farms to the abattoir. Broiler birds delivered to the abattoir are also required to be disease free. Records detailing the daily operations and the development of broiler birds taken throughout each production cycle by the farmer and contractor experts are used to assess the suitability of birds for slaughtering. The farmer records the daily mortality, and the cumulative mortality is reported at the end of each cycle: a mortality rate of at most 5% is accepted by the contractor. Prior to catching and transportation of broiler birds from each farm to the abattoir, contractor experts measure weight and conduct tests on a randomly selected number of birds to certify each batch for slaughter.

As of March 2010, the producer price for broiler chickens paid to contracted farmers was fixed at R9.18 per kg of live bird. This price is agreed between the farmers and the contractor at the beginning of each year. According to the contractor and respondent farmers, costs of day-old chicks, feeds, medicines, management expertise rendered, transport of feeds and chicks to the farms, ready-to-slaughter birds from farms to the abattoir and the going market prices, locally and nationally, are considered for producer price formulation.

Despite the afore-mentioned, each batch of broiler birds transported from farms is weighed at the abattoir's weighbridge before the birds are delivered for slaughtering and the weight is then used to calculate the amount to be paid to a farmer. Thus, the revenue that accrues to a farmer per bird will vary according to the average weight of delivered birds.

b) Input supply, technical assistance and production management

Bushvalley provides all contracted farmers with all required inputs for rearing broiler birds throughout each production cycle. The contractor keeps track of each farmer's production programme and supplies the requisite inputs accordingly: day-old chicks are ordered and transported to each farm following consultation and confirmation of readiness to receive these by the farmer. The farmer, with the assistance of contractor experts, prepares the chicken house (cleans, fumigates, adds sawdust on floor, and adjusts interior temperature) in time for each batch of day-old chicks. Bushvalley supplies the required feeds to each farmer prior to delivering day-old chicks: feeds of the right type and quantities are "fed" into storage tanks and automatically incorporated into the chicken house at scheduled times through a computer-programmed system.

Each farmer monitors the feeding, growth and development of broiler-chicks: the farmer keeps daily records, including mortality rates, and reports these to the contractor's experts. Contractor experts visit each farm to rectify any problems reported by a farmer and give relevant technical advice to the farmer. These experts also go on scheduled farm visits to observe the progress of the broiler birds and adjust the computer-programmed system in order to maintain ideal interior chicken house conditions.

The contractor keeps records of costs of all inputs supplied to each farmer in each production cycle, which are then paid off at the end of the cycle: the total cost of inputs is deducted from the total revenue obtained from the broiler birds delivered in the particular cycle. Farmers are charged a fixed fee of R8000.00 for scheduled farm visits (enterprise management fees) by contractor experts in each cycle. Unscheduled farm visits, which are done at the request of the farmer, are charged for separately and fees vary according to the nature of technical advice and/or assistance offered to the farmer. Farmers are paid after one month following the delivery of ready-to-slaughter birds.

c) Credit finance

Bushvalley does not provide contracted farmers with credit finance for production inputs, although the total cost of all inputs and services provided to each farmer may be regarded as a proxy for credit finance. The contractor deducts the total cost of all inputs and services provided to each farmer from revenue realised at the end of each cycle. However, in cases of need, contracted farmers receive advance payments from the contractor in order to meet their variable costs. The amount of advance payment to each farmer depends on the expected value of the ready-to-slaughter broiler birds to be delivered to the abattoir at the end of a particular cycle. Thus, the broiler chicken enterprise serves as collateral for the farmer to access advance payments. Farmers are not charged interest on money advanced to them.

d) Contract failure and resolution of conflicts

Over the contract period (5 years), neither broiler chicken out-growers nor Bushvalley farms are allowed to disengage from the contractual arrangement, unless either party breaches the terms of contract beyond remedy. In cases of breach of contract terms, either party, the contractor or the farmer, solicits the intervention of the association of the contracted farmers (Rainbow Chicken Farmers) for civil arbitration. The contractor and farmers also engage the Department of Agriculture to assist in redressing any arising conflicts.

Each farmer's broiler chicken enterprise is insured against several types of risks, including outbreaks of fire and disease. The contractor pays the subscription instalment for each farmer and the total cost is paid off as part of the deductions from revenue at the end of each production cycle. It is this insurance that covers both parties in cases of failure of enterprises. However, an assessment of the cause and nature of enterprise failure is done in order to establish the degree of responsibility and/or liability prior to any possible insurance payout(s).

4.2.1.2 Advantages and disadvantages of the broiler chicken production contract

Table 4.3 below outlines the perceptions of respondent farmers with regard to the benefits of engagement in the broiler chicken contract with Bushvalley. A number of advantages were cited by contracted farmers. Ready access to a guaranteed market for ready-to-slaughter broiler chicken is regarded by farmers as a major benefit of their involvement in this contract: five of the respondent farmers mentioned this. Exposure to advanced skills in commercial broiler chicken rearing was cited by three farmers as an important benefit accruing to out-growers. According to the farmers, the fact that the broiler chicken contractor provides contracted farmers with all required inputs renders the contract an important remedy to the lack of production finance: two respondent farmers cited this.

Table 4.3: Advantages of the contract: farmers' perspective

Advantage	Number of farmers citing the advantage (n=9)
Provision of inputs on credit (counteracts lack of production finance)	2
Ready and guaranteed market for ready-to-slaughter broiler chickens	5
Saves farmers' time: less time spent on marketing, more time for enterprise activities	2
Reduces income loss due to late disposal: diminishing returns from prolonged feeding of birds beyond slaughter weight	1
Low to minimal costs of production	1
Steady cash inflows: helps farmers meet variable costs and loan instalments	1
Farmers learn new and advanced broiler chicken rearing skills	3
Legal recourse feasible in cases of dissatisfaction, unlike spot markets	1
Provides a platform for farmers to negotiate the producer price	1
Helps farmers to link broiler chicken with market prior to inception of production	2
Farmers learn to do enterprise budgeting (business planning) and farm financial management	2

Table 4.4 below outlines a number of disadvantages that result from engaging in the broiler chicken production contract, as cited by farmers. Rigidity of the terms of contract is an important shortcoming mentioned by five farmers: they contend that the contractor does not accommodate their concerns to effect the adjusting/changing of certain clauses they deem unfavourable. Although the contract stipulates that the contractor pays for delivered broiler-birds after one month, four farmers indicated that payments are often effected late, thus rendering their cash inflows irregular: farmers are not able to pay their workers and other costs on time. That the contractor calculates the costs of inputs supplied to every farmer in each production cycle and deducts that amount without consultation is regarded as unscrupulous by farmers: three farmers

raised concerns with regard to calculation of input costs and the accuracy of subsequent deductions. The fixed producer price of R9.18 per kg of live mass of a broiler bird is regarded as low by farmers: two farmers contend that this contract price is far below the price fetched by broiler chicken in the open market and thus they do not get commensurate returns on their investment in this farming activity. That farmers required a specific structure (environmentally controlled chicken house) for contract broiler chicken over the stipulated period of five years means that farmers cannot easily engage in other/different farming activities or contracts. Thus, engagement in the broiler chicken contract limits diversification on the part of the farmers; this was cited by one farmer.

Table 4.4: Disadvantages of the contract: farmers' perspective

Disadvantage	Number of farmers citing the disadvantage (n=9)
Contractor dictates terms: farmers expected to comply without room to effect changes	5
Contractor monopolises broiler chicken production and the value chain in Tzaneen	2
Contractor dictates the producer price: farmers have less bargaining power	2
Contract too long (5 years): farmers cannot pull out in cases of dissatisfaction	1
Producer price remains fixed even when going market prices increase	2
Financial mistrust: contractor not transparent on costs of production (inputs) and returns	1
Broiler contract enterprise returns are too low	1
Farmers not involved in contract designing	2
Contract specifications not very clear	2
Payment method not very clear: costing of inputs and services and calculation of prices not clear	3
Late payments for delivered birds by contractor	4
Low/poor skills transfer: contractor manages day-to-day enterprise operations; limited involvement of farmers	2
Contract producer price is low	2
Production and land use are fixed over the duration of the contract: farmers cannot easily engage in different farming activities	1
Contract quality expectations are too high and stringent	1

Table 4.5 below outlines the advantages and disadvantages of engaging in the broiler chicken enterprise, as cited by the contractor. That a large number of broiler birds is delivered for slaughter at particular times, which allows the contractor to meet the demand by customers and other consumers, is regarded as a paramount benefit of contracting by the contractor. Thus, this enables the contractor to retain a viable market share.

The contractor indicated that contracting has resulted in considerably high returns on investment: large numbers of broiler birds are slaughtered at any given time and thus the abattoir is utilised to capacity. Accordingly, contracting confers economies of scale for the contractor in the form of guaranteed supplies of large numbers of ready-to-slaughter broiler birds and the maximum utilisation of the specific infrastructure (the abattoir). The provision of technical advice to contracted farmers and the constant management of the broiler chicken enterprises by contractor experts results in the availability ready-to-slaughter broiler birds of high quality standards. This helps the contractor to meet consumer commodity quality expectations and preferences and thus increasing sales and/or income.

Despite the afore-mentioned advantages of contracting with broiler chicken out-growers, the contractual arrangement presents an array of problems to the contractor. The prevalence of side-selling of ready-to-slaughter broiler birds by some farmers results in fewer numbers of broiler birds being delivered to the abattoir. The contractor's sales volumes are lowered and demand levels are not always met. That not all contracted farmers adhere to stipulated broiler chicken husbandry practices means that quality standards are not always met and this results in a non-uniform consumer product. Susceptibility of the broiler chicken enterprises to an array of risks, including fire and diseases, means that the contractor is exposed to possible loss of sales volumes and income. This risk is exacerbated by the fact that each contracted farmer rears a large number of broiler birds (40 000) per production cycle and thus a substantial loss of volumes will be suffered by the contractor in cases of enterprise failure. Above all, the contractor contends that the benefits of contracting could be out-weighed by a possible loss of the company's corporate image and/or goodwill attributable to latent conflicts with out-growers emanating from enterprise operations and financial discord.

Table 4.5: Advantages and disadvantages of the contract: contractor’s perspective

Advantages	Disadvantages
Allows the contractor to monitor broiler chicken growth and development	Side selling: some farmers dispose of broiler birds to parallel markets
Expected broiler chicken quality standards easily met: allows contractor to meet consumer preferences	Poor quality broiler birds: some farmers fail to adhere to stipulated broiler chicken rearing practices
Large number of broiler chickens slaughtered at the same time: allows contractor to satisfy customers (i.e., demand)	Risk of income loss due to enterprise failure: fire outbreaks, diseases, and theft of feeds
Abattoir utilised to capacity	Latent conflicts over enterprise returns with farmers: some farmers have too high expectations: goodwill of company can be spoiled
Increased economies of scale	Poor appreciation of large scale broiler production by farmers

4.2.2 Production management and market specification contracts

Figure 4.2 below outlines the linkages between farmers and the contractor(s), as well as other relevant stakeholders in the peppadew or tomato contract.

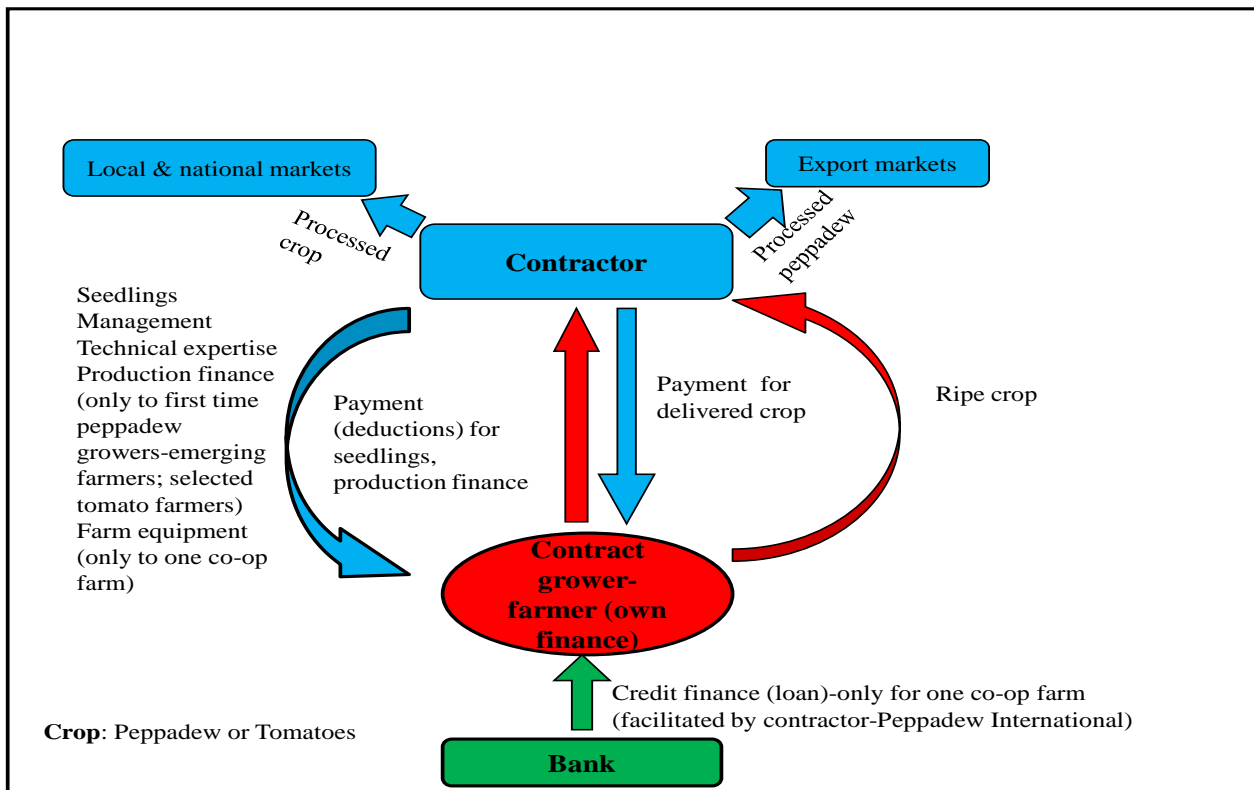


Figure 4.2: Flow of inputs and outputs in the peppadew and tomato contracts in Tzaneen

Four agro-processing companies procure peppadew, tomatoes and butternuts from farmers under more-or-less similar contractual arrangements. Peppadew International and Agro-processors of Limpopo (APOL) contract farmers to grow peppadew and tomatoes, respectively. Du Roi and Tiger brands also contract farmers to grow butternuts and tomatoes, respectively. Although there are slight variations, all companies provide contracted farmers with seedlings of the required variety of the crop; stipulate crop husbandry practices as to required chemicals, fertilisers and applications rates; and manage the growth and development of the contract crop by providing technical expertise. Contracted farmers pay for seedlings and any finance extended to them at the end of the season subsequent to harvesting and delivery of the commodity. In this paper, the case of Peppadew International, and partly APOL, will be used to describe the arrangements in this type of a contract.

Box 4.2 below outlines the characteristics of Peppadew International and APOL and their importance in the production management and market specification contract.

Box 4.2: Characteristics of Peppadew International and APOL

- Peppadew International commenced operating in Tzaneen in 2003: peppadew (Piquanté/Golde w v. 1) processing factory was built,
- APOL commenced operating in Politsi (about 25 km from Tzaneen) in 2009: tomato processing factory was built. APOL was started by LTGA to assist emerging farmers with a market for tomatoes. The company was funded by the LDA and the EU,
- Peppadew International contracts with farmers in Limpopo and Mpumalanga while APOL contracts with farmers only in Limpopo
- Peppadew International contracts about 80 (9 in Tzaneen) farmers every season, while APOL contracts 35 farmers in Tzaneen,
- Peppadew exports 85 % of its products; the remainder is disposed of locally and nationally to Pick ‘n Pay and Woolworths on contract, while APOL sells locally and nationally.

Source: Survey data

4.2.2.1 Terms of the contract

a) Marketing: transport, grading, pricing and payment

Contract growers are obliged to deliver all ripe peppadew to the company's processing factory at the end of each growing season. The company buys all peppadew harvested by each farmer and pays for it if, and only if, it satisfies stipulated quality standards; all produce that does not meet minimum standards is destroyed by the company, following consultation with the concerned farmer.

Peppadew International offers fixed producer prices for different grades of crop delivered to the factory by farmers: the company classifies acceptable fruit into two main grades with variations according to fruit size, blemishes (due to pest attack, sunburn, and wind scaring), black spot, extent of ripeness, and the presence of calyx on fruit. The two main grades used by the company are referred to as the "choice grade" for fruit weighing at least six grams, and the "standard grade" for fruit weighing between four and six grams. As of March 2010, the fixed price for the choice grade of peppadew was R6200.00 per ton, while the standard grade price varied between R5000.00 and R6000.00 per ton. According to the company, these fixed producer prices are arrived at by considering a number of factors, including the cost of production incurred by farmers, cost of transport and the prevailing demand and supply levels in international markets where the company's products are exported to.

Prior to delivering peppadew to the factory, contract growers inform the contractor about their crop: extent of ripeness and yield estimates. Growers submit records of the fertiliser application and spraying schedule/operations, including names of specific fertilisers and pesticides used, to the contractor before delivering any crop consignment. The contractor only accepts deliveries of the crop following an assessment of the record submitted by each farmer: adherence to the company's recommended programme is used as the benchmark. Peppadew growers transport ripe fruit from individual farms to the factory in special bulk bins hired from the company. Growers

use own or hired transport and harvested crop is only accepted when it is delivered in the company-supplied bulk bins.

Subsequent to delivery of the first crop consignment by a farmer, the contractor's factory experts draw a sample of peppadew for grading purposes. The sample is divided into two equal quantities: one half is subjected to grading assessment and laboratory tests for chemical and fertiliser residues, and the other half is stored safely for use in cases of disputes with farmers. Results of sample assessment and laboratory tests are then considered when attaching a grade(s) to the farmer's crop. The results and grades, as well as the price fetched by the crop, are then communicated to the farmer through a mobile phone "text" message and followed up by a fax of printed out grades, lab tests, and prices.

If a farmer does not object to the above, the contractor deducts the total cost of seedlings, hired bulk bins and any production finance extended to the farmer over the growing season before processing payment into the grower's bank account. The contractor pays for all delivered fruit after two to three weeks and payments are made on the 25th day of every month.

APOL's tomato growing contract is more-or-less like the peppadew one, but unlike the latter, APOL provides subsidised transport, at a fee of R100.00 per ton, to all farmers for the transfer of tomatoes from farms (collection points) to the processing factory. Contracted farmers deliver all ripe tomatoes to APOL at a fixed price of R1200.00 per ton. Although the contractor does not have very stringent quality standards, all tomatoes delivered to the factory are supposed to be ripe (red), and not green, with minimum to no blemishes due to pest attack or physical damage. Thus, the fixed producer price is subject to adjustment based on the quality of tomatoes delivered to the factory by a farmer. According to the production contract, APOL pays for all consignments of tomatoes delivered by farmers after two weeks and payments are processed through farmers' bank accounts.

b) Input supply, technical assistance and production management

Peppadew International provides all contract growers with seedlings for each planting and these are paid for in two instalments following harvesting and delivery of ripe crop to the factory. Fifty per cent of the total cost of seedlings supplied to a farmer is deducted prior to payment when the farmer delivers the first fruit consignment and the remaining amount comes from the second consignment. The contractor charges R137.50 per 1000 seedlings provided to a farmer.

Although seedlings are the only input provided to farmers by the contractor, one cooperative farm has a special arrangement with Peppadew International in which the latter has assisted the cooperative with finance to acquire farm equipment.

APOL, like Peppadew International, provides seedlings to contracted farmers, albeit not all: only those farmers who are deemed strategic tomato suppliers are supplied with seedlings. The rest of contracted farmers are expected to procure their own seedlings but to stick to the preferred variety (i.e. factory/jam tomato).

Peppadew contract growers are visited by the company's agricultural extension officers once in every week to inspect the crop and receive each farmer's record of operations carried out and any problems encountered. The extension officers advise farmers on how best they can nurture their crop and remedy any reported problems. Peppadew International does not charge contract growers for any technical assistance extended to them in each growing season.

APOL relies on the department of agriculture to assist tomato contract growers with relevant technical advice. The company also convenes monthly meetings where farmers are advised on tomato growing best practices and solutions to any problems experienced.

c) Credit finance

Peppadew International provides interest-free production finance to small-scale “emerging” contract growers on inception of their first contract. The amount of production finance given to contract growers depends on the size of land to be planted with peppadew, cost of inputs, and the ability to raise own finance exhibited by each farmer. The company regards the envisaged yield as collateral for the production finance extended to farmers. In some instances, Peppadew International provides advance payments to assist farmers who experience shortages of money to cover the variable costs of operations for their enterprises. This is done at a farmer’s request and no interest is charged on money extended to the farmer.

Like Peppadew International, APOL provides production finance only to a selected number of contract growers. Only farmers considered strategic suppliers of tomatoes to the factory are assisted with interest-free loans at the inception of the growing season.

Peppadew International also acted as a guarantor to help contracted cooperative access credit finance (loan) from First National Bank (FNB) in 2008. The company also extended interest-free finance to the cooperative farm for the purchase of farm equipment.

d) Contract failure and resolution of conflicts

In cases where peppadew contract growers do not adhere to the contractor’s guidelines, the latter has the prerogative of terminating the contract seven days following intimation of the identified breach. Cases of contract breach would entail uses of non-stipulated chemicals and fertilisers without prior consultation and consent of the contractor, use of the contractor’s material (including seedlings) for purposes (such as propagation for resale, research and breeding) other than that of peppadew growing activities, and not adhering to the spraying programme and/or application rates.

Although APOL's contract terms are not very stringent and decisive in cases of breach by farmers or the company, there is recourse for non-adherence by either party. Tomato growing contracts are only terminated in extreme cases, as the primary goal of the company is to assist and "incubate" emerging farmers. In cases of contravention of any terms, the non-breaching party is supposed to give a detailed written notice to the other and the contract can be terminated if five days lapse without remedy being effected.

Peppadew International will not buy peppadew that does not meet quality standards, stated above, as stipulated in the contract. The contract allows the contractor to withhold payments to growers if the latter do not submit spraying records and if 40% of the delivered crop does not meet quality standards. However, all growers are allowed to have a second sample of their crop graded in their presence in the event that they dispute the results of grading and testing conducted at the factory.

Crop damage due to natural disasters, such as hail, drought, floods, frost and fire, would not oblige either party to bear any costs, and the growers are exempt from paying for seedlings. However, in cases of negligence by either party, the non-breaching party is allowed to seek legal recourse in order to recoup costs suffered due to such action/behaviour.

4.2.2.2 Advantages and disadvantages of the production management and market specification contracts

Table 4.6 below outlines the advantages of engaging in the above-mentioned contract(s), according to contract growers. Access to a ready and guaranteed market for agricultural produce was indicated by six farmers as being the major benefit of engagement in the contract. That the producer price for contract crop is fixed and thus stable throughout the marketing period means that farmers are protected from the volatility that obtains in open markets: six farmers cited this. Two farmers indicated that guaranteed payments for delivered crop consignments from the contract buyer result in steady cash flows, thus allowing them to meet their variable costs. The risk of incurring income losses due to spoilage of crop during storage while searching for buyers

after harvesting is not paramount to farmers: only one farmer indicated the income-saving role of the contract.

Table 4.6: Advantages of the contract: farmers' perspective

Advantage	Number of farmers citing the advantage (n=10)
Provision of seedlings on credit: saves farmers' time by not doing own seedling propagation	3
Ready and guaranteed market for ripe crop	6
Guaranteed payment for delivered crop	2
Reduces income loss due to late disposal: storage spoilage	1
Stable producer price: protects farmers from price volatility in open markets	6
Steady cash inflows: helps farmers meet variable costs and loan instalments	2
Contract exposes farmers to new and advanced crop production technologies	1
Legal recourse feasible in cases of dissatisfaction unlike spot markets	3

Despite the above-stated advantages, farmers indicated the following as being some of the main disadvantages of engaging in the particular contracts (Table 4.6). Lack of bargaining power on the part of the farmers was cited as the most important disadvantage of contract growing: five farmers indicated that this leads to the contractor always having a final say on the producer price. The quality standards for the crop delivered to the factory are too stringent and farmers do not always manage to satisfy these and thus their consignments do not always fetch expected revenue, which was indicated by two farmers. The grower's contract was designed by the contractor without the involvement of farmers: two farmers cited this as one of the shortcomings of the contract as they cannot influence the fixed terms. In order to meet the contractor's stipulated quality standards, it is paramount that farmers pay considerable attention to the contract crop during the growing and this limits their ability to engage in other farming activities; one farmer indicated this.

Table 4.7: Disadvantages of the contract: farmers' perspective

Disadvantage	Number of farmers citing the disadvantage (n=10)
Contract a priori requirements are too stringent: cost of irrigation installation is high	1
Stipulated crop quality standards are high and stringent	1
Contractor's crop grading procedure not very transparent: farmers are not directly involved; rejected crop not returned to concerned farmers	2
Contractor dictates producer price: farmers sparingly involved in price formulation and have low bargaining power	5
Farmers' innovation is dampened as they only follow outlined production as required by the contractor	1
Producer price is fixed and not adjusted in cases of increases in going market prices: farmers lose out on possible increased returns	2
Farmers not involved in contract designing	2
Farmers restricted to one market: low marketing knowledge gained	1
Contract producer price is low	2
Production and land use are fixed over the duration of the contract: farmers cannot easily engage in different farming activities	1
Contractor requires farmers to have own production finance	1
No transparency on payment (APOL-tomato): no statements made available to farmers regarding grading and pricing	1

Table 4.8 below outlines the advantages and disadvantages for engaging in the production management and market specification contracts as cited by the contractor(s). The contract(s) allows the contractor to monitor crop growth and development and this ensures the high quality produce needed to satisfy consumer preferences. That contractors receive large and consistent volumes of crops enables them to utilise the processing factories to capacity, thus conferring economies of scale. Bulk procurement also allows the contractor to process large quantities of the crop, thus meeting consumer demand.

Inasmuch as the contractor manages and monitors the growth and development of the contract growers' crops, not all farmers manage to meet expected quality standards and this brings about inconsistencies in products from the factory. Conflicts with farmers emanating from mostly grading issues can be detrimental to the company's reputation, according to the contractor. The contractor also indicated that contracts are not easy to enforce as farmers are sparsely situated: high costs are incurred in the effort to reach every farmer during the growing season.

Table 4.8: Advantages and disadvantages of the contract: contractor’s perspective

Advantages	Disadvantages
Allows the contractor to monitor crop production	Side selling: some farmers dispose of crop (tomatoes) to parallel markets
Expected crop quality standards easily met: allows contractor to meet consumer preferences	Poor crop quality: some farmers fail to adhere to stipulated crop husbandry practices
Large volumes of crop delivered: allows contractor to satisfy customers (i.e. demand)	Risk of income loss due to enterprise failure: fire outbreaks, pests, and theft of crop
Processing factory utilised to full capacity	Latent conflicts over enterprise returns with farmers: some farmers have too high expectations
Consistent volumes of crop supplied: viable processing enabled	Contractor incurs high costs of management of crop enterprises
Allows contractor indirect access to land and confers economies of scale	Contracts are not easy to enforce: farmers are sparsely situated; enforcement costs are high
Guaranteed large volumes of good quality crop	

4.2.3 Production specification and market specification contracts

Formal (written) contractual arrangements with production specification and market specification were encountered in the orange and grapefruit sectors. Two cooperative farms, with a total of 45 member farmers, and an individual farmer are contracted to grow oranges and grapefruits, mainly for export markets. Low-grade fruits are disposed of in local markets on a non-contractual basis. Lona Citrus has contracts with these growers and specialises in buying and exporting citrus.

Figure 4.3 below shows the linkages between contract growers and the contractor, as well as other relevant stakeholders partaking in the production specification and market specification contract.

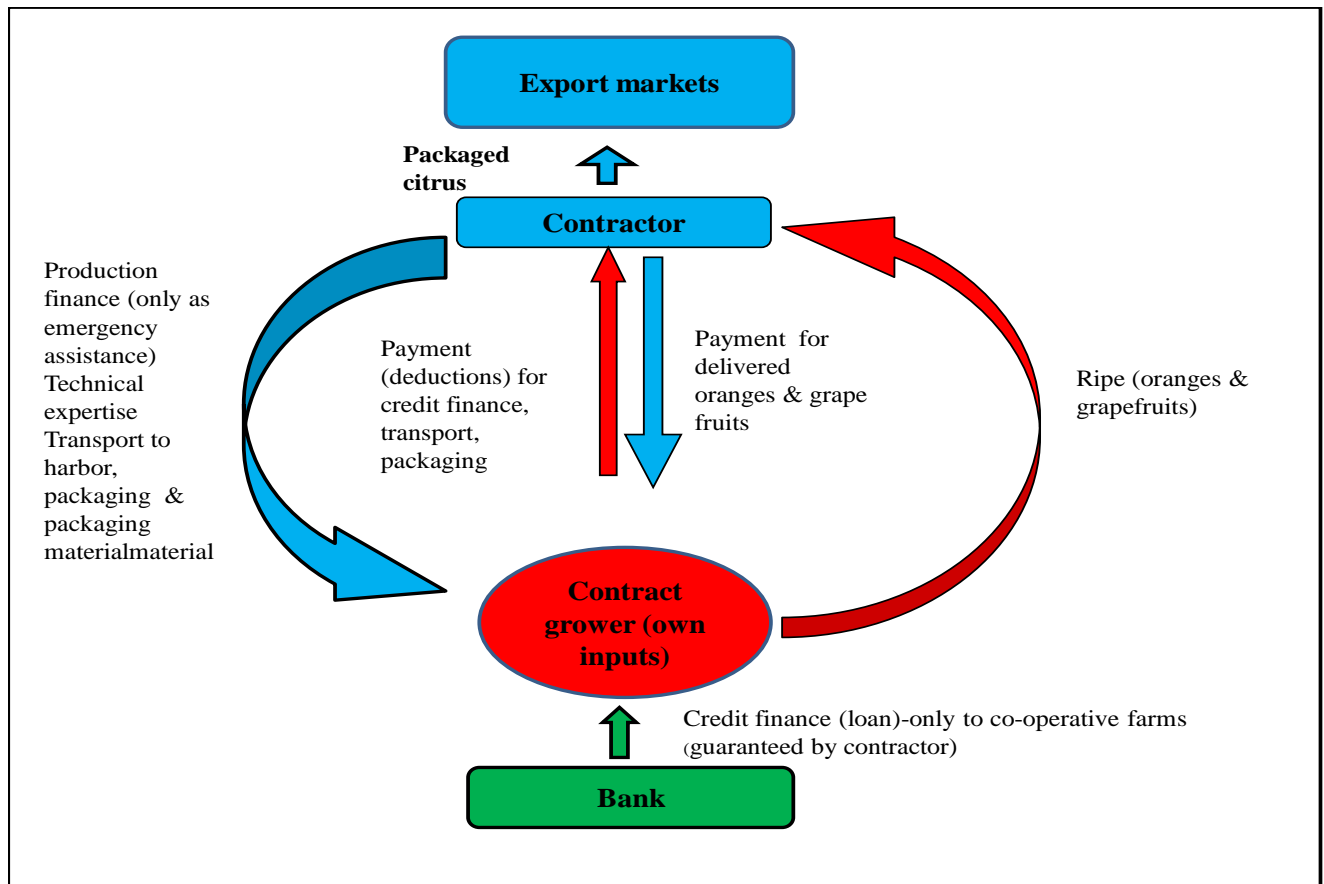


Figure 4.3: Input and output flow in the production specification and market specification contract

Box 4.3 below outlines the characteristics of Lona Citrus and their importance in the production specification and market specification contracts.

Box 4.3: Characteristics of Lona Citrus

- Company commenced fruit export business in 1996 in Cape Town,
- Lona specialises in citrus and is among the top five exporters in RSA,
- Company has 40 key markets around the world and exports to 53 different countries,
- The company's citrus is disposed of under a brand name called Jaffa,
- Lona procures citrus under contractual arrangements from many farmers around South Africa,
- The company's contract farmers are located in the Western and Eastern Cape, KZN, Mpumalanga and Limpopo provinces.

Source: Survey data

4.2.3.1 Terms of the contract

a) Marketing: transport, grading, pricing and payment

Contract growers transport own fruits from farms to the company packhouse and the contractor provides transport to the harbour. Farmers are charged for the transfer of their fruits from the packhouse to the harbour. According to the contract, farmers are obliged to deliver all ripe first and second grade fruits to the contractor's packhouse. The contractor buys all consignments of fruits delivered to the packhouse which satisfy the quality standards of the afore-stated grades.

The prices paid to farmers for citrus are agreed upon with the company at the beginning of every farming season. According to both parties, a number of factors are taken into consideration to determine the producer prices: the costs of production, cost of transport, packaging costs and the international market situation.

Grading of fruits is done at the packhouse by the company's buyer in the presence of the growers or their representatives. Farmers are paid for delivered fruits after a period of one month; the contractor deducts the cost of transport from the packhouse to the harbour, packaging costs and credit finance prior to paying the farmers for delivered citrus.

b) Input supply and technical expertise

Lona Citrus does not provide contracted farmers with inputs according to the contractual arrangement. However, the contract allows Lona Citrus to stipulate types of fertilisers and chemicals to be used by the farmers during the growing season and farmers are obliged to adhere to the application rates and desired citrus husbandry practices.

Company citrus experts visit farms frequently to assist farmers with advice on citrus husbandry, as well as providing a remedy for any problems encountered. These company experts also monitor the growth and development of citrus fruits in order to make sure that farmers attain high yields of good quality fruits. Contract farmers are not charged for the technical expertise rendered to them during the growing season.

c) Credit finance.

Although the contract does not compel Lona Citrus to provide credit finance to farmers, the company extends credit to farmers in situations where the latter experience shortfalls during the course of each growing season.

The amount of credit finance extended to each contract grower depends on the production needs and shortages experienced, as well as the ability of the grower to repay. This credit finance is charged an interest of 12.5% and is payable at the end of each growing season. Contract citrus enterprises and expected yields/income are considered as collateral for the credit finance by the company. This contract allows Lona Citrus to play the role of a “quasi-guarantor” for the loans extended to cooperative farms by the DBSA prior to the inception of this contractual arrangement.

d) Contract failure and resolution of conflicts

The contract document in the farmers’ possession is not clear on issues of failure and conflicts; however, respondent farmers indicated that the contractor has the prerogative to terminate the

arrangement if they do not comply with the stipulated citrus husbandry programme. Thus, the contractor can reject fruits delivered by any contract grower that do not meet stipulated quality standards.

4.2.3.2 Advantages and disadvantages of the production specification and market specification contract

Table 4.9 below outlines the benefits drawn from participation in the production and specification contract, as indicated by respondent farmers in Tzaneen. Three contracted farmers indicated that their involvement in the citrus growing contract with a relatively “smaller” buyer means that they are given due consideration as suppliers and thus preferential treatment in terms of exchange. Since their fruits constitute a greater proportion of the total volumes sourced by the contractor, farmers feel that they get the best price offers. Extension of credit finance by the contractor in situations of need is regarded as one major advantage of involvement in this contract by farmers. A total of three farmers stated that access to a ready and guaranteed market for their produce is beneficial to their farming businesses. Relatively stable producer prices for citrus are also advantageous to farmers: two farmers indicated that steady cash inflows obtained from the contract enterprises help them meet their variable costs and loan repayments.

Table 4.9: Advantages of the contract: farmers’ perspective

Advantage	Number of farmers citing the advantage (n=3)
Farmers are highly recognised by contractor: farmers are major suppliers of the small contractor	3
Ready and guaranteed market for ripe citrus	3
Guaranteed payment for delivered citrus	2
Reduces income loss due to late disposal: storage spoilage	1
Stable producer price: protects farmers from price volatility in open markets	3
Steady cash inflows: helps farmers meet variable costs and loan instalments	2
Contract exposes farmers to new and advanced citrus production technologies	1
Contractor assists with credit finance to rescue farmers in cases of need	3

However, an array of shortcomings impede smooth interaction between farmers and the contractor (Table 4.10). The producer price of citrus which is linked to international markets leaves no room for considerable involvement of farmers in price formulation since some of the factors considered are beyond their comprehension. Two farmers indicated that fruit quality

standards set by the contractor are too stringent and are not often attainable: export-oriented fruits are subject to phytosanitary scrutinisation and this directly impacts on the farmers. The need to invest in the installation and operation of an irrigation system (micro-jet system) for citrus trees is a major disadvantage for engaging in this contract: one farmer indicated that the cost of installing the recommended irrigation system is too high.

Table 4.10: Disadvantages of the contract from the farmers' perspective

Disadvantage	Number of farmers citing the disadvantage (n=3)
Contract a priori requirements are too stringent: phytosanitary standards	1
Stipulated citrus quality standards are high and stringent for export market	2
Contractor dictates producer price: farmers sparingly involved in price formulation and have low bargaining power; farmers do not understand export markets	2
Farmers' innovation is dampened as they only follow outlined production as required by the contractor	1
Producer price is fixed and can be lower than open market prices at certain times	2
Farmers not involved in contract designing	2
Production and land use are fixed over the duration of the contract: farmers cannot easily engage in different farming activities	1
Contract requires farmers to invest in irrigation facilities which are expensive	1

The perspective of the contractor on the advantages and disadvantages of engaging contract growers in this particular arrangement could not be obtained: the contractor's representative could not furnish the researcher with relevant responses, despite several attempts to this effect.

4.2.4 Organic vegetable certification contracts

An association of 17 organic farmers is formally contracted to grow green beans, butternut, beetroot, sweet corn, cauliflower, and spinach on a relational basis, annually. Nkomamonta organic farmers have been contracted to Woolworths since 2007. As of March 2010, only four of the seventeen farmers were actively supplying Woolworths, while the remainder were idle (or could not satisfy quality standards) owing to a number of factors, including lack of production finance.

Figure 4.4 below shows the linkages between organic farmers and Woolworths, as well as other relevant stakeholders in the organic certification contract. All organic farmers were linked to Woolworths through assistance from HIVOS⁷ and produce is packaged and transported to Woolworths by Westfalia.

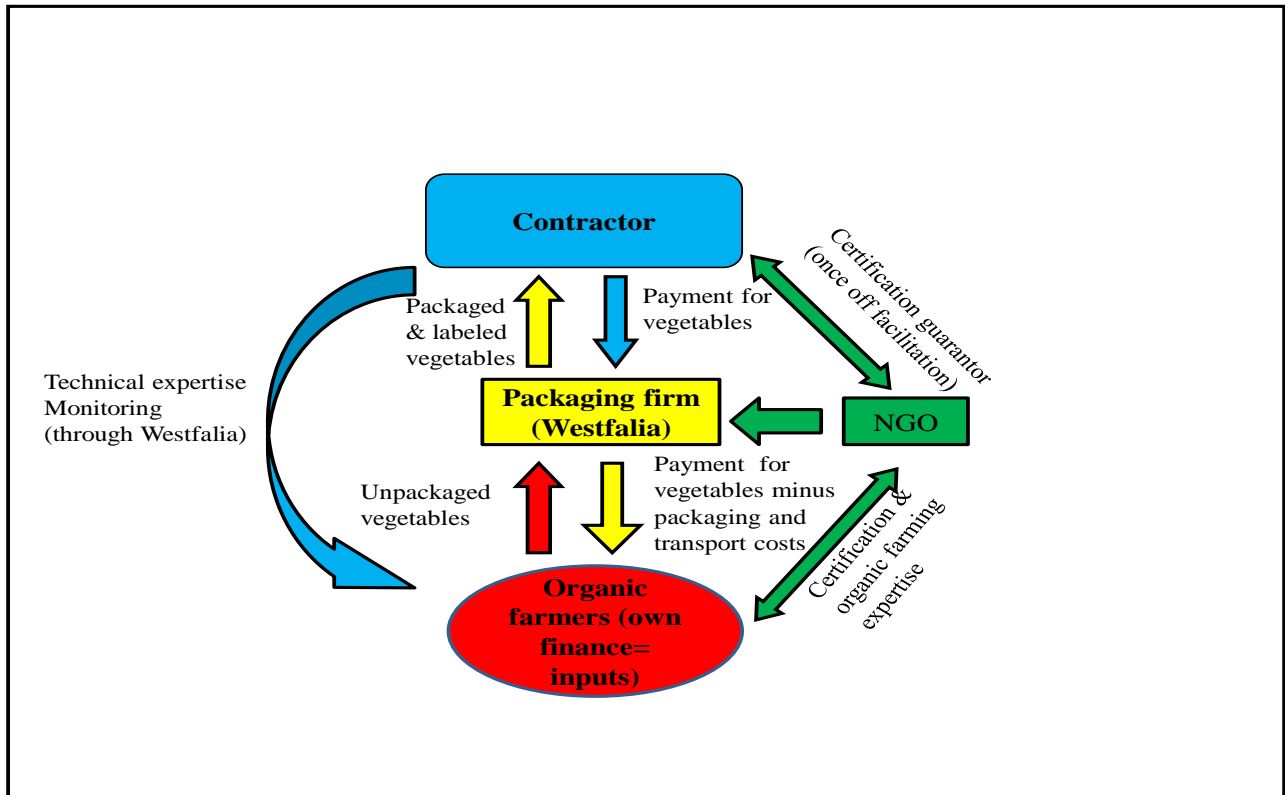


Figure 4.4: Inputs and outputs flow in the organic vegetable certification contract

The organic vegetable contract was initiated in 2005 and growers started supplying Woolworths in 2007. HIVOS helped the farmers with the conversion from conventional to organic methods of farming: the NGO provided farmers with expertise on organic farming through their agronomists. The NGO facilitated the inspection for suitability to produce organic vegetables and the certification of the association’s farms. Costs of certification were borne by HIVOS on behalf of the farmers’ association.

⁷ HIVOS-Humanist Institute for Cooperation or Humanistisch Instituut voor Ontwikkelingssamenwerking-a Dutch non-governmental organisation

Following their certification, farmers were linked to Westfalia (in Modjadjiskloof) for the required grading and packaging of their produce and its transportation to Woolworths' central depot in Midrand. HIVOS solicited this link on behalf of the farmers since Woolworths requires specific grading and labelling of all vegetables delivered to its depot: Westfalia has special packhouses for organic products and is a major supplier to Woolworths.

Box 4.4 below outlines the characteristics of Woolworths and their importance in the organic vegetable certification contract.

Box 4.4: Characteristics of Woolworths

- a major retailer in the South African food industry with regard to affluent market segments,
- retail products are of high standards and are tailored to fetch premium prices,
- organic produce constitutes a considerable proportion of product lines marketed by Woolworths,
- Woolworths has a centralised procurement system which supplies outlets country wide,
- The company has contracts with selected farmers who can satisfy its stringent quality specifications,
- The company engages in empowerment initiatives and promotes emerging farmers by affording them access to agricultural markets.

Source: Survey data

4.2.4.1 Terms of the contract

a) Marketing: transport, grading, pricing and payment

Woolworths buys all organic produce from contract farmers if, and only if, the stipulated quality standards are satisfied. Farmers transport their produce to Westfalia for grading and packaging, as well as labelling, before transportation to Woolworths' central distribution centre in Midrand.

Westfalia stores and grades all supplied vegetables according to Woolworth's requirements. Although farmers are not directly involved in the grading process, a representative of their

association works with Westfalia throughout the whole process and reports back to the farmers. Farmers are charged for grading and labelling of all produce. Westfalia transports the packaged vegetables to Woolworths on behalf of the farmers.

Woolworths meets with Nkomamonta farmers at the beginning of every growing season/year to agree on producer prices. According to respondent farmers, a number of factors are taken into account in deciding different vegetables' producer prices. Prevailing costs of inputs, transport, labour, and the levels of demand and supply constitute major determinants of the contract producer price. The set producer prices remain fixed throughout the production season, unless consultative adjustments are effected. However, these prices will vary according to the quality of vegetables delivered to Woolworths by farmers.

The contractor stipulates the production methods to be used by farmers: farmers are required to use organic seeds, organic fertilisers and organic pesticides throughout the growing season of each vegetable. Westfalia inspects and tests vegetables from farmers to ascertain adherence with stipulated production guidelines, which requires that laboratory tests be conducted on samples of each vegetable to detect the type and level of residues of fertilisers and chemicals used by farmers. Results of these tests are also used to determine the producer price and the acceptance or rejection of delivered vegetable consignments.

Westfalia pays contract farmers after deductions for packaging and transport services. Farmers receive statements indicating the final grades and prices fetched by their vegetables, and payments are made into their bank accounts. Payments are made after an average of three weeks subsequent to deliveries.

b) Input supply and technical assistance

The organic vegetable certification contract does not oblige Woolworths to assist contract farmers with any inputs. Farmers are expected to purchase required inputs, as specified by Woolworths, using their own funds. Westfalia provides organic farmers with technical advice

through an organic agricultural expert placed with the company by Woolworths. Farmers can request technical advice from Westfalia at any time and are not charged for this.

c) Credit finance

Woolworths does not lend money for farming activities to contracted organic farmers in Tzaneen. Farmers finance their farming activities through own equity and other sources of income, such as employment salary and other non-farm activities, including businesses, remittances and personal bank loans.

d) Contract failure and conflict resolution

In cases where a farmer does not adhere to Woolworths stipulated procedures of organic farming, the association has the mandate to reprimand the particular member farmer. The association stops the breaching farmer from disposing of produce collectively through Westfalia.

If the breaching farmer's produce is not withdrawn by the association and is detected after testing at Westfalia, the farmer's consignment will be withdrawn from the collective consignment. Repeated violation of expected standards results in the particular farmer's exclusion from the association. Contravention of stipulated production guidelines and expected quality standards by more farmers might result in termination of the collective contract by Woolworths.

4.2.4.2 Advantages and disadvantages of the organic vegetable certification contract

Contract organic vegetable farmers regard access to a ready and guaranteed market for vegetables as a major benefit of their engagement in the contract, which is cited by four farmers (Table 4.11). In this contractual arrangement, farmers' commodities fetch relatively stable producer prices. Three farmers indicated that this is an advantage to their farming businesses as they are protected from the volatile prices that obtain in the open markets. Guaranteed payment for delivered vegetables and steady cash inflows are important benefits of contract production, as stated by two farmers. Exposure to organic farming techniques is one major benefit of involvement in this contract, as cited by three farmers. Since farmers dispose of their vegetables

soon after harvesting, this means that there will be no storage costs incurred or possible loss of income due to storage spoilage of vegetables while searching for buyers.

Table 4.11: Advantages of the contract: farmers' perspective

Advantage	Number of farmers citing the advantage (n=4)
Ready and guaranteed market for vegetables	4
Guaranteed payment for delivered vegetables	2
Reduces income loss due to late disposal: storage spoilage	1
Stable producer prices: protects farmers from price volatility in open markets	3
Steady cash inflows: helps farmers meet variable costs and loan instalments	2
Contract exposes farmers to new and advanced vegetable production techniques	3
Contract helps farmers to link vegetable enterprises with market prior to production	3
Contract allows accurate/informed farm business planning	2

On the other hand, three farmers cited the stringent requirements for converting from conventional to organic farming as being lengthy and expensive (Table 4.12). The cost of investing in new irrigation facilities and certification are high, thus requiring a huge capital outlay. Organic vegetable quality standards are too high and farmers do not always meet these, thereby leading to low producer prices being attained for produce, as cited by two farmers. The presence of a third party (i.e. the packaging firm) was been cited by one farmer as being an impediment to direct interaction with the contractor, which is necessary for registering disaffection and thus prompting rectification of any arising problems.

Table 4.12: Disadvantages of the contract: farmers' perspective

Disadvantage	Number of farmers citing the disadvantage (n=4)
Contract a priori requirements are too stringent: conversion to organic farming and certification lengthy and expensive	3
Stipulated vegetable quality standards are high and stringent: difficult to attain by farmers	2
Producer prices: farmers sparingly involved in price formulation and have low bargaining power	2
Farmers only allowed to deliver limited volumes of different vegetables	2
High start-up capital: expensive organic vegetable seeds, organic fertilisers and pesticides	2
Farmers not involved in contract designing	2
Farmers do not have direct and constant interaction with the contractor: third part involved	1
Contract requires farmers to invest in irrigation facilities which are expensive	1

The contractor's perspective of the advantages and disadvantages of engaging farmers as contract growers of organic vegetables could not be established: the contractor's representative indicated to the researcher that all information regarding their business dealings with farmers was confidential and thus could not be discussed or passed on to third parties, despite repeated assurances by the researcher and the University that confidentiality would be upheld.

4.2.5 Production management and export market specification contracts

The production management and export market specification contract for citrus is between Capespan, a citrus exporting company, and farmers. Capespan engages 10 citrus-growing farmers in Tzaneen: among the contract farmers, there is one emerging farmer who grows kumquats for export markets under a formal (written) contractual agreement, while the rest are large-scale farmers.

Figure 4.5 below shows the input and output linkages in the production management and export market specification contract.

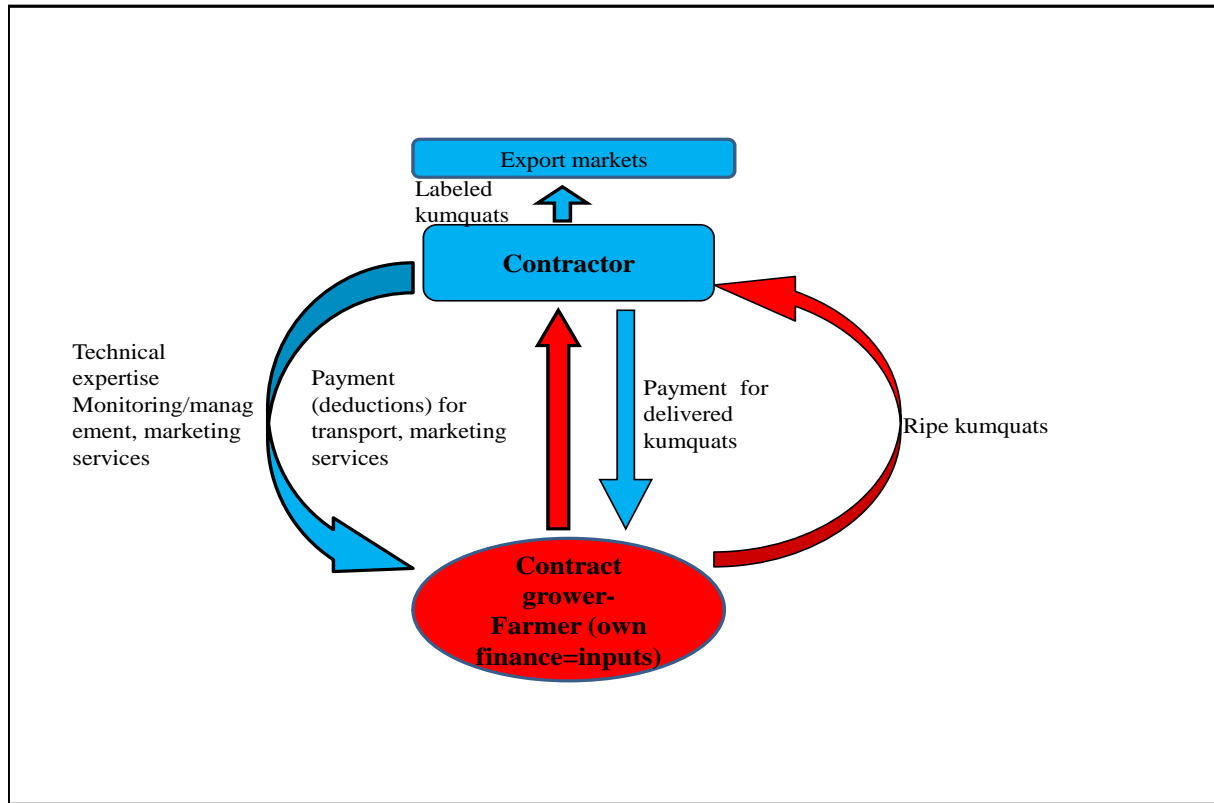


Figure 4.5: Flow of inputs and outputs in the production management and export market specification contract

The farmer receives technical advice from the company, while the company receives ready-to-market fruit for export from the farmer, and the farmer pays for transport while the contractor pays for the fruit.

Box 4.5 below outlines the characteristics of Capespan and their importance in the production management and export market specification contract.

Box 4.5: Characteristics of Capespan

- Capespan is a citrus export agent/logistics company,
- The company has contracts with 50 farmers (45 large-scale and 5 small-scale and/or emerging) in Limpopo as of March 2010,
- Capespan manages citrus enterprises for all contracted farmers.

Source: Survey data

The one farmer grows kumquats for the company at a pre-set minimum producer price. Capespan contracts the farmer for the duration of each growing season and the contract is relational.

4.2.5.1 Terms of the contract

a) Marketing: transport, grading, pricing and payment

The contract stipulates that the farmer deliver all ripe fruits (kumquats) to the contractor's packhouse. Only fruits which meet quality standards as stipulated by the contractor are accepted. The company does market research and informs the farmer of the prevailing prices and required fruit quality/grades. A minimum price is agreed upon between the farmer and the contractor prior to disposal of the fruit.

The farmer sorts, grades and packages the fruit in the farm's packhouse according to the guidelines supplied by the contractor. Quantities and grades of consignments delivered to the contractor are sorted according to the orders placed by the contractor.

Kumquats are separated into first and second grade: grades are based on size of fruits, extent of damage due to diseases such as black spot, sunburn, and fungal rust. Only the first and second grade fruits are exported, while third grade is sold locally and nationally. Capespan labels and transports the fruits to the harbour or airport en route to export markets. The maximum price fetched by the exported fruit in 2009/2010 season was R40.00 per carton (2 kg).

Capespan charges the farmer for transportation of the fruit to the harbour: the farmer pays a fixed amount of R15 000.00 per month for transport. The farmer is charged a commission of 13 % of the total revenue from each season's fruit sales as payment for the contractor's services. The farmer is paid for delivered fruit after a period of about three months. The contractor deducts all costs and commission before depositing the farmer's payment into his bank account. Prior to payments, the farmer can request advance payments from the contractor, the amounts of which are deducted at the time of payment.

b) Input supply, technical expertise and production management

The contract does not oblige Capespan to provide the contracted farmer with inputs, but technical expertise and production management is provided. Citrus experts from the contractor visit the farmer once fortnightly to inspect the growth and development of the fruit and render advice to the farmer. The experts also check whether the farmer is adhering to stipulated citrus husbandry practices: the farmer is expected to provide the company experts with records of farm operations, including spraying and fertilising carried out.

The contractor does not charge the farmer for technical advice and management of the citrus enterprise.

c) Credit finance

Capespan does not extend credit finance to this contracted farmer. However, according to the company's manager, short-term loans are extended to large-scale farmers.

d) Contract failure and conflict resolution

According to the respondent farmer and the company's respondent, the contract allows either party to terminate the agreement in cases of breach of stipulated terms, on prior written notice to the breaching party. The contractor can also terminate the contract if the farmer does not follow stipulated citrus husbandry practices and the fruit does not meet expected quality standards. Any discord between the farmer and the contractor is resolved through dialogue between a company representative and the farmer.

4.2.5.2 Advantages and disadvantages of the production management and export market specification contract

The respondent farmer enthused that having access to a ready and guaranteed market for his fruit is the major benefit of engaging in this contract (Table 4.13). A high return-to-enterprise investment due to premium prices fetched in export markets is another important advantage to the farmer resulting from partaking in contract production. The farmer cited steady cash inflows from the relatively stable producer price offered by the contractor as being another advantage of his involvement in the contract (Table 4.13).

Table 4.13: Advantages and disadvantages of the contract: farmers' perspective

Advantage	Disadvantages
Ready and guaranteed market for citrus (kumquats)	Late payments for delivered kumquats
Premium producer price fetched in export markets	Farmer not involved much in price formulation
High returns on farm investment	Farmer's diversity in farming activities is limited: contract citrus covers land for a several years; contract citrus requires much attention
Reduces income loss due to late disposal: storage spoilage	High cost of production: farmer requires credit finance
Steady cash inflows: helps farmer to meet variable costs and loan instalments	Farmer's prolonged reliance on exporting contractor destroys local market networks
Contract exposes the farmer to new and advanced citrus production techniques	
Contract helps the farmer to link citrus enterprise with market prior to production	
Contract allows accurate/informed farm business planning	

A number of disadvantages emanating from engaging in the contract were also cited by the farmer (Table 4.12). The farmer mentioned that late payments attributable to the fact that the fruit goes through a long value chain in the export market exposes the farm business to financial constraints, as variable costs cannot be easily met. The fact that the contractor exports the farmer's fruits means that the farmer's influence on the producer price is limited since his understanding of the price determinants is limited. The farmer's prolonged involvement in contract production, and thus the export market, results in the farmer losing linkages with local markets. This could be detrimental to the farmer should the contractor decide to terminate the contract in future.

Table 4.14 below outlines the advantages and disadvantages of engaging contract growers to grow citrus for the export market.

Table 4.14: Advantages and disadvantages of the contract from the contractor’s perspective

Advantages	Disadvantages
Allows the contractor to monitor citrus production	Side selling: some farmers dispose of fruit to parallel markets
Expected fruit quality standards easily met: allows contractor to meet consumer preferences	Poor fruit quality: some farmers fail to adhere to stipulated fruit husbandry practices
Large volumes of fruit delivered: allows contractor to satisfy customers (i.e., demand)	Risk of income loss due to enterprise failure: fire outbreaks, pests, and theft of fruits
Consistent volumes of citrus supplied: viable export business enabled	Contracts are not easy to enforce: farmers are sparsely situated; enforcement costs are high
Allows contractor indirect access to land and confers economies of scale	
Guaranteed large volumes of good quality fruit	

4.3 Comparison of formal contracts

Contractual arrangements identified in the area of study varied between commodities and role players. In most cases, the contractor, rather than the farmer, greatly determined the aspects of the arrangement and this presents the inherent pros and cons for either party. However, all identified contractual arrangements bore common key aspects in the three main types of arrangements in most agricultural markets: (i) production management, (ii) resource providing and (iii) market specification contracts.

The success of each arrangement differed between the contractor and the farmer, and from one scenario to another. The efficacy of each contractual arrangement in facilitating the ease of access and participation in agricultural markets constitute the major success factors for smallholder farmers. In addition to continued access to markets, farmers ranked high and stable producer prices as being an overarching success factor in all arrangements. On the other hand, contractors regarded a reliable supply of high volumes of products that meet their specifications as being important success factors of these arrangements.

Resource-providing contractual arrangements, accompanied by technical assistance, augured well with participant farmers. Provision of production inputs enabled farmers with relevant infrastructure and access to land to easily negotiate and to enter into contractual arrangements. In most of these arrangements, technical assistance provided by contractor experts also meant that farmers managed to successfully produce products that satisfied agreed specifications. Although producer prices were often pre-determined in these arrangements, most farmers were not satisfied with the incomes after deductions of input costs. This led to high incidences of shirking by some farmers as a way of avoiding input costs deductions, which were assumed to be too high and not calculated in a transparent manner. The loss of expected supplies on the part of contractors constituted a breach of the contractual arrangement and that often resulted in disputes and subsequent termination.

Production management and specification, as well as market specification contractual arrangements, excluded input provision and dedicated technical assistance to farmers. Contractors monitored development of contracted enterprises to ascertain quality and expected time of supplies. Only a few farmers with adequate production finance or reliable sources of finance (i.e. credit finance or equity) managed to enter into such arrangements. These arrangements often involved high value products, such as peppadew and citrus for export markets with high producer prices. Farmers regarded these as profitable arrangements and there were no incidences of shirking. However, there were isolated cases of low quality produce arising from to unsatisfactory husbandry when farmers did not have adequate funds for pesticides. In most of these arrangements, both contractors and farmers were satisfied and their participation continued in successive production seasons.

Farmers that were contracted to supply organic vegetables were very satisfied with their arrangements and the high to premium producer prices. Organic certification and access to Global Gap Certified packhouses were facilitated by a third party non-profit organisation. A number of farmers worked collectively to attain group organic certification for their individual farms and supplied a single contractor. High costs, stringent standards and rigorous procedures for certification were prohibitive for individual smallholder farmers. Farmers received support

from the non-profit organisation. This facilitation and supply of quality produce helped farmers enter into this arrangement in successive production seasons.

Table 4.15 summarises differences among identified contracts, their major categories and efficacy. The efficacy of each contractual arrangement is indicated by major aspects which promote participation by both parties, thus enabling sustainable access to agricultural markets for smallholder farmers. The following were the major aspects of contractual arrangements identified in the study area: input finance, technical assistance, fixed producer price, and product standards specifications.

Table 4.15: Differences among identified contractual arrangements and their suitability

Identified contractual arrangement	Generic contract form category			Efficacy of arrangement ¹
	Production management	Resource providing	Market specification	
Resource management for broiler chicken production contracts		X		++++
Production management and market specification contracts	X	X		++++
Production specification and market specification contracts	X			++
Organic vegetable certification contracts			X	++
Production management and export specification contracts	X		X	+++

Notes

¹++++,+++,,++ and + indicate the presence of all, three, two and one major aspect, respectively

CHAPTER 5

Characteristics of contract farmers

5.1 Introduction

After analysing the different contractual arrangements engaged in by farmers, this chapter endeavours to establish the characteristics of such farmers, according to type of contract. General characteristics of the farmers will be detailed, whereafter their trajectories will be analysed. These characteristics and the farmers' and/or households trajectories will be discussed, related to the possible influence thereof on the feasibility of engaging in contractual arrangements, or to the possible impact of the contractual arrangements on households trajectories. In order to protect the identities of respondents, pseudonyms were used to identify farmers who represented participant farmers in each contractual arrangement.

5.2 General characteristics of contract farmers

Characteristics of farmers involved in the five identified contractual arrangements were used to explain the factors determining their participation in the particular arrangements. These characteristics, as embodied in the trajectories of the farmers, influenced their engagement in particular contractual arrangements. In turn, participation in contractual arrangements impacted differently on trajectories of the farmers. Notwithstanding other factors, it is imperative to note that, in general, certain trajectories are necessary in enabling the farmers to engage in particular contractual arrangements (Table 5.1).

5.2.1 Resource management for deep litter broiler chicken production contract farmers

The respondent farmers were contracted to rear and supply broiler chicken to the Bushvalley farm abattoir. All nine contract farmers also grew mangoes which were disposed of in the informal local markets: atchar making factories were the main buyers of mango in the study area (Tzaneen). Although three (33.3%) of these farmers grew vegetables, broiler rearing was their main farming activity under this contractual arrangement. Only one (11.1%) of the broiler chicken farmers had a contractual arrangement for organic vegetables, while the rest disposed of their vegetables in the open market, including the fresh produce markets in Johannesburg and Pretoria.

Table 5.1: General characteristics of contract farmers

Characteristics of contract farmers	Type of contract					
	Resource management for deep litter broiler chicken production contracts	Production management and market specification contracts	Production specification and market specification contracts	Organic (certification) vegetables contracts	Production management and export specification contracts	
Main activity	Broiler chicken farming	Peppadew farming	Citrus farming	Organic vegetable farming	Kumquat farming	
Extra activities	Mango production	Citrus farming	Peppadew farming	Mango production	Butternut production	
Number of farmers	9	10	3	4	1	
Age of farmer/household head (years)						
Max	66	66	48	65	54	
Min	25	32	43	37	54	
Av	54.6	49.6	45.7	56.3	54	
Std.dev	12.84	9.42	2.52	13.1		
Employment before contract (%)						
Employed	88.9	60	66.7	100	100	
Employed in government	62.5	50	33.3	75	0	
Employed in private sector	37.5	50	33.3	25	100	
Unemployed	11.1	40	33.3	0	0	
Current employment (%)						
Employed	0	0	0	50	0	
Unemployed	100	100	100	50	100	
Level of education (%)						
Degree	11.1	20	0	25	0	
Diploma	44	10	0	25	0	
Matric	44	70	100	25	0	
Primary school	0	0	0	25	0	
Uneducated	0	0	0	0	100	
Annual Income (R)						
Global	Max	4048 162.00	10925 845.00	10925 845.00	3715 378.00	647 176.00
	Min	410 259.00	29 885.00	1 586 594.00	35 503.00	647 176.00
	Av	3052 828.81	4 598 170.00	7 462 738.50	1 052 943.66	647 176.00
	Std.dev	1 500 011.66	4 554 173.38	5 115 903.25	1 779 532.58	
Farm income	Max	4048 162.00	10925 845.00	10925 845.00	3715 378.00	560 376.00

Characteristics of contract farmers		Type of contract				
		Resource management for deep litter broiler chicken production contracts	Production management and market specification contracts	Production specification and market specification contracts	Organic vegetables (certification) contracts	Production management and export specification contracts
	Min	404 473.00	2 285.00	1 586 594.00	8 383.00	560 376.00
	Av	3 032 486.58	4 586 898.00	7 462 738.50	1 025 008.66	560 376.00
	Std.dev	1 500 334.29	4 564 903.91	5 115 903.25	1 798 763.34	
% of global income	Max	100.00	100.00	100.00	100.00	86.59
	Min	91.06	7.65	100.00	23.61	86.59
	Av	98.58	89.81	100.00	66.2	86.59
	Std.dev	2.89	28.93	0	37.05	
Off-farm income	Max	47 120.00	52 000.00	0	50 000.00	86 800.00
	Min	0	0	0	0	86 800.00
	Av	20 342.22	11 272.00	0	18 125.00	86 800.00
	Std.dev	20 336.87	17 584.95	0	22 114.76	
Size of land owned (ha)						
	Max	191	380	320	220	22
	Min	21	50	252	32	22
	Av	58	214.8	290.67	92.38	22
	Std.dev	53.4	108.45	34.95	86.05	
Method of land acquisition (%)						
	Land reform (LRAD)-Land Bank loan	100	10	0	75	100
	Community redistribution-pre government owned	0	30	66.67	0	0
	Equity	0	20	0	0	0
	Inheritance	0	0	0	25	0
	Leasehold	0	40	33.33	0	0
	Tribal authority allocation	0	0	0	0	0
Form of land tenure (%)						
	Freehold	100	30	0	75	100
	Leasehold	0	40	33.33	0	0
	PTO	0	30	66.67	25	0
Farm infrastructure (%)						
	Environmentally-controlled chicken house	100	0	0	25	0
	Semi-environmentally controlled chicken house	0	0	0	0	0

Characteristics of contract farmers		Type of contract				
		Resource management for deep litter broiler chicken production contracts	Production management and market specification contracts	Production specification and market specification contracts	Organic vegetables (certification) contracts	Production management and export specification contracts
Drip irrigation		33.33	70	100	100	100
Sprinklers		0	20	0	0	0
Micro-jet		0	40	100	0	100
Flood system		0	0	0	0	
Centre-pivot		0	0	0	0	
None		66.67	0	0	0	
Asset ownership (%)						
Tractor	Own at least one	44.44	100	100	100	100
	Do not own any	55.56	0	0	0	0
Car/lorry	Own at least one	66.67	90	100	100	100
	Do not own any	33.33	10	0	0	0
Warehouse	Own at least one	0	70	100	0	100
	Do not own any	0	30	0	0	0
Pack house	Own at least one	0	30	66.67	0	100
	Do not own any	0	70	33.33	0	0
Association membership (%)						
Rainbow chicken farmers		88.89	0	0	0	0
NAFU		0	20	0	0	0
Agri SA		0	0	0	0	0
Citrus growers' association		0	30	100	0	0
Mango growers' association		0	10	0	0	0
Nkomamonta organic farmers		11.1	0	0	100	0
APOL		11.1	10	0	0	0
Non-affiliated		11.1	10	0	0	100

The average age of the contract broiler farmers is 54.6 years: 88.9 per cent were previously employed and 62.5 per cent of these worked for various government departments. All of these farmers own land (on average, 58ha) under freehold tenure which was acquired through loans from the Land Bank under the government's LRAD and CASP land reform programmes. Each of the farmers has an environmentally controlled chicken house with a carrying capacity of 40 000 birds per production cycle: this was a major pre-requisite for the contractual arrangement. These farmers received financial assistance (in the form of grants) from the government through the Department of Agriculture to fund the construction of their boiler chicken houses.

To this end, it was of paramount importance that the government played an important role in facilitating the broiler chicken contractual arrangements. It is apparent that these farmers' involvement with the government, initially as employees, could have been a necessary enabling factor in this arrangement. The acquisition of farms through the government's land reform programme and extension of grants for infrastructure development provides the basis for the thesis that the catalytic factor in this arrangement was the government. Respondents indicated that they had lobbied the government for assistance prior to this contractual arrangement. All but one of these farmers belonged to the same association, Rainbow Chicken Farmers.

All broiler chicken contract farmers were fully engaged in the operations of their enterprises and are no longer employed. Farmers indicated that government support was imperative in enabling them to earn substantial farm incomes and become viable commercial producers. In addition, this support was aimed at helping farmers to service their land acquisition loans from the Land Bank. On average, each farmer supplied 38 000 ready-to-slaughter broiler birds to Bushvalley farms per cycle. Each farmer earned an average annual income of R3 052 828.81 and the greater part (98.58%) of this was farm income.

5.2.1.1 Trajectory of broiler contract farmers

In this section, the trajectory of the contract broiler chicken farmers will be outlined: specific information of one representative farmer will be used to provide a comprehensive background of these farmers; and the likely influence on engagement in the contractual arrangement will be

traced. The trajectory of a broiler contract farmer⁸ is outlined and depicted below in Box 5.1 and Figure 5.1, respectively.

Box 5.1: Trajectory of a broiler chicken farmer

Mr Sithole was born in Bushbuckridge in the Limpopo province in 1950. He attended school and trained as a teacher in Limpopo. Between 1975 and 1992, Mr Sithole taught at different high schools in the province and was elevated to the position of an education officer (curriculum implementer) for mathematics in 1992. Mr Sithole worked as an education officer in the province and retired in 1999 due to ill-health.

In 2000, Mr Sithole bought a farm (55.5 ha) in Tarentaalrand (Tzaneen) with the help of a loan from the Land Bank through the country's land reform programme (LRAD). Mr Sithole assumed ownership of the farm which has 32 ha of mango trees. With his own equity, he planted rain-fed maize and vegetables on about 6 ha of his farm. Harvested mangoes were sold to atchar factories within Tarentaalrand, while maize was mainly for family consumption, with surplus being disposed of to local buyers. Vegetables were sold to hawkers and the informal market at the taxi/bus rank in the Tzaneen town. In addition to the mango, maize and vegetable enterprises, Mr Sithole started a broiler chicken production enterprise in 2002. The farmer used his own savings to construct three open structures with a combined carrying capacity of 2000 birds per cycle. The bulk of the ready-to-slaughter birds was sold to hawkers (and the local communities), while a few birds were sold to Bushvalley farms' abattoir.

Mr Sithole, with a number of other farmers, formed an organic farmers' association (Nkomamonta Organic Farmers) in 2006. These farmers were assisted by an NGO (HIVOS) to transform from conventional to organic farming methods. HIVOS helped these farmers with organic certification and facilitated the signing of a contract to grow and supply organic vegetables to Woolworths in 2006. HIVOS liaised with Westfalia to provide the packaging services in line with Woolworths' procurement standards. Like the rest of the member farmers, Mr Sithole uses his own money to grow organic vegetables, although the group of farmers occasionally buys expensive organic certified seeds and fertilisers collectively. Most of the organic vegetables (green beans, green pepper, sweet corn, lettuce, spinach, beetroot and eggplant) are sold to Woolworths, while the remainder is sold to local buyers and shops

In 2007, through the government infrastructure grant, Mr Sithole transformed his broiler chicken rearing enterprise from an open structure to an environmentally controlled chicken house with a capacity of 40 000 birds per cycle. The construction of the environmentally controlled chicken house was intended to enable Mr Sithole to engage in a contractual arrangement with Bushvalley farms which, in effect, had been facilitated by the department of agriculture. Thus, Mr Sithole is contracted by Bushvalley farms to rear and supply the company's abattoir with ready-to-slaughter broiler birds in every cycle for a period of five years.

Source: Survey data

⁸ A pseudonym was used to protect the respondent farmer's identity.

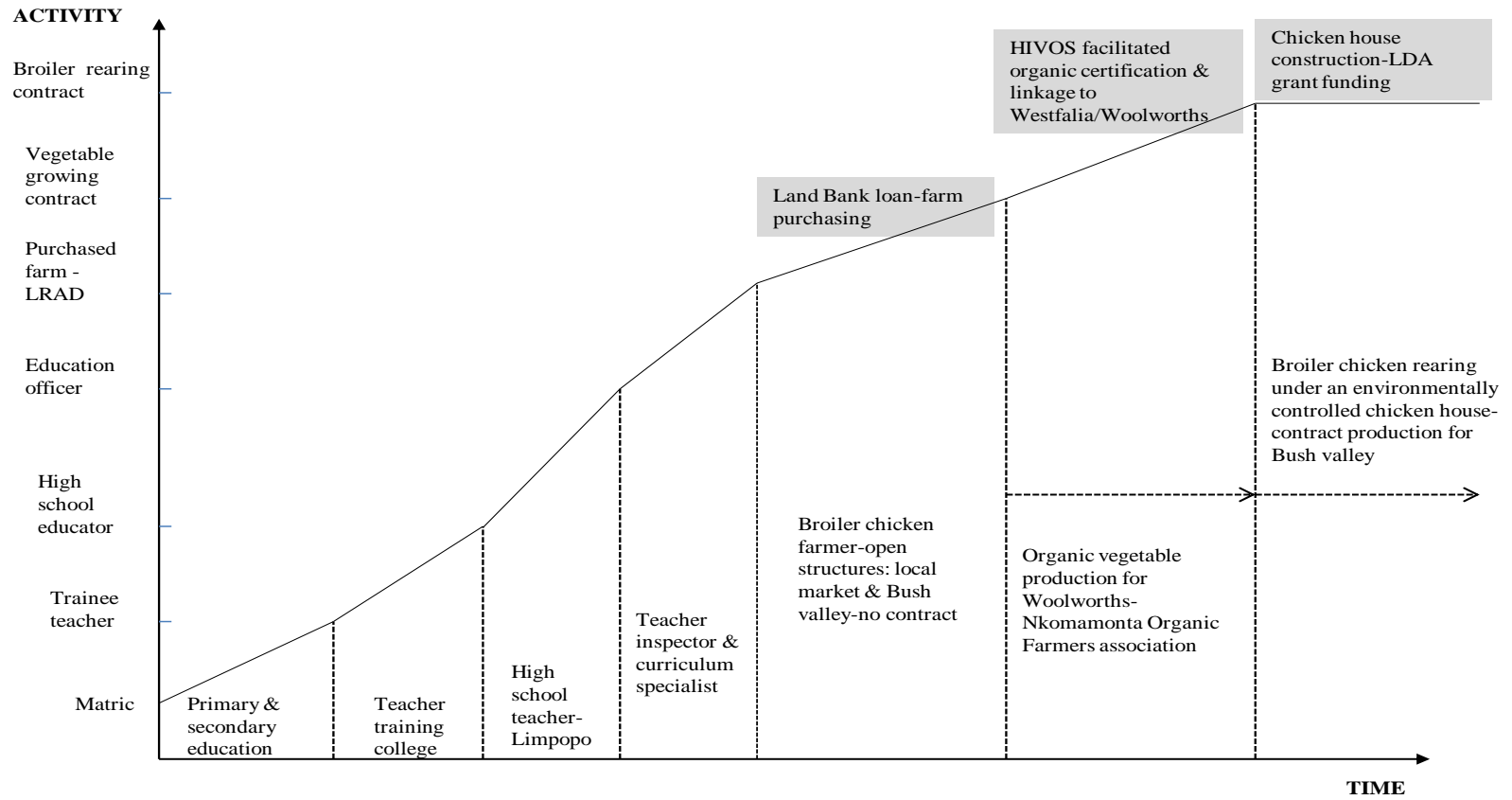


Figure 5.1: Trajectory of contract broiler chicken farmers

5.2.2 Production management and market specification contract farmers

Ten farmers were contracted to grow and supply peppadew to a company called Peppadew International. Although peppadew was the main/common crop being grown by these farmers, other activities formed major contributing enterprises to their farm incomes. Citrus, butternuts, mangoes and cattle were the other important activities carried out among this group of farmers. Forty per cent of the farmers grow citrus and 75 per cent of these are under contractual arrangements. Only 50 per cent of the butternut is grown under formal contractual arrangements, while 50 per cent of both cattle and mangoes are produced under informal arrangements (gentlemen's agreements).

Of the ten respondents, 30 per cent are cooperative farms. The average age of the respondent farmers is 49.6 years; 60 per cent of these were employed prior to farming and/or contractual arrangements; 50 per cent of these were government employees and the other 50 per cent were in the private sector (Table 5.1). Forty per cent of the respondents were unemployed: some were subsistence farmers in the surrounding communities, while others were running different business ventures.

The employment status of the farmers, prior to the contractual arrangement, seems to have had a marginal effect on participation in this contract. Although 60 per cent of the contract farmers were previously employed, a sizeable number (40%) of unemployed respondents managed to partake in the peppadew growing contract. Employment, either in the government or the private sector, impact equally on the feasibility of the farmers' participation in this contractual arrangement.

Most of the peppadew contract growers are well linked to other farmers, and the Peppadew International agricultural manager had previously worked in the farming area of Tzaneen. Motivation by fellow contract farmers, as well as the acquaintance with the company's official, has had influence on some farmers' participation in this contractual arrangement.

The average size of the land owned by this group of farmers is 214.8 ha (Table 5.1) and an average of 15.4 ha (Table 5.2) is committed to peppadew production. Forty per cent of peppadew contract farmers lease land from various owners; 30 per cent acquired land through redistribution to resident communities by the former homeland government; 20 per cent of the farmers used own equity to purchase the land; and 10 per cent used Land Bank loans to acquire farms through the land reform programme (LRAD) of the current government. Thus, 40 per cent of the farmers have leasehold tenure, 30 per cent have a permission to occupy (PTO) from the government, while the remaining 30 per cent have private ownership status (freehold tenure) of the land (Table 5.1).

Table 5.2: Land size under different farming activities

Farming activity	Size of land utilised (ha)			
	Max	Min	Mean	Std dev.
Peppadew	72	3	15.4	20.79
Citrus	190	0	43.5	69.44
Butternuts	52	0	6.55	16.09

Peppadew International requires a contract farmer to be able to plant at least three hectares of peppadew, ideally under drip irrigation, as one of its prerequisites. That each contract farmer owns at least 50 ha of land under various forms of tenure, with an average of 15.4 ha planted with peppadew, means that the size of irrigable land, but land tenure, influences participation in this contractual arrangement.

The type of farm equipment and infrastructure varies among peppadew contract farmers: all farmers (100%) own at least one tractor; 90 per cent own a car/lorry; 70 per cent have a warehouse; and 30 per cent own a packhouse. All of these farmers have an irrigation system installed on at least three hectares of their land: 70 per cent have drip irrigation; 40 per cent have micro-jet irrigation; and 20 per cent utilise sprinklers (Table 5.1). That all contract farmers own at least one tractor means that such equipment/implement is an important determinant of participation in this arrangement. Although 90 per cent of the contract farmers own a car/lorry, most of these farmers indicated that they use hired transport to transfer their peppadew to the factory. Thus, car/lorry ownership has little to no effect on entering into this contractual

arrangement. Ownership of a packhouse does not influence the peppadew contract, since all harvested peppadew is ferried from the farm to the factory at the end of each day.

Peppadew contract farmers belong to different farmers' and commodity associations and do not have a "peppadew" association. Only three (30%) of the respondent farmers are members of cooperatives, while the rest work individually. Affiliation to an association/organisation, save the cooperatives, does not influence the participation of farmers in this contractual arrangement. Membership to cooperatives indirectly influences the involvement of such farmers in the peppadew contract. The average annual income earned by peppadew contract farmers is R4598 170.00, and 89.81 per cent of this is from farming activities (Table 5.1).

5.2.2.1 Trajectory of peppadew contract farmers

The trajectory of the contract peppadew farmers is outlined; specific information of one representative farmer and a cooperative farm is used to provide a comprehensive background of these farmers. The trajectory of a peppadew contract farmer⁹ is outlined and depicted below in Box 5.2 and Figure 5.2, respectively.

⁹ A pseudonym was used to protect the respondent farmer's identity.

Box 5.2: Trajectory of a peppadew contract farmer

Mr Mado was born in 1961 in the Tzaneen area of the Limpopo province. After attaining matric in 1985, he worked in citrus farms as a general labourer until the early 1990s. Mr Mado underwent on-farm training in farm management and citrus production from both private- and government-run citrus farms and became a citrus growing adviser in 1994.

Between 1995 and 2005, Mr Mado worked as a citrus farm manager on both private commercial farms and government-run farms. He was an adviser in the establishment of two cooperative citrus farms in Tzaneen which were funded by the homeland government through the ARDC: Mr Mado provided the expertise required for planting and management of citrus trees and was later employed as a manager at one of the ARDC citrus farms and remained in that position until 2005.

In 2005, Mr Mado commenced to lease a farm (252 ha) from a restitution community in the Eiland area. Prior to 1994, the farm was run by the ARDC and had about 25 ha of orange and grape fruit trees. Mr Mado planted 15 ha with more citrus trees to expand his enterprise. The farmer entered into contract with Lona Citrus which provided him with a R600 000.00 loan as production finance. To date, Mr Mado has 40 ha of citrus trees and the enterprise operates under a relational contract.

In addition to citrus, Mr Mado grows butternuts (5 ha) and peppadew (15 ha), which commenced in 2007 and 2008, respectively. Butternuts are grown on a non-contract basis, while peppadew is produced under a relational contract with Peppadew International. Mr Mado received a production loan of R100 000.00, at 12% simple interest, from Peppadew International in 2008.

The farmer has a micro-jet irrigation system for the citrus trees and drip irrigation systems for both peppadew and butternuts enterprises. Mr Mado owns two tractors and one vehicle which he uses in the farm business.

Through Lona Citrus, Mr Mado exports all his first and second grade oranges and grape fruits, while the remainder is sold to local fruit hawkers and citrus buying companies. The farmer sells butternuts to local communities and the Johannesburg Fresh Produce market.

Source: Survey data

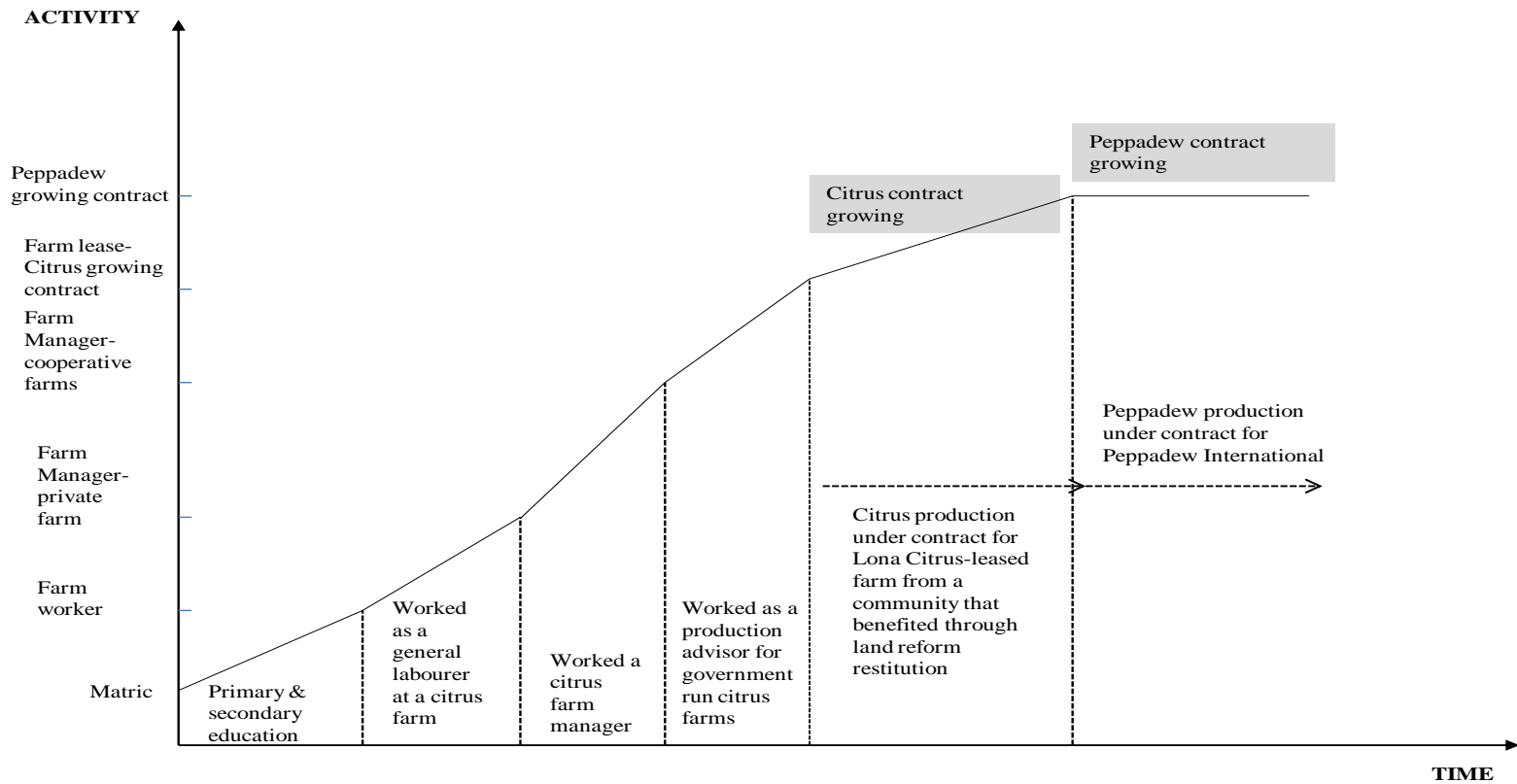


Figure 5.2: Trajectory of a peppadew contract farmer

To substantiate the above, the trajectory of a cooperative farm (Emergent Farmers Enterprises Tours) is outlined. The cooperative owns 130 ha of arable land which was redistributed to individuals from the surrounding communities in the Ga-Maake tribal area in 1997 (Box 5.3 & Figure 5.3).

Box 5.3: Trajectory of a peppadew contract cooperative farm

Emergent Farmers Enterprises Tours cooperative is comprised of 17 members who benefited from government's land reform programme. All members are former subsistence farmers from surrounding communities who received portions of the land/farm from the government through redistribution in 1997. The farm was previously utilised as a tea plantation by the former homeland government. The 17 members were resettled on the farm which had been subdivided into equal portions/plots; individual farmers were given PTOs as a form of land ownership. With the help of the ARDC, most of the resettled farmers grew rain-fed maize on their plots. The ARDC provided farmers with inputs, production finance and expertise, as well as produce marketing facilitation. The farm is located in the Ga-Maake tribal area in Tzaneen.

Subsequent to cessation of the ARDC in 2000, the resettled farmers could not manage to proceed with their farming ventures; the existing farming activities failed and most stopped operations. In 2008, the farmers formed the cooperative, to which they all ceded their portions of land to farm collectively. The cooperative entered into a contract to grow peppadew for Peppadew International in 2008; the farmers collectively planted 72 ha of the crop. To facilitate this contractual arrangement, Peppadew International became a "quasi" strategic partner: the company injected funds, in the form of a soft loan, into the cooperative farm to enable them to install the required irrigation system; experts from the company supervised the growing of peppadew and its harvesting, as well as marketing. The cooperative received a loan for production finance from the FNB; Peppadew International acted as a guarantor for collateral purposes to enable the cooperative to access the loan.

Source: Field interviews

The involvement of the contractor, Peppadew International, in the organisation of the farmers, funding of irrigation infrastructure and guaranteeing of loan funding for working capital constituted an integral role in facilitating this contractual arrangement. It is important to note that the contractor's ultimate interest was to secure continuous and guaranteed access to substantial volumes of peppadew fruit.

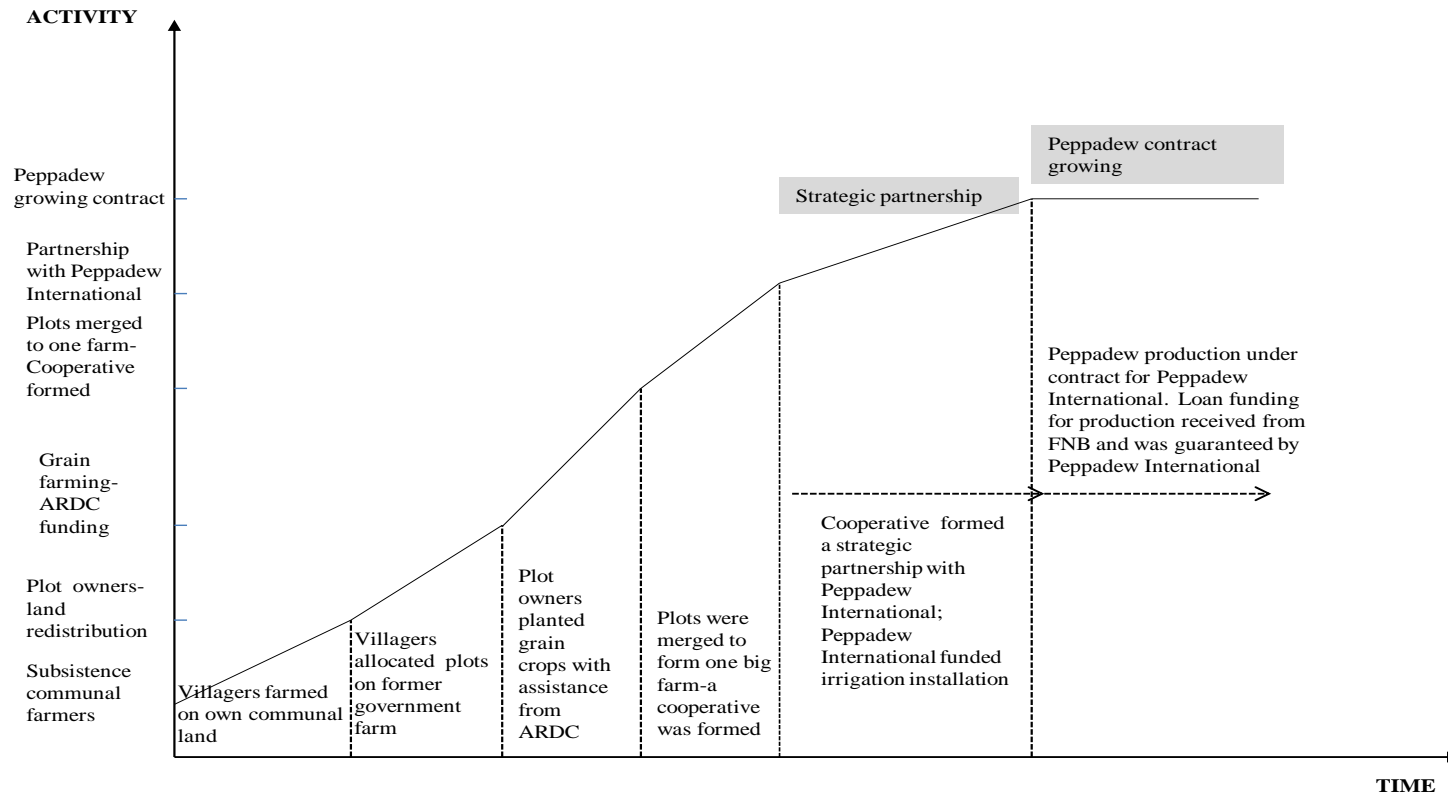


Figure 5.3: Trajectory of a peppadew contract cooperative farm

5.2.3 Production specification and market specification contract farmers

Two cooperative farms and an individual farmer are contracted by Lona Citrus to grow citrus (oranges and grape fruits). All of these farms grow peppadew on contract basis for Peppadew International, while one cooperative grows butternuts and bananas; the other cooperative grows mangoes in addition to its contract activities.

The average age of respondent farmers is 45.7 years. A considerable number (66.7%) of the respondents were previously employed, both in the government and private sectors (Table 5.1). However, there is a wide variation in the background of members of cooperative farms, although most of these were subsistence farmers. To this end, age and prior employment status of farmers do not influence participation in the citrus contractual arrangement. In the case of cooperative farms, affiliation to a cooperative indirectly translates into participation in this contractual arrangement.

The size of land owned by citrus contract growers varies; on average, respondents own 290.67 ha and an average of 108.75 ha of the farmland is committed to citrus production (Table 5.3). Cooperative farms acquired land through redistribution of farms which were previously owned by the former homeland government. Members of cooperatives have PTOs and thus farms are collectively owned under the same form of tenure. The individual farmer leases land from a local restitution community, while all cooperative farms have PTOs (Table 5.1).

Table 5.3: Land size under different farming activities

Farming activity	Size of land utilised (ha)			
	Max	Min	Mean	Std dev.
Peppadew	22	3	12.5	8.02
Citrus	190	40	108.75	70.76
Butternuts	52	0	14.75	24.92
Mango	70	0	32.5	37.75
Banana	52	0	13	26

The average size of land (290.67 ha) owned by citrus contract farmers is considerably large. That an average of 108.75 ha of the land is devoted to citrus means that land size and the size of the citrus enterprise have a bearing on the farmers' participation in this contractual arrangement. Although respondents did not indicate that there is a stipulated minimum size of land owned and land under citrus, large sizes of land and enterprises confer a high likelihood of participation in the citrus contract.

Citrus contract farmers own farm equipment and infrastructure that are important in their farming activities. Drip and micro-jet irrigation systems are commonly owned among member farmers in each cooperative. All respondents have functional drip irrigation and micro-jet irrigation systems on their farms. Farmers use micro-jet irrigation for citrus trees, while drip irrigation is used for other crops. That all citrus contract farmers own micro-jet irrigation systems means that ownership or access to this specific irrigation system influences their likelihood to participate in this contractual arrangement.

All respondent farmers own a warehouse, and in addition, each cooperative farm owns a packhouse (Table 5.1). Although respondent farmers indicated that they transfer all picked fruits from the farm to the buyer's pack house daily, having an on-farm packhouse increases their chances of entering into this contractual arrangement; packhouses allow farmers to handle fruits easily and meet stringent quality standards set by the buyer and/or market. One hundred per cent of citrus contract farmers own at least one tractor and a car/lorry. Farmers indicated that they use tractors for various farm operations, including picking of fruits. Although some farmers use own cars/lorries to transport fruits to the buyer's pack house, additional transport is often hired. Inasmuch as tractor ownership is important for participation in this contractual arrangement, owning or not owning a car/lorry does not strongly determine the contract.

On average, contract citrus farmers earn an annual income of R7 462 738.50; all (100%) income is generated from farming activities (Table 5.1).

That all citrus contract farmers subscribe to a citrus growers' association means that affiliation to an association has some influence on the farmers' participation in the citrus contractual arrangement.

5.2.3.1 Trajectory of citrus contract farmers

Mariveni Farmers' Cooperative owns a farm (320 ha) in the Mariveni Tribal area near Litsetele in Tzaneen. It has twenty-four members from neighbouring communities who were each allotted an average of ten (10 ha) hectares of land through redistribution of a previously government-owned farm in 1994. Currently, all members are equal shareholders of the farm, as they have since ceded their plots to the cooperative (Box 5.4 & Figure 5.4).

Box 5.4: Trajectory of a citrus contract cooperative farm

Mariveni Farmers' Cooperative was formed in 2002. It is comprised of 24 members from surrounding communities. The cooperative operates on a farm which was initially run by the homeland government until 1992. Between 1992 and 1993, the government planted the farm with bananas (52 ha) and citrus (145 ha) before allocating it to individuals from the surrounding communities in 1994. These individuals applied for consideration to own a plot and were interviewed by government officials, agricultural department officials, community leaders and ARDC experts (Figure 5.4). From inception, the new plot holders received generous support, mainly from the ARDC, and partly from the Limpopo Economic Development Enterprise (LimDev), and the Limpopo Business Support Agency (LIBSA). The ARDC withdrew its support to the farmers in 2000 and the enterprises regressed to non-viable entities. Although these farmers received loans from the Land Bank to revamp their farming activities, they lacked farming skills and expertise.

Through government intervention, a company called Du Roi was engaged as a strategic partner to assist with the revival of the farm's enterprises (Figure 5.4). Du Roi injected some funds into the farm's citrus venture and in order to effect sound management and viability, the Mariveni Farmers' Cooperative was formed and registered in 2002. By acting as a guarantor, Du Roi successfully facilitated the application for a loan of about R10.5 million to the DBSA by the cooperative. This money was used for farm recapitalisation and production. The cooperative also started planting peppadew on a contractual basis for Peppadew International. Du Roi provided management expertise and trained the farmers on sound farming and citrus husbandry practices in order to boost production. Mariveni Farmers' Cooperative disposed of their citrus through SAFE and Dole, while bananas go the open market. In 2008, the cooperative started planting butternut under contract with Du Roi.

Du Roi pulled out of the strategic arrangement in 2009 and the cooperative has since engaged a citrus exporting company, Lona Citrus, in a contractual arrangement.

Mariveni Farmers' Cooperative owns twenty-two tractors, three trucks and a small packhouse which they use for their bananas which are sold locally and to the fresh produce markets in Johannesburg and Pretoria. Mariveni Cooperative is TESCO global GAP certified and the certification process was funded by the EU.

Source: Survey data

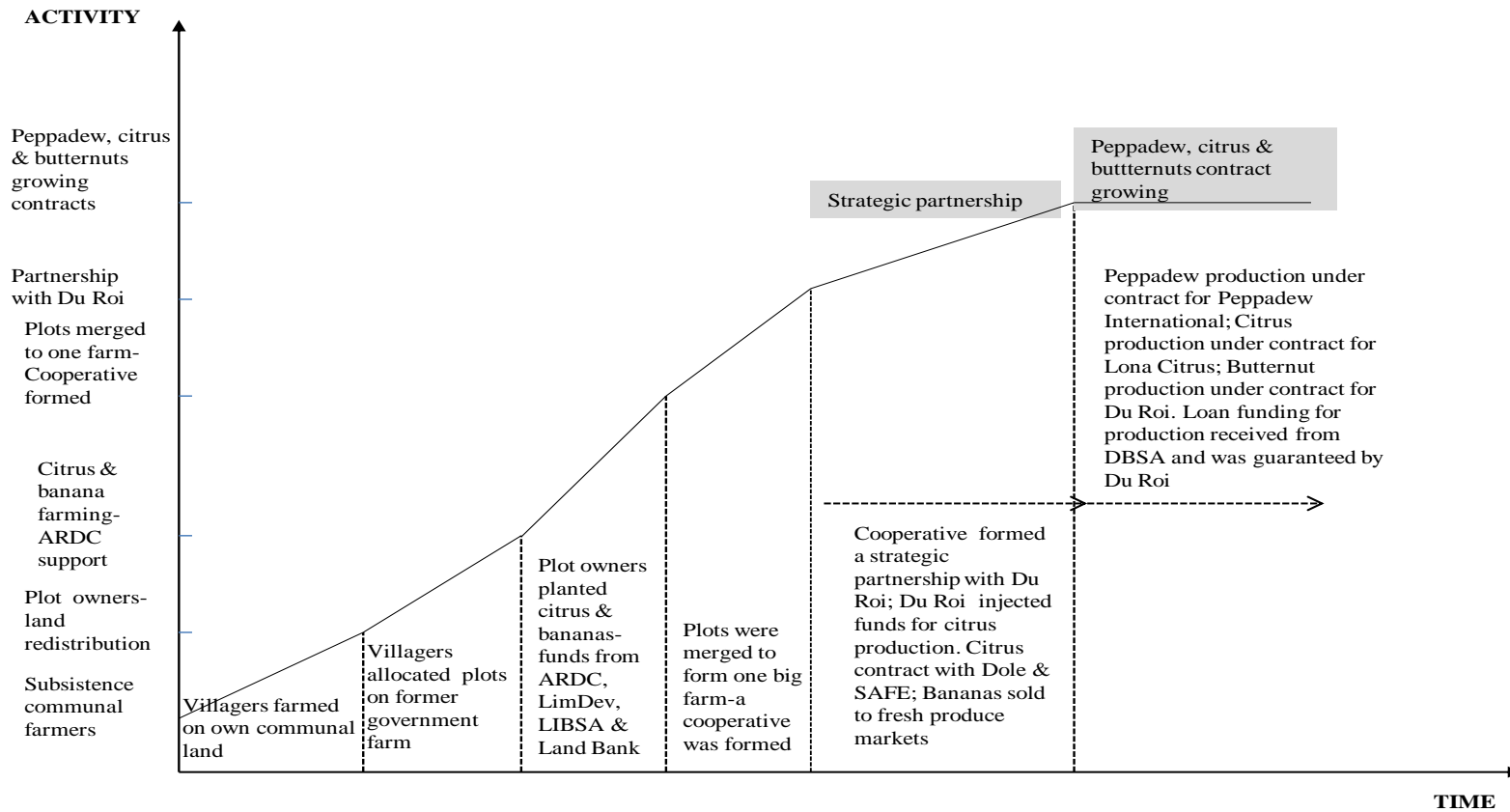


Figure 5.4: Trajectory of a citrus contract cooperative farm

5.2.4 Organic vegetables (certification) contract farmers

Seventeen farmers located in Tarentaalrand and the surrounding villages of Tzaneen are collectively contracted to Woolworths to grow and supply organic vegetables. Only four of these farmers are currently supplying the contractor as they are able to meet the required vegetable quality standards and were the respondents in this study.

The respondent contract organic vegetable farmers grow a variety of vegetables, including spinach, green pepper, sweet corn, beetroot, green beans, cauliflower and lettuce. All contract farmers have mango orchards and dispose of their mango to atchar factories on a spot market basis. One of the contract organic vegetable farmers also rears broiler birds under a contractual arrangement for Bushvalley farms.

The average age of contract farmers is 56.3 years (Table 5.1). All (100%) respondent farmers were employed prior to contract farming: 75 per cent of the farmers were employed in the government, while the remainder worked in the private sector (Table 5.1). Currently, 50 per cent are employed, while the remainder are fully dependent on farming. That all contract farmers were previously employed means that a certain level of equity is important for participation in this contractual arrangement; farmers did not receive any external financial support. Although 75 per cent of the organic farmers are previous government employees, neither financial support nor lobbying has been rendered by the government. Thus, neither government support nor affiliation to government influences participation in this contractual arrangement.

All contract organic farmers subscribe to an organic farmers association called Nkomamonta Organic Farmers (Table 5.1). This association renders assistance to farmers through collective action in procurement of certain expensive inputs, as well as vegetable marketing. Organic certification was done collectively and all subscribing Nkomamonta farmers were certified under the guidance of the association. Thus, affiliation to an association determines the participation of farmers in this contractual arrangement.

Contract organic farmers were helped by an NGO, HIVOS, to transform from conventional to organic farming; HIVOS provided the expertise on organic farming methods and helped the association of farmers with finance, as well as facilitating certification. In addition to certification, HIVOS facilitated the liaison between farmers and Woolworths and Westfalia to effect the contractual arrangement. To this end, access to external support (financial or institutional) is important for participation of farmers in this contract.

The average size of land owned by contract organic vegetable farms is 92.38ha (Table 5.1) and an average of 31.5ha of this is used for growing organic vegetables (Table 5.4). Seventy-five per cent of the farmers acquired land through loans from the Land Bank under the land reform programme (LRAD) of the government; and 25 per cent inherited their land (Table 5.1). Thus, 75 per cent of the farmers have freehold titles to their land, while 25 per cent have PTOs.

Table 5.4: Size of land owned and utilised for organic vegetables

Description	Size of land (ha)			
	Max	Min	Mean	Std dev.
Land owned/farm size	320	32	92.38	86.10
Land under vegetables	40.50	16.26	31.50	10.75

To this end, neither the size of land owned by contract organic vegetable farmers nor the form of land ownership influences participation in this contractual arrangement.

All respondent farmers grow their organic vegetables under irrigation; 100 per cent of the farms have drip irrigation systems installed. Each farmer owns at least one tractor and a car/lorry. None of the contract farmers own either a warehouse or a packhouse. Ownership of drip irrigation significantly determines the participation of a farmer in this contractual arrangement; respondents indicated that this was a pre-requisite. That none of the respondents owned a packhouse means that participation in this contract is independent of such infrastructure; contract farmers transport all vegetables harvested each day to Westfalia where packaging is done.

The average annual income earned by contract organic vegetable farmers is R1 052 943.66 and 66.2 per cent of this comes from farming activities (Table 5.1).

5.2.4.1 Trajectory of organic vegetable contract farmers

Mr Konke¹⁰ was born in 1945 in Bushbuckridge in the Limpopo province and attended school in this area. Upon completion of primary school, Mr Konke worked in various factories in Johannesburg. He later became a bus driver for PUTCO buses in Pretoria and a bus inspector with the same company (Box 5.5 & Figure 5.5).

Box 5.5: Trajectory of an organic vegetable farmer

Mr Konke grows organic vegetables under a group contractual arrangement to supply Woolworths. He previously worked as a bus driver and an inspector for a bus company in Pretoria. Mr Konke operated a grocery and hardware shop in Bushbuckridge in the late 1990s. In 2000, he purchased a farm using his own savings and additional money borrowed from the Land Bank. The farmer planted maize and various vegetables which he disposed of locally and in the fresh produce markets in Johannesburg and Pretoria.

In 2003, the farmer started his conversion from conventional to organic farming methods after joining the Nkomamonta Organic Farmers' Association. With help from HIVOS, Mr Konke fully converted to organic farming and started supplying Woolworths on a contractual arrangement.

Under Nkomamonta Organic Farmers, Mr Konke supplies Woolworths with various organically grown vegetables; all packaging and labelling is done by Westfalia for all the contract farmers.

Source: Survey data

¹⁰ A pseudonym was used to protect the identity of the farmer.

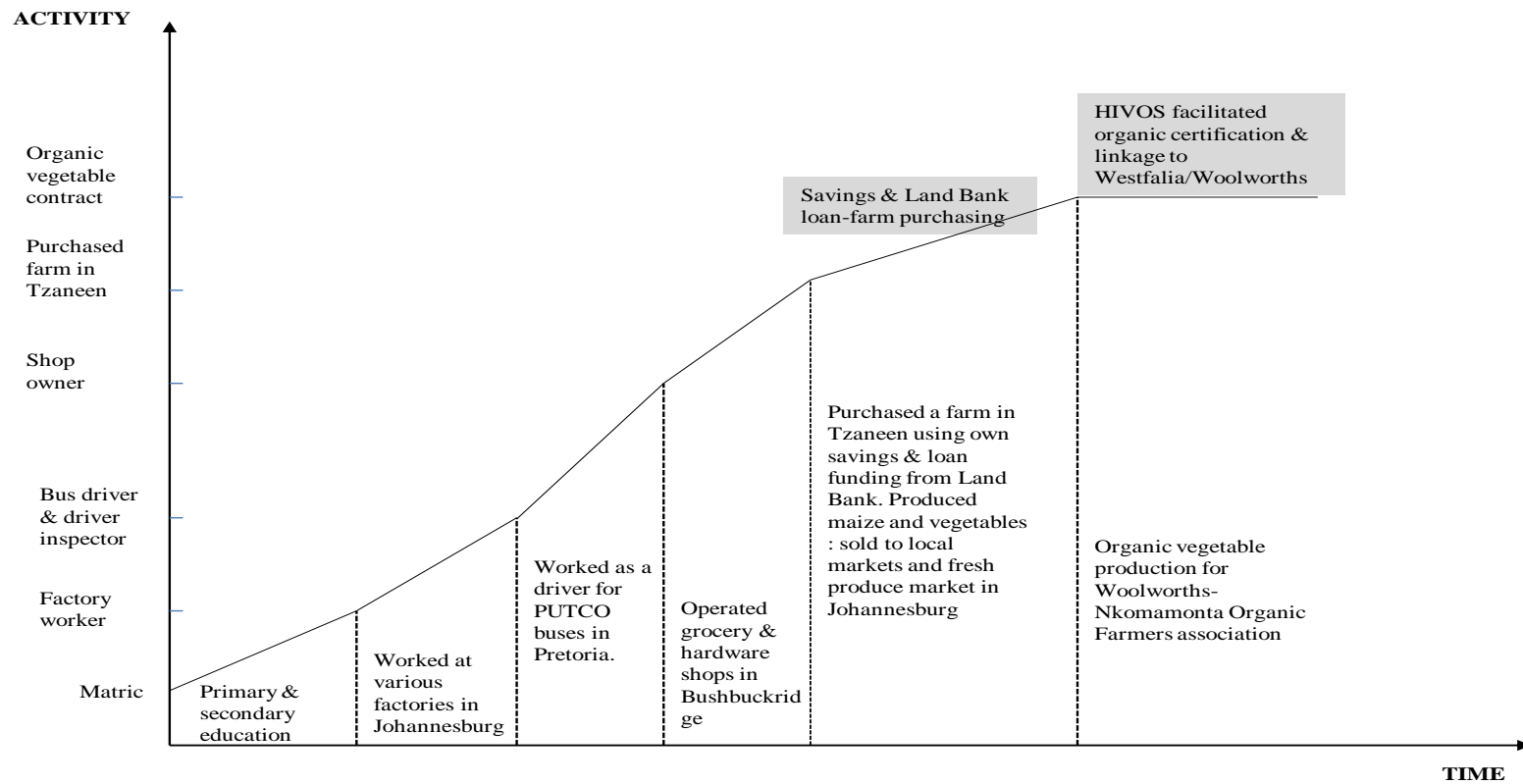


Figure 5.5: Trajectory of a contract organic vegetable farmer

5.2.5 Production management and export specification contract farmer

Mr Ngoba¹¹ was born in 1955 in the Bushbuckridge area in the Limpopo Province. He was educated in the area and upon completion of school, he worked as a commuter taxi driver in Johannesburg and ran his own commuter taxi business until the late 1990s. During this time, he also invested in a grocery and hardware retail business in the Limpopo Province (Box 5.6 & Figure 5.6).

Box 5.6: Trajectory of an export citrus farmer

Mr Ngoba grows kumquat citrus fruit under a contractual arrangement with Capespan. All of the fruit that satisfies Capespan specifications is exported, while the remainder is sold to the fresh produce markets.

Prior to farming, Mr Ngoba worked as a commuter taxi driver in Johannesburg. He later ran his own commuter taxi business in Johannesburg. In addition, Mr Ngoba invested in and operated a grocery and hardware shop in Bushbuckridge. In 2001, Mr Ngoba purchased a farm (22 ha) using partly his savings and a loan from the Land Bank through the land reform programme (LRAD) of the government in Tagnshoek area of Tzaneen. Mr Ngoba assumed ownership of kumquat trees which had been left behind by the previous owner. Most of the trees required resuscitation in order to regain their productive state: the farmer bought kumquat tree seedlings from Du Roi and the company assisted him with the necessary husbandry practices. He received help with the management of the fruit trees from another kumquat farmer in the Tzaneen area. Mr Ngoba disposed of all ripe fruit locally and to the City Deep fresh produce market in Johannesburg.

In 2003, Mr Ngoba was linked to a citrus exporting company, Capespan, by a fellow farmer; Capespan assisted him with best management practices. In 2004, the farmer entered into a fruit management contract, which included marketing, with Capespan. Capespan assists the farmer with production advice and marketing of ripe fruit.

On average, Mr Ngoba earns an annual income of R647 176.00 and 86.59 per cent of this is generated by the kumquat enterprise.

Mr Ngoba is not affiliated to any farmers' association or organisation. The farmer has three tractors, a lorry, and a vehicle which are used in farm operations.

Source: Survey data

¹¹ A pseudonym was used to protect the identity of the farmer.

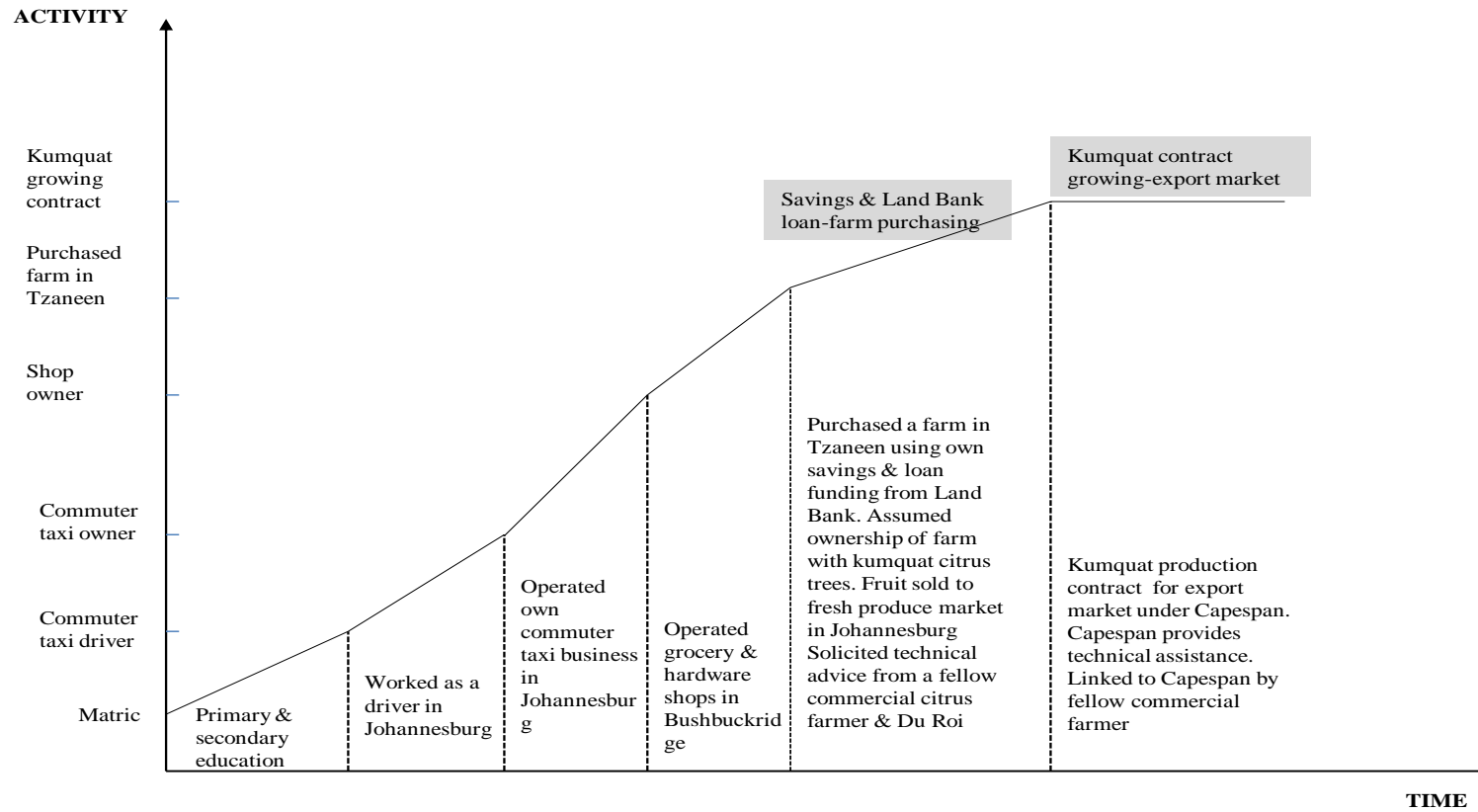


Figure 5.6: Trajectory of a Capespan kumquat contract farmer

5.3 Summary

The characteristics of farmers who entered into contractual arrangements vary. The variation among farmers is chiefly temporal and partly spatial, as indicated by their trajectories. The developments and changes in farmers' activities, participation and involvement with certain organisations over time in different places provided opportunities that influenced their engagement in specific contractual arrangements. Farmers' asset endowments, mainly land and associated infrastructure, differed widely and thus so did the easiness of their participation in different contractual arrangements. In addition, the farmers' backgrounds partly influenced their ability and willingness to enter into certain contractual arrangements.

The behaviour (adherence to stipulated 'rules/conditions') and performance of farmers (i.e. enterprises and success/failure) in different contractual arrangements are influenced by their trajectories and aspects of the actual arrangement. Farmers who had been previously gainfully employed, involved in commercial farming or other form of commercial enterprises for a considerably longer period, have a greater chance of entering into contractual arrangements. Most of these farmers easily adhere to conditions of contractual arrangements and may achieve high farm incomes. In contrast, although farmers with different trajectories managed to enter into contractual arrangements, most of them could not satisfy the requirements to enter into certain arrangements. These farmers could have adequate land, but without the suitable infrastructure as required by the contractor. In addition, these farmers may not have sufficient amounts of money to successfully run operations related to the contracted commodity throughout the production season.

Farmers who received some form of support from the contractor or third party (i.e. government department or body, non-governmental organisation, or private organisation) entered into and participated in contractual arrangements without many difficulties. Support in the form of infrastructure development, finance for working capital, access to transport and packaging facilities and technical skills helped farmers to successfully run their enterprises. Adequate and consistent support enabled the farmers to achieve high yields and earn high incomes from their

contracted enterprises. Most of the farmers and contractors conformed to conditions of contractual arrangements. The enterprise-related support extended to farmers created conducive platforms for successful participation in contractual arrangements and it is under such circumstances that contractual arrangements thrived.

The working capital outlay required for most of the contracted enterprises was an important factor in determining entrance into contractual arrangements. In all analysed contractual arrangements, contractors expected significantly large volumes of produce from each contract producer/farmer. This in turn required that farmers' contract enterprises were to be considerably large, with the corresponding working capital for the production season. It is apparent that only farmers who could successfully run such enterprises, with or without the support of the contractor or third party, would enter into certain contractual arrangements.

The trajectory of a farmer, asset endowment (i.e. land and infrastructure), ownership or access to enterprise-related machinery and equipment, and ability to finance production, as well as the amount and type of external support, significantly impact on the entrance and participation of farmers in different contractual arrangements. Farmers who entered into and participated in identified contractual arrangements had certain trajectories and received some form of external support. In general, farmers who successfully ran contract enterprises in the three main categories of contractual arrangements had characteristics which enabled them to satisfy most aspects of the specific contractual arrangements.

CHAPTER 6

Summary and conclusions

6.1 Summary

The general objective of this study was to assess different types of contractual arrangements which are engaged in by farmers in Limpopo province and analyse the efficacy of such arrangements in fostering the inclusion of smallholder farmers in agricultural markets in South Africa. The specific objectives were to analyse the types of observed contractual arrangements and types of farmers participating in these; identify policy/institutional innovations vital for smallholder farmers' participation; and propose recommendations to inform precise policy instruments pertinent for the inclusion of smallholder farmers under different circumstances in agricultural markets.

According to the geographic approach employed for the survey, the study focused on agribusinesses and farmers in Tzaneen and surrounding areas who were engaged in contractual arrangements for production/supply and procurement of agricultural products. In addition, other relevant organisations with direct or indirect influences on existing contractual arrangements were also engaged with. Personal interviews were conducted by the use of semi-structured and structured questionnaires in order to obtain data on aspects of contractual arrangements and participant parties. The data analyses encompassed two major aspects, namely: types of contractual arrangements engaged in by farmers, and characteristics of farmers involved in particular contractual arrangements. Descriptive analyses of contractual arrangements, participating farmers and cross analyses of the two were done in order to comprehend various aspects. Results of the analyses were used to determine the efficacy of contractual arrangements in helping smallholder farmers to enter into agricultural markets.

The results of this study indicated that there were five main types of contractual arrangements engaged in by farmers and agribusinesses in Tzaneen. The study established that the characteristics of the contractual arrangements are diverse and that only certain farmers participated in particular arrangements. Farm sizes and ownership, production infrastructure, farmers' trajectories, affiliation to organisations and/or farmers' associations, income levels, and

types and sizes of contract enterprises are more-or-less similar among farmers in each particular contractual arrangement.

The following constitute the five contractual arrangements observed in the study area:

- (i) Resource management for deep litter broiler chicken production contracts (broiler chicken),
- (ii) Production management and market specification contracts (peppadew),
- (iii) Production specification and market specification contracts (citrus),
- (iv) Organic vegetable (certification) contracts (organic vegetables),
- (v) Production management and export specification contract (kumquats).

In each of the above contractual arrangements, it was established that all agribusinesses/contractors have a certain set of conditions which should be fulfilled by prospective contract farmers prior to approval for participation, and that such farmers should exhibit the ability and willingness to adhere to conditions obtaining for the duration of the contract. In all contractual arrangements, farmers are expected to be able to produce considerable volumes of a contract product of a certain quality over a production period. In general, prospective contract farmers need to have specific types of infrastructure in addition to a minimum size of land in order to enter into a contractual arrangement.

In broiler production, prospective contract growers should have environmentally controlled chicken houses with a carrying capacity of at least 40 000 broiler birds per cycle, while peppadew growers should have at least three hectares fed by drip irrigation systems. Prospective contract growers of citrus, organic vegetable and kumquats are expected to have irrigation facilities on sizeable land. The fact that prospective contract farmers are expected to have specific infrastructure indicates the need for finance to acquire or develop such infrastructure. Most of the required infrastructure is expensive and thus contract growers incur huge capital outlays prior to inception of contractual arrangements. It is thus important to realise that access to finance plays a crucial role in determining the participation of farmers in contractual arrangements.

In addition, this study established that farmers participating in contractual arrangements do so individually or as cooperatives. In general, cooperative farms operated relatively large contract enterprises, compared with individual farmers. It is more likely for cooperative farms to obtain financial and technical assistance from various sources, including non-governmental organisations to boost production and sustain contractual arrangements, than individual farmers. In as much as the affiliation of farmers to organisations or associations does not confer participation in contractual arrangements, it is imperative to note that some contractors are keener to engage affiliated farmers, rather than individuals. To this end, collective action plays a role in fostering contractual arrangements: pooled resources and the relative ease with which contract terms are enforced encourage contractors to engage with affiliated contract growers.

On the other hand, farmers partaking in contractual arrangements have certain outstanding characteristics. At least 60% of farmers who were interviewed in this study were employed prior to embarking on farming and engaging in contractual arrangements. Previously employed farmers managed to acquire and install farm infrastructure without major difficulties, as compared with their previously unemployed contemporaries. Savings from earned incomes and eligibility for loan applications, as well as links to various relevant people and organisations, played an important role in aiding previously employed farmers. Therefore, it is important to note that the trajectories of farmers involved in contract farming are major determinants of contractual arrangements.

6.2 Conclusions

The conclusions in this study are drawn from the results obtained, the proposed questions of the study, and the hypotheses synthesised. These are centred on the efficacy of contractual arrangements in fostering the inclusion of smallholder farmers in agricultural markets in South Africa, and are discussed below.

6.2.1 Types of contractual arrangements likely to be engaged in by smallholder farmers

This study indicated that farmers engage in different types of contractual arrangements and their preference is informed by existing/set and/or agreed conditions, as well as their capabilities to undertake certain farming activities. Conditions of contractual arrangements vary and the feasibility and extent of engagement or non-engagement in certain contractual arrangements by smallholder farmers vary. In most cases, smallholder farmers who participated in contractual arrangements received some form of external support from government agencies or private entities, as well as non-governmental organisations. This support ranges from finance for farm infrastructure development, production working capital, to enterprise-specific technical assistance.

To this end, it is important to note that the involvement of third parties would increase the chances of smallholder farmers for entering into contractual arrangements. In essence, such external support would indirectly tailor contractual arrangements, thereby enabling the participation of smallholder farmers, and hence their inclusion, in agricultural markets, as opposed to the stringent nature of generic contractual arrangements.

6.2.2 Determinants/barriers and sustainability of contractual arrangements for smallholder farmers

Although there are major determinants of smallholder farmers' involvement in contractual arrangements and sustainability thereof, these factors vary from one contractual arrangement to another. In addition to ownership of, or access to, land by smallholder farmers, relevant and adequate infrastructure plays an integral role in enabling participation in any contractual arrangement. This study established that contractors invariably regard those smallholder farmers whose land has sizeable and sound infrastructure as being suitable contract candidates. In some instances, contractors were willing to assist farmers who had infrastructure with production finance for the contracted enterprises.

The interaction between the contractor and the contracted farmer, based on set contract terms, subsequent to the inception of any contractual arrangement, determined the continuation or

sustainability of the arrangement. In addition, the performance of the farmer, in terms of producing and delivering the agreed volumes produce that meet stipulated specifications, is crucial in any contractual arrangement. In return, the behaviour of the contractor, in terms of payments for supplied produce within agreed time lines and producer prices, impacts on any arrangement. Thus, without extreme exogenous factors, determinants of contractual arrangements and their sustainability cannot be prescriptive; instead, most arrangements become tailor-made and relational over time.

6.2.3 Collective action and success of contractual arrangements for smallholder farmers

Both affiliated and individual farmers have engaged in contractual arrangements, as the findings of the study have indicated. However, it is important to note that where some form of collective action is enacted, contractual arrangements are initiated and started with relative ease and their likelihood to succeed surpasses that of non-affiliated, individual farmers. Collective action allows farmers to pool both human resources (in terms of technical expertise and labour) and financial resources (from donors, government and private financial institutions), thus enabling the success of contractual arrangements. Cooperatives and/or farmers' organisations are highly likely to secure support from both government and non-governmental organisations: such farmers can procure the required infrastructure and technical expertise, thus making them preferred contract growers. Contractors are keener to engage farmers who have the right infrastructure and requisite expertise.

The level of adherence to terms of contractual arrangements is relatively high in collectively managed projects. Incidences of shirking are low, resulting in high efficacy of enforcing terms of contractual arrangements: this enhances the preference of contractors to engage with farmers, and thus collective action is important for successful contract farming by smallholder farmers.

6.2.4 Contractual arrangements and inclusion of smallholder farmers in agricultural markets

The fact that agribusinesses and supermarkets enter into contractual arrangements with farmers for procurement of certain agricultural commodities provides participant farmers with guaranteed

markets. This study has indicated that farmers partaking in contractual arrangements are able to dispose of their produce to markets other than local markets, as long as they satisfy stipulated standards. Prior to engaging in contractual arrangements, all of the respondent farmers had little to no access to well-established agricultural markets, including regional and international markets: instead of local markets, contracted farmers were able to dispose of produce to various markets in South Africa and export markets. Contractors engaging with farmers in growing different crops, fruits and livestock have access to various established markets, thus fostering the inclusion of contracted smallholder farmers in agricultural markets.

However, in cases where contracted farmers' products do not satisfy the stipulated standards, farmers would not obtain good prices, and produce may not land in certain lucrative markets. Notwithstanding the stringent requirements which are commonplace in contractual arrangements, and their wide variation, contractual arrangements are an important factor in enabling smallholder farmers' access to agricultural markets.

6.3 Recommendations

Drawing on the results of this study, a number of recommendations are suggested to improve the participation of smallholder farmers in contractual arrangements, thus fostering their inclusion in agricultural markets. However, owing to the limitations of the study, certain aspects of contractual arrangements and participants (agribusinesses, supermarkets, farmers and third parties) will require further probing and comprehension. It is important to note that there are spatial and temporal variations in contractual arrangements, which present compounding limitations of this study. Further research is therefore required in order to capture the trends in the smallholder farming sector, the agricultural industry and markets, and the participation of smallholder farmers.

Participation of smallholder farmers in contractual arrangements depends on a number of factors, among which access to relevant and adequate farm infrastructure, access to capital and operational finance, technical expertise, level of farm organisation, and prevailing institutional environment, as well as the ability to meet stringent product standards stipulated by contractors,

are key. The provision of some, if not all, of these creates an enabling platform for smallholder farmers to enter into contractual arrangements, thereby allowing access to agricultural markets.

Smallholder farmers participating in contractual arrangements have relevant, though inadequate, infrastructure with which to embark on contract production. In order to produce and supply sizeable and sustainable product volumes of the right quality, farm infrastructure is indispensable. Most smallholder farmers do not own or have access to farm infrastructure, and thus cannot partake in contractual arrangements. The cost of acquiring and installing/developing farm infrastructure is high and unaffordable for most smallholder farmers: it is imperative that smallholder farmers are afforded access to affordable finance in order to help them develop farm infrastructure. Government assistance in the provision of affordable finance in the form of grants and loans is therefore required.

Contractors require certain standards for all commodities supplied by contract growers: the acceptance of delivered product and payment depends on the satisfactory grading thereof. These standards have since become stringent and are constantly evolving as consumers' preferences change, and this often renders most smallholder farmers' produce below par. Most smallholder farmers do not have access to relevant technical expertise and thus cannot manage to produce according to stipulated guidelines; they cannot harvest, package and transport commodities appropriately. Thus, commodities from most smallholder farmers fetch low grades and prices, if not rejected by the buyer/contractor. The involvement of NGOs and contracting companies' agents helps bridge this gap between the contractor and smallholder farmers. However, NGOs' efforts are localised and not widespread because of financial constraints and time; this leaves most smallholder farmers being ineffective in production, as government technical advisers are not well equipped and are often not unavailable in farming areas. It is thus crucial for the government to apprise technical experts of the latest technical aspects, partner with other relevant organisations such as NGOs, and provide adequate finance in order to assist smallholder farmers.

The level of organisation among smallholder farmers should be improved in order for them to partake in contractual arrangements. Smallholder farmers require enabling institutional arrangements and environment. It is imperative that smallholder farmers be assisted by

government organs in order to organise themselves so as to be able to engage prospective contractors as a combined force. Government can provide an enabling environment governing the activities of farmers and contractors, as well as other relevant stakeholders, in order to preclude shirking. Adequate control measures should be put in place to act as deterrents and safety nets for developing smallholder farmers, who are often victims of unscrupulous contractors.

The involvement of government, through various agencies, could give smallholder farmers access to grant funding, or provide guarantees for loan finance from commercial financial institutions and other sources. Private–public sector partnerships between the government and private agribusiness participating in the agricultural industry could be initiated or enhanced in order to foster “symbiotic associations” to alleviate the capital outlay required by smallholder farmers to enter into contractual arrangements: government and agribusinesses can partly contribute towards capital expenditure.

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Annexures

Annexure 1: Farmer Questionnaire

Questionnaire #:

Assessment of Contractual Agreements for Agricultural Market Access in South Africa: A Smallholders’ perspective

Questionnaire: Farmer/farmers’ organization

Anold Derebwe

UNIVERSITY OF PRETORIA

Name of interviewer : _____

Date : _____

Farm/organization	
Interviewee	
Designation ⁱ	
Address/area/location	
Contact number	

ⁱCode: 1= Household head(farmer), 2= Farm manager, 3= Chairperson/director of organization, 4= other (specify)

Section A: Farmer/organization background

Section B: Farming Activities

Section C: Contracting Issues and Specifications

Section D: Pros and Cons of Contracts

Section E: Opportunities (suggestions) for betterment

A: Farm household background

A.1 Please provide the following information pertaining to your farming household

Household member	Respondent													
Age														
Gender ⁱ														
Level of education ⁱⁱ														
Residence ⁱⁱⁱ														
Main activity/employment														
Remuneration/income														
Extra activity(ies)^{iv}														
Income (R)														
Other sources of income:														
Child support grant														
Old age grant														
Pension														
Remittances														
Other(specify):														

ⁱCode: 1= male, 2= female

ⁱⁱCode: 1= primary school, 2= matric, 3= certificate, 4= diploma, 5= degree, 6= still at school, 7=other(specify).....

ⁱⁱⁱCode: 1= on farm, 2= off farm, 3= available when required (labour), 4= other (specify).....

^{iv}Code: please state the activities.....

A.1.2 Land issues

Land	Size	Date acquired	Way of acquisition ⁱ	Title deeds document ⁱⁱ
Total size				
Freehold(bought)				
Renting(leasehold)				
Communal(Chief apportioned)				

ⁱCode: 1= equity, 2= loan (specify source), 3= land reform, 4= inheritance, 5= other (specify).....

.....

ⁱⁱCode: 1= in possession, 2= no document, 3= other (specify).....

A.1.3 Which farm assets do you own?

Asset ⁱ	Size/Number	Date acquired/built	Source of income ⁱⁱ

ⁱCode: 1=tractor, 2= greenhouse, 3= vehicle/lorry, 4= warehouse, 5= other (specify).....

ⁱⁱCode: 1= equity, 2= loan, 3= other (specify).....

A.1.3 Do you belong to any farmers' association/organization/union? 1=Yes, 2=No

A.1.3.1 If no, please give reasons skip A.1.3.2

.....

A.1.3.2 If yes, please provide the following information about your association/organization.

Name of association/organisation			
Subscription fees:			
Do you pay any? 1=yes, 2= no			
Amount (R)			
Frequency ⁱ			
Assistance from association/organization:			
Do you get any? 1= yes, 2= no			
Form of assistance ⁱⁱ			

ⁱCode: 1= monthly, 2= quarterly, 3= annually, 4= other (specify).....

ⁱⁱCode: 1= input procurement, 2= transport for output to market, 3= marketing , 4= contracting with buyers, 5= lobbying, 6= other (specify)

A.1.3.3 Do you belong to a water-users' association? 1=Yes, 2= No

.....

B: Farming Activities

B.1 Which crops/fruits do you grow?

Crop/fruit					
Land size					
Source of water ⁱ					
Number of times crop is planted in a year					
Type of irrigation ⁱⁱ					
Date commenced					
Reason for choice of crop/fruit ⁱⁱⁱ					
Source of capital ^{iv}					

ⁱCode: 1= rain fed, 2= irrigated

ⁱⁱCode: 1= drip system, 2= flood system, 3= sprinkler, 4= centre pivot, 5= micro jet, 6= other (specify).....

ⁱⁱⁱCode: 1= high producer prices, 2= guaranteed market, 3= easy to manage, 4= other (specify)

^{iv}Code: 1= government grant, 2= land bank, 3= commercial bank (specify)....., 4= equity, 5= micro lender,

6= other (specify).....

B.1.1 If you got a loan, please indicate the interest rate

B.1.2 Do you get any help from extension officers? 1=Yes, 2=No

B.1.2.1 Please explain your answer to B.1.2 (i.e. form of help; if not any, why).....

B.2 How much your crops/fruits do you consume and/or sell?

Crop/fruit														
Quantity consumed														
Quantity sold														
Form of produce when sold ⁱ														
Buyer ⁱⁱ														
Price														
Time of sale ⁱⁱⁱ														
Arrangement with buyer:														
Do you have any? 1= yes, 2= no														
Transport to market ^{iv}														
Cost of transport (R)														

ⁱCode: 1= raw/original, 2= processed, 3= packaged(3.1=washed,3.2= bar-coded), 4= unpackaged, 5= other (specify).....

ⁱⁱCode: 1=community hawkers, 2= local road-side stalls, 3= retail agents (middlemen), 4= Spar, 5= Pick ‘n Pay, 6= Fruit and Veg, 7=Shoprite, 8= Wool worths, 9= archer factories, 10= Letaba juice factory, 11= Peppadew Factory, 12= Jbg fresh produce market, 13= Tswane fresh produce market, 13= other (specify)

ⁱⁱⁱCode: 1= seasonal (specify months), 2= all year round, 3= other (specify).....

^{iv}Code: 1= own, 2= hired, 3= buyer collects, 4= other (specify).....

B.2.1 If you do not have a marketing arrangement with any of your buyers, please explain why?

.....

B.2.2 Do you experience any problems with accessing your crop/fruit buyers? 1= yes, 2= no

B.2.2.1 If yes, please explain/state

.....

B.3 Which livestock do you rear?

Livestock				
Land size				
Number				
Source of water ⁱ				
Date commenced				
Reason for choice of livestock ⁱⁱ				
Source of capital ⁱⁱⁱ				

ⁱCode: 1= river, 2= municipal tape, 3= own borehole, 3= other (specify).....

ⁱⁱCode: 1= high producer prices, 2= guaranteed market, 3= easy to manage, 4= form of savings, 5=other (specify).....

ⁱⁱⁱCode: 1= government grant, 2= land bank, 3= commercial bank (specify)....., 4= equity, 5= micro lender,
6= other (specify).....

B.3.1 If you got a loan, please indicate the interest rate

B.4 How much of your livestock/livestock products do you consume and/or sell?

Livestock products																		
Quantity consumed																		
Quantity sold																		
Form when sold ⁱ																		
Buyer ⁱⁱ																		
Price																		
Time of sale ⁱⁱⁱ																		
Arrangement with buyer:																		
Do you have any? 1= yes, 2= no																		
Transport to market ^{iv}																		

ⁱCode: 1= live animal, 2= slaughtered/meat and packaged, 3= slaughtered and unpackaged, 4= other (specify).....
.....

ⁱⁱCode: 1= community hawkers, 2= local road-side stalls, 3= retail agents (middlemen), 4= retail shops/supermarkets,
5= abattoirs, 6= butcheries, 6= other (specify).....

ⁱⁱⁱCode: 1= seasonal (specify months), 2= all year round, 3= other (specify).....

^{iv}Code: 1= own, 2= hired, 3= buyer collects, 4= other (specify).....

B.4.1 If you do not have a marketing arrangement with any of your buyers, please explain why?

.....
.....

B.4.2 Do you experience any problems with accessing your livestock buyers? 1= yes, 2= no

B.4.2.1 If yes, please explain/state

.....
.....

C: Contracting Issues and Specifications

C.1 What types of marketing arrangements do you have (for your crops) with your buyers you have mentioned B.3 in above?

Crop/fruit																				
Buyer ⁱ																				
Marketing arrangement ⁱⁱ																				
Is there a document for the arrangement? 1= yes, 2= no																				
Language of document ⁱⁱⁱ																				
Did you sign the contract document? 1=yes, 2= no																				
Do you have a copy of the document? 1= yes, 2= no																				
Price																				
Time of price setting ^{iv}																				
Did you partake in price setting? 1=yes, 2= no																				
How long does it take the buyer to pay you? ^v																				
When did the arrangement start?																				
Length of arrangement ^{vi}																				
How did the arrangement start? ^{vii}																				
Support services from buyer ^{viii}																				
Why did you choose this arrangement? ^{ix}																				
Apriori conditions for arrangement ^x																				
Which quality standards/norms were stipulated? ^{xi}																				

ⁱCode: 1= community hawkers, 2= local road-side stalls, 3= retail agents (middlemen), 4= retail shops/supermarkets,
5= Fresh produce markets, 6= other (specify).....

ⁱⁱCode: 1= agreement(informal-oral), 2= contract (formal-written), 3= contract (formal-not written), 4= spot/ad hoc sales,
5= other (specify)

ⁱⁱⁱCode: 1= vernacular, 2= English, 3= Afrikaans, 4= other (specify).....

^{iv}Code: 1= pre-planting, 2= course of season, 3= on delivery, 4= other (specify).....

^vCode: 1= cash on delivery, 2= 1 week, 3= 2weeks, 4= 3 weeks, 4= I month, 5= other (specify).....

^{vi}Code: 1= seasonal (specify months), 2= annual, 3= indefinite, 4= other (specify)

^{vii}Code: 1= farmer sought the buyer, 2= buyer sought the farmer, 3= buying agent link, 4= other (specify).....

^{viii}Code: 1= input provision, 2= credit finance, 3= advance payments, 4= bank loan facilitation, 5= tillage, 6= extension/technical advice, 7= farmer training, 8= transport (produce collection), 9= insurance, 10= none, 11= other (specify)

^{ix}Code: 1= high producer prices, 2= reliable market, 3= access to inputs, 4= access to credit finance, 5= bank loan facilitation, 6= tillage, 7=extension/technical advice, 8= farmer training, 9= transport (produce collection), 10= NGO/Donor facilitation (specify).....

11=other (specify).....

^xCode: 1= minimum land size, 2= minimum yield/volume, 3= ownership of irrigation, 4 = having a greenhouse, 5 = having own transport, 6= other (specify).....

^{xi}Code: specify.....

C.1.1 Do pre-production/delivery producer prices remain fixed or are adjusted according to the market forces/situation?ⁱ

ⁱCode: 1= fixed, 2= adjustable

.....

C.1.1.1 Give reasons for your answer to C.1.1

.....

.....

C.1.2 How is the producer price calculated (pricing formula)? Which factors are considered?ⁱ

ⁱCode: 1= processing/production/input costs, 2= prevailing local market prices, 3=international commodity prices,

4= norms and standards (specify),

5= Fresh produce markets' prices used as bench marks

6= other (specify).....

C.1.3 If you are not involved in price setting, explain why?

.....

C.1.4 If the buyer provides you with inputs, how do you pay back?ⁱ

ⁱCode: 1= buyer deducts before paying for produce, 2= pay after receiving returns from sales, 3= other (specify)

C.1.4.1 Are you charged interest on inputs? 1= yes, 2= no

C.1.4.1.1 If yes, please state the rate

C.2 What types of marketing arrangements do you have (for your livestock) with your buyers you have mentioned B.4 in above?

Livestock															
Buyer ⁱ															
Marketing arrangement ⁱⁱ															
Is there a document for the arrangement? 1= yes, 2= no															
Language of document ⁱⁱⁱ															
Did you sign the contract document? 1= yes, 2= no															
Do you have a copy of the document? 1= yes, 2= no															
Price															
Time of price setting ^{iv}															
Did you partake in price setting? 1=yes, 2= no															
How long does it take the buyer to pay you? ^v															
When did the arrangement start?															
Length of arrangement ^{vi}															
How did the arrangement start? ^{vii}															
Support services from buyer ^{viii}															
Why did you choose this arrangement? ^{ix}															
Apriori conditions for arrangement ^x															
Which quality standards/norms were stipulated? ^{xi}															

ⁱCode: 1= community hawkers, 2= local road-side stalls, 3= retail agents (middlemen), 4= retail shops/supermarkets,

5= abattoirs, 6= butcheries, 6= other (specify).....

ⁱⁱCode: 1= agreement(informal-oral), 2= contract (formal-written), 3= contract (formal-not written), 4= spot/ad hoc sales,
5= other (specify)

ⁱⁱⁱCode: 1= vernacular, 2= English, 3= Afrikaans, 4= other (specify).....

^{iv}Code: 1= pre-production, 2= course of season, 3= on delivery, 4= other (specify).....

^vCode: 1= cash on delivery, 2= 1 week, 3= 2weeks, 4= 3 weeks, 4= I month, 5= other (specify).....

^{vi}Code: 1= seasonal (specify months), 2= annual, 3= indefinite, 4= other (specify)

^{vii}Code: 1= farmer sought the buyer, 2= buyer sought the farmer, 3= buying agent link, 4= other (specify).....

^{viii}Code: 1= input provision (feed, seed stock etc), 2= credit finance, 3= advance payments, 4= bank loan facilitation,
5= extension/technical advice, 6= farmer training,7= transport (animal/meat collection), 8= insurance, 9= none,
10= other (specify)

^{ix}Code: 1= high producer prices, 2= reliable market, 3= access to inputs, 4= access to credit finance, 5= bank loan facilitation, 6= tillage,
7=extension/technical advice, 8= farmer training, 9= transport (produce collection),
10= NGO/Donor facilitation (specify).....,
11= other (specify).....

^xCode: 1= minimum land size, 2= minimum number/volume, 3= ownership of borehole, 4 = having animal handling facilities,

5 = having own transport 6= other (specify).....

^{xi}Code: specify.....

C.2.1 Do pre-production/delivery producer prices remain fixed or are adjusted according to the market forces/situation?ⁱ

ⁱCode: 1= fixed, 2= adjustable

C.2.1.1 Give reasons for your answer to C.2.1

.....
.....

C.2.2 How is the producer price calculated (pricing formula)? Which factors are considered?ⁱ

ⁱCode: 1= processing/production/input costs, 2= prevailing local market prices, 3=international commodity prices,
4= norms and standards (specify)
5= other (specify).....

C.2.3 If you are not involved in price setting, explain why?

C.2.4 If the buyer provides you with inputs, how do you pay back?ⁱ

ⁱCode: 1= buyer deducts before paying for produce, 2= pay after receiving returns from sales, 3= other (specify)

C.2.4.1 Are you charged interest on inputs? 1= yes, 2= no

C.2.4.1.1 If yes, please state the rate

C.3 What are the repercussions of you failing to meet some of the conditions of marketing arrangements?ⁱ

ⁱCode: 1= buyer rejects produce, 2= price is lowered, 3=contract terminated, 4= other
(specify).....

C.4 Are you or the buyer(s) free to terminate the agreement at any juncture? 1=Yes, 2= No

.....
.....

D: Pros and Cons of Contracts

D.1 What problems have you experienced (you reckon) with contract production?ⁱ

ⁱCode: 1= difficult to get a buyer, 2= stringent a priori requirements, 3= low contract prices, 4= fluctuation of prices, 5= late payments,

6= defaulting buyers, 7= stringent quality requirements, 8=other (specify).....

.....

.....

D.1.1 Can you use your contractual arrangement as a form of collateral to access credit finance? 1= Yes, 2= No

.....

D.2 Outline the advantages and disadvantages of contract production

Advantages	Disadvantages

D.2.2 Is the current legal framework in South Africa conducive for contract farming? 1= Yes, 2=No

Elaborate (i.e. is it adequate /does facilitate contracting nor enforce contacts, protection, legal costs ?)

.....

.....

.....

.....
.....

E.3.1 If yes, what should be the main responsibilities of such a body?

.....
.....

E.4 Outline your stance on the future of contract farming and suggestions for best practices

.....
.....

E.5 Do you have any pertinent notions about contract farming and this research perse? Remarks?

.....
.....

Additional Information

1. Was the interviewee cooperative during the course of the interview? 1= Yes, 2= No

2. What is the interviewer's overall impression of the interview?

.....
.....

Annexure 2: Company Questionnaire

Questionnaire #:

Assessment of Contractual Agreements for Agricultural Market Access in South Africa: A Smallholders' perspective

Questionnaire: Farmer/farmers' organization
Anold Derembwe

UNIVERSITY OF PRETORIA

Name of interviewer :

Date :

Farm/organization	
Interviewee	
Designation ⁱ	
Address/area/location	
Contact number	

ⁱCode: 1= Household head(farmer), 2= Farm manager, 3= Chairperson/director of organization, 4= other (specify)

Section A: Farmer/organization background

Section B: Farming Activities

Section C: Contracting Issues and Specifications

Section D: Pros and Cons of Contracts

Section E: Opportunities (suggestions) for betterment

A: Farm household background

A.1 Please provide the following information pertaining to your farming household

Household member	Respondent													
Age														
Gender ⁱ														
Level of education ⁱⁱ														
Residence ⁱⁱⁱ														
Main activity/employment														
Remuneration/income														
Extra activity(ies)^{iv}														
Income (R)														
Other sources of income:														
Child support grant														
Old age grant														
Pension														
Remittances														
Other(specify):														

ⁱCode: 1= male, 2= female

ⁱⁱCode: 1= primary school, 2= matric, 3= certificate, 4= diploma, 5= degree, 6= still at school, 7=other(specify).....

ⁱⁱⁱCode: 1= on farm, 2= off farm, 3= available when required (labour), 4= other (specify).....

^{iv}Code: please state the activities.....

A.1.2 Land issues

Land	Size	Date acquired	Way of acquisition ⁱ	Title deeds document ⁱⁱ
Total size				
Freehold(bought)				
Renting(leasehold)				
Communal(Chief apportioned)				

ⁱCode: 1= equity, 2= loan (specify source), 3= land reform, 4= inheritance, 5= other (specify).....

.....

ⁱⁱCode: 1= in possession, 2= no document, 3= other (specify).....

A.1.3 Which farm assets do you own?

Asset ⁱ	Size/Number	Date acquired/built	Source of income ⁱⁱ

ⁱCode: 1=tractor, 2= greenhouse, 3= vehicle/lorry, 4= warehouse, 5= other (specify).....

ⁱⁱCode: 1= equity, 2= loan, 3= other (specify).....

A.1.3 Do you belong to any farmers' association/organization/union? 1=Yes, 2=No

A.1.3.1 If no, please give reasons skip A.1.3.2

A.1.3.2 If yes, please provide the following information about your association/organization.

Name of association/organisation			
Subscription fees:			
Do you pay any? 1=yes, 2= no			
Amount (R)			
Frequency ⁱ			
Assistance from association/organization:			
Do you get any? 1= yes, 2= no			
Form of assistance ⁱⁱ			

ⁱCode: 1= monthly, 2= quarterly, 3= annually, 4= other (specify).....

ⁱⁱCode: 1= input procurement, 2= transport for output to market, 3= marketing , 4= contracting with buyers, 5= lobbying,
6= other (specify)

A.1.3.3 Do you belong to a water-users' association? 1=Yes, 2= No

.....

B: Farming Activities

B.1 Which crops/fruits do you grow?

Crop/fruit				
Land size				
Source of water ⁱ				
Number of times crop is planted in a year				
Type of irrigation ⁱⁱ				
Date commenced				
Reason for choice of crop/fruit ⁱⁱⁱ				
Source of capital ^{iv}				

ⁱCode: 1= rain fed, 2= irrigated

ⁱⁱCode: 1= drip system, 2= flood system, 3= sprinkler, 4= centre pivot, 5= micro jet, 6= other (specify).....

ⁱⁱⁱCode: 1= high producer prices, 2= guaranteed market, 3= easy to manage, 4= other (specify)

^{iv}Code: 1= government grant, 2= land bank, 3= commercial bank (specify)....., 4= equity, 5= micro lender,
6= other (specify).....

B.1.1 If you got a loan, please indicate the interest rate

B.1.2 Do you get any help from extension officers? 1=Yes, 2=No

B.1.2.1 Please explain your answer to B.1.2 (i.e. form of help; if not any, why).....

B.2 How much your crops/fruits do you consume and/or sell?

Crop/fruit															
Quantity consumed															
Quantity sold															
Form of produce when sold ⁱ															
Buyer ⁱⁱ															
Price															
Time of sale ⁱⁱⁱ															
Arrangement with buyer:															
Do you have any? 1= yes, 2= no															
Transport to market ^{iv}															
Cost of transport (R)															

ⁱCode: 1= raw/original, 2= processed, 3= packaged(3.1=washed,3.2= bar-coded), 4= unpackaged,
5= other (specify).....

ⁱⁱCode: 1=community hawkers, 2= local road-side stalls, 3= retail agents (middlemen), 4= Spar, 5= Pick ‘n Pay, 6= Fruit and Veg,
7=Shoprite, 8= Wool worths, 9= archer factories, 10= Letaba juice factory, 11= Peppadew Factory, 12= Jbg fresh produce market, 13=
Tswane fresh produce market,
14= other (specify)

ⁱⁱⁱCode: 1= seasonal (specify months), 2= all year round, 3= other (specify).....

^{iv}Code: 1= own, 2= hired, 3= buyer collects, 4= other (specify).....

B.2.1 If you do not have a marketing arrangement with any of your buyers, please explain why?

.....

B.2.2 Do you experience any problems with accessing your crop/fruit buyers? 1= yes, 2= no

B.2.2.1 If yes, please explain/state

B.3 Which livestock do you rear?

Livestock				
Land size				
Number				
Source of water ⁱ				
Date commenced				
Reason for choice of livestock ⁱⁱ				
Source of capital ⁱⁱⁱ				

ⁱCode: 1= river, 2= municipal tape, 3= own borehole, 3= other (specify)

ⁱⁱCode: 1= high producer prices, 2= guaranteed market, 3= easy to manage, 4= form of savings, 5=other (specify).....

ⁱⁱⁱCode: 1= government grant, 2= land bank, 3= commercial bank (specify)....., 4= equity, 5= micro lender, 6= other (specify).....

B.3.1 If you got a loan, please indicate the interest rate

B.4 How much of your livestock/livestock products do you consume and/or sell?

Livestock products															
Quantity consumed															
Quantity sold															
Form when sold ⁱ															
Buyer ⁱⁱ															
Price															
Time of sale ⁱⁱⁱ															
Arrangement with buyer:															
Do you have any? 1= yes, 2= no															
Transport to market ^{iv}															

ⁱCode: 1= live animal, 2= slaughtered/meat and packaged, 3= slaughtered and unpackaged, 4= other (specify).....

ⁱⁱCode: 1= community hawkers, 2= local road-side stalls, 3= retail agents (middlemen), 4= retail shops/supermarkets, 5= abattoirs, 6= butcheries, 6= other (specify).....

ⁱⁱⁱCode: 1= seasonal (specify months), 2= all year round, 3= other (specify).....

^{iv}Code: 1= own, 2= hired, 3= buyer collects, 4= other (specify).....

B.4.1 If you do not have a marketing arrangement with any of your buyers, please explain why?

.....**B**

.4.2 Do you experience any problems with accessing your livestock buyers? 1= yes, 2= no

B.4.2.1 If yes, please explain/state

C: Contracting Issues and Specifications

C.1 What types of marketing arrangements do you have (for your crops) with your buyers you have mentioned B.3 in above?

Crop/fruit															
Buyer ⁱ															
Marketing arrangement ⁱⁱ															
Is there a document for the arrangement? 1= yes, 2= no															
Language of document ⁱⁱⁱ															
Did you sign the contract document? 1=yes, 2= no															
Do you have a copy of the document? 1= yes, 2= no															
Price															
Time of price setting ^{iv}															
Did you partake in price setting? 1=yes, 2= no															
How long does it take the buyer to pay you? ^v															
When did the arrangement start?															
Length of arrangement ^{vi}															
How did the arrangement start? ^{vii}															
Support services from buyer ^{viii}															
Why did you choose this arrangement? ^{ix}															
Apriori conditions for arrangement ^x															
Which quality standards/norms were stipulated? ^{xi}															

ⁱCode: 1= community hawkers, 2= local road-side stalls, 3= retail agents (middlemen), 4= retail shops/supermarkets,
 5= Fresh produce markets, 6= other (specify).....

ⁱⁱCode: 1= agreement(informal-oral), 2= contract (formal-written), 3= contract (formal-not written), 4= spot/ad hoc sales,

5= other (specify)

ⁱⁱⁱCode: 1= vernacular, 2= English, 3= Afrikaans, 4= other (specify).....

^{iv}Code: 1= pre-planting, 2= course of season, 3= on delivery, 4= other (specify).....

^vCode: 1= cash on delivery, 2= 1 week, 3= 2weeks, 4= 3 weeks, 4= I month, 5= other (specify).....

^{vi}Code: 1= seasonal (specify months), 2= annual, 3= indefinite, 4= other (specify)

^{vii}Code: 1= farmer sought the buyer, 2= buyer sought the farmer, 3= buying agent link, 4= other (specify).....

^{viii}Code: 1= input provision, 2= credit finance, 3= advance payments, 4= bank loan facilitation, 5= tillage, 6= extension/technical advice, 7= farmer training, 8= transport (produce collection), 9= insurance, 10= none, 11= other (specify)

^{ix}Code: 1= high producer prices, 2= reliable market, 3= access to inputs, 4= access to credit finance, 5= bank loan facilitation, 6= tillage, 7=extension/technical advice, 8= farmer training, 9= transport (produce collection), 10= NGO/Donor facilitation (specify)....., 11=other (specify).....

^xCode: 1= minimum land size, 2= minimum yield/volume, 3= ownership of irrigation, 4 = having a greenhouse, 5 = having own transport, 6= other (specify).....

^{xi}Code: specify.....

C.1.1 Do pre-production/delivery producer prices remain fixed or are adjusted according to the market forces/situation?ⁱ

ⁱCode: 1= fixed, 2= adjustable

C.1.1.1 Give reasons for your answer to C.1.1

.....
.....

C.1.2 How is the producer price calculated (pricing formula)? Which factors are considered?ⁱ

- ⁱCode: 1= processing/production/input costs, 2= prevailing local market prices, 3=international commodity prices,
- 4= norms and standards (specify)
- 5= Fresh produce markets' prices used as bench marks
- 6= other (specify).....

C.1.3 If you are not involved in price setting, explain why?

.....

C.1.4 If the buyer provides you with inputs, how do you pay back?ⁱ

ⁱCode: 1= buyer deducts before paying for produce, 2= pay after receiving returns from sales, 3= other (specify)

C.1.4.1 Are you charged interest on inputs? 1= yes, 2= no

C.1.4.1.1 If yes, please state the rate

C.2 What types of marketing arrangements do you have (for your livestock) with your buyers you have mentioned B.4 in above?

Livestock															
Buyer ⁱ															
Marketing arrangement ⁱⁱ															
Is there a document for the arrangement? 1= yes, 2= no															
Language of document ⁱⁱⁱ															
Did you sign the contract document? 1= yes, 2= no															
Do you have a copy of the document? 1= yes, 2= no															
Price															
Time of price setting ^{iv}															
Did you partake in price setting? 1=yes, 2= no															
How long does it take the buyer to pay you? ^v															
When did the arrangement start?															
Length of arrangement ^{vi}															
How did the arrangement start? ^{vii}															
Support services from buyer ^{viii}															
Why did you choose this arrangement? ^{ix}															
Apriori conditions for arrangement ^x															
Which quality standards/norms were stipulated? ^{xi}															

ⁱCode: 1= community hawkers, 2= local road-side stalls, 3= retail agents (middlemen), 4= retail shops/supermarkets,
 5= abattoirs, 6= butcheries, 6= other (specify).....

ⁱⁱCode: 1= agreement(informal-oral), 2= contract (formal-written), 3= contract (formal-not written), 4= spot/ad hoc sales,
 5= other (specify)

ⁱⁱⁱCode: 1= vernacular, 2= English, 3= Afrikaans, 4= other (specify).....

^{iv}Code: 1= pre-production, 2= course of season, 3= on delivery, 4= other (specify).....

^vCode: 1= cash on delivery, 2= 1 week, 3= 2weeks, 4= 3 weeks, 4= I month, 5= other (specify).....

^{vi}Code: 1= seasonal (specify months), 2= annual, 3= indefinite, 4= other (specify)

^{vii}Code: 1= farmer sought the buyer, 2= buyer sought the farmer, 3= buying agent link, 4= other (specify).....

^{viii}Code: 1= input provision (feed, seed stock etc), 2= credit finance, 3= advance payments, 4= bank loan facilitation,
5= extension/technical advice, 6= farmer training,7= transport (animal/meat collection), 8= insurance, 9= none,
10= other (specify)

^{ix}Code: 1= high producer prices, 2= reliable market, 3= access to inputs, 4= access to credit finance, 5= bank loan facilitation, 6= tillage,
7=extension/technical advice, 8= farmer training, 9= transport (produce collection),
10= NGO/Donor facilitation (specify).....,
11= other (specify).....

^xCode: 1= minimum land size, 2= minimum number/volume, 3= ownership of borehole, 4 = having animal handling facilities,
5 = having own transport 6= other (specify).....

^{xi}Code: specify.....

C.2.1 Do pre-production/delivery producer prices remain fixed or are adjusted according to the market forces/situation?ⁱ

ⁱCode: 1= fixed, 2= adjustable

.....
.....

C.2.1.1 Give reasons for your answer to C.2.1

.....
.....

C.2.2 How is the producer price calculated (pricing formula)? Which factors are considered?ⁱ

ⁱCode: 1= processing/production/input costs, 2= prevailing local market prices, 3=international commodity prices,
4= norms and standards (specify)
5= other (specify).....

C.2.3 If you are not involved in price setting, explain why?

C.2.4 If the buyer provides you with inputs, how do you pay back?ⁱ

ⁱCode: 1= buyer deducts before paying for produce, 2= pay after receiving returns from sales, 3= other (specify)

C.2.4.1 Are you charged interest on inputs? 1= yes, 2= no

C.2.4.1.1 If yes, please state the rate

C.3 What are the repercussions of you failing to meet some of the conditions of marketing arrangements?ⁱ

ⁱCode: 1= buyer rejects produce, 2= price is lowered, 3=contract terminated, 4= other (specify).....

C.4 Are you or the buyer(s) free to terminate the agreement at any juncture? 1=Yes, 2= No

D: Pros and Cons of Contracts

D.1 What problems have you experienced (you reckon) with contract production?ⁱ

ⁱCode: 1= difficult to get a buyer, 2= stringent a priori requirements, 3= low contract prices, 4= fluctuation of prices, 5= late payments,
6= defaulting buyers, 7= stringent quality requirements, 8=other (specify).....

D.1.1 Can you use your contractual arrangement as a form of collateral to access credit finance? 1= Yes, 2= No

D.2 Outline the advantages and disadvantages of contract production

Advantages	Disadvantages

.....

D.2.2 Is the current legal framework in South Africa conducive for contract farming? 1= Yes, 2=No

Elaborate (i.e. is it adequate /does facilitate contracting nor enforce contacts, protection, legal costs ?)

.....

D.2.3 Is the prevailing agricultural policy pro-contract farming (i.e. state incentives, tax exempted investments, low interest loans)?

1= Yes, 2= No (please specify)

.....



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Additional Information

1. Was the interviewee cooperative during the course of the interview? 1= Yes, 2= No
2. What is the interviewer's overall impression of the interview?

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