

**Perceptions of barriers to market participation among three
farmer groups in rural KwaZulu-Natal**

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ABSTRACT

There has long been evidence that many smallholder farmers can benefit from market-oriented agriculture. However, smallholder farmers often face a number of barriers to accessing the markets. Smallholder market access is often cited as a factor that exacerbates the smallholder situation, but is little researched. This study investigated barriers to market participation among three smallholder farmer groups in rural KwaZulu-Natal. It is hypothesised that identification of these barriers could assist in institutional innovation to alleviate market constraints and challenges faced by smallholder farmers. It is also expected that addressing such barriers may create enabling conditions that would encourage smallholder farmers to access and participate more effectively in markets. Such efforts could improve the ability of smallholder farmers to become part of the mainstream or commercial agricultural economy.

Three farmer groups from rural areas of KwaZulu-Natal (Centocow, Mbumbulu and Muden) were selected to participate in the study because they had interests in marketing fresh produce. One group (Mbumbulu) was a certified organic producer and was supplying a formal market. The other two groups (Centocow and Muden) were not organically certified and sold produce to informal markets. A three way comparison that included agricultural Policy Reform, Integrated Development Plans (IDPs) from Local Municipalities and focus group discussions was used to check and validate farmers' responses to questions asked. Agricultural policy reforms relevant to these groups were reviewed. IDPs were analysed to evaluate service delivery and provision of infrastructure (enabling conditions for market participation). Focus group discussions were conducted to investigate farmer experiences in marketing and perceptions of agricultural policy constraints.

The study revealed that access to resources, market information, infrastructure and farmer support services were barriers to market participation. Efforts to incorporate smallholder farmers through agricultural policy reforms in large scale agriculture have failed. Programmes to create enabling conditions (e.g. infrastructural development and telecommunications) were either not budgeted for or not implemented by local municipalities. Local economic development programmes focused on developing

tourist attractions, although communal areas (Centocow and Mbumbulu) have the potential for agricultural growth. Local municipalities also faced challenges, such as lack of capacity to plan, implement, budget for planned projects, lack of service provider commitment and municipal funds. The results showed that despite barriers to market participation, smallholder farmers still marketed limited amounts of produce.

If identified barriers are addressed, the issues raised in this study might improve market participation. Some barriers require direct intervention by government, as in the case of support services, extension service, credit and training. Investment in good infrastructure may encourage smallholder farmers to participate effectively in markets. This may be done by establishing a market infrastructure that includes collection points, transportation and market deposits in order to address the problems of proximity to markets. Such intervention should require the involvement of the private sector.

DECLARATION

I Nonkululeko Mthembu declare that:

- (i) The research reported in this dissertation, except where otherwise indicated, is my original research.
- (ii) This dissertation has not been submitted for any degree or examination at any other university.
- (iii) This dissertation does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from those persons.
- (iv) This dissertation does not contain other author's writing, unless specifically acknowledged as being sourced from other authors. Where other written sources have been quoted, then:
 - a) Their words have been re-written but the general information attributed to them has been referenced;
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As research co-supervisor I agree to submission of this dissertation for examination:

Signed.....
Prof SL Hendriks **Date**

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LIST OF ABBREVIATIONS

AFRA	Association for Rural Advancement
DBSA	Development Bank of Southern Africa
IDPs	Integrated Development Plans
KPAs	Key Performance Areas
LED	Local Economic Development
MALA	Ministry of Agriculture and Land Affairs
NAMC	National Agricultural Marketing Council
NDA	National Department of Agriculture
NEPAD	New Partnership for Africa's Development

Chapter 1

The research problem and its setting

1.1 Introduction and the importance of this study

A number of challenges face smallholder farmers in market participation. For most African smallholder farmers, markets are difficult to access (Makhura, 2001). Formal market access is difficult for smallholder farmers in rural areas because of a wide range of barriers and constraints (Delgado, 1998). These include lack of assets (e.g. tenure and collateral), market information, appropriate training, limited access to services necessary for crop production and the high costs involved in production and marketing (Machethe, 2004; Matungul, 2002 & Makhura, 2001). Effective market participation is further challenged by a lack of innovative institutions to support farmers (Hazell, 2005 & NEPAD, 2002). Most African countries have a poor infrastructure in rural areas and weak institutions, such as credit provision, to support smallholder agricultural development (Hazell, 2005).

International experience shows that with good implementation of policies, adequate access to farmer support services and provision of market infrastructure, smallholder farmers can significantly increase agricultural productivity and production (Bryant, 2005; Hazell, 2005 & Cochrane, 1993). Improvement in agricultural performance has the potential to increase rural incomes and purchasing power for many people in South Africa (Machethe, 2004). To help distribute the benefits of agricultural growth more widely, there is a need for sound policies and agricultural investments that would integrate smallholder farmers into modern market chains and promote long-term development (Bryant, 2005).

Market access and transport costs are some obstacles that inhibit the growth of smallholder farmers in developing countries (Matungul, 2002). Modern technologies for land preparation, irrigation and storage are not cost-effective when farmers have to pay three to five times the price for inputs and receive only 30 to 60% of the market value of products sold (Peacock & Jowett, 2006). For example, the largest group of smallholder cotton growers in KwaZulu-Natal at Makhathini Flats market

participation dropped in 2002 because they did not have capital to purchase inputs and pay for resources needed (Gouse *et al*, 2002).

In South Africa, the majority of disadvantaged farmers are not part of mainstream agriculture and generally practice subsistence agriculture in the former homelands (Matungul, 2002 & Kirsten *et al*, 1998). This kind of subsistence farming is characterised by low production, poor access to productive land, agricultural inputs and credit (Makhura, 2001). Efforts to promote smallholder agriculture, such as access to credit to purchase farmland, have benefited a small minority of smallholder farmers. These efforts have not been sufficient to improve the participation of smallholder farmers in commercial agriculture (Lyne & Ferrer, 2006; Van Zyl, 1998 & Kirsten, 1994). Such efforts could be overcome by improved access to markets, credit, appropriate training, provision of infrastructure and service delivery that is relevant for marketing. In South Africa, urgent research is needed to identify the specific challenges faced by smallholder farmers and to understand what support is required. This study aims to investigate the barriers to market participation among three smallholder groups in rural KwaZulu-Natal. The role of Integrated Development Plans (IDPs) in providing conducive marketing environment for smallholder farmers is also explored.

1.2 Subproblems

The study investigates the barriers to market participation among three farmer groups in rural KwaZulu-Natal. Four subproblems were investigated are: -

Subproblem 1: - The farmers' perceptions of what agricultural policy reforms mean to them as smallholder farmers.

Subproblem 2: - The marketing channels used by the farmers.

Subproblem 3:- Constraints related to marketing faced by the farmers.

Subproblem 4: - The barriers to accessing formal markets.

1.3 Study limits

The study focused on case studies of smallholder farmer groups in KwaZulu-Natal. These farmer groups are not representative of the total population of smallholder

farmers in this Province because, although smallholder farmers share some similarities, the extent of operation is different and access to markets, resources, etc. Therefore, the results of this study cannot be generalised. This study also focused on barriers to market participation as they affect effective participation of smallholder farmers in the markets. Among other relevant local municipality documents, such as local economic development plans, the study analysed IDPs.

1.4 Assumptions

External support from government and other stakeholders is important to assist smallholder farmers, especially in agricultural activities such as marketing. Most smallholder farmers are too poor to afford purchased input supplies for farming activities. Smallholder farmers also have poor, or no access to infrastructure and markets and are historically located in poorly resourced areas in South Africa (Kirsten *et al*, 1998). Farmers like these tend not to participate in formal markets (Makhura, 2001). Therefore, it is assumed that farmer groups who are not participating in formal markets lack the necessary resources to engage in formal marketing activities.

In addition, it was assumed that members of the farmer groups would give relevant and truthful information about their perceptions of agricultural policy and about conditions related to service delivery and the provision of infrastructure that is relevant for marketing activities.

It was assumed that Integrated Development Plans (IDPs) and Local Economic Development (LED) plans would be available, on request, from the Local Municipalities to evaluate programmes planned to address services and infrastructure relevant for agricultural marketing. Lastly it was assumed that Local Municipalities have the capacity (qualified staff) to support and implement such plans.

1.5 Structure of the dissertation

The dissertation is organised in seven chapters. Chapter one presents an introduction to the study, the importance of this study, subproblems, study limits and assumptions.

The second chapter presents a review of literature on smallholder market participation with regards to agricultural policy reforms, marketing channels used by smallholder farmers, constraints faced and barriers to accessing markets. The descriptive characteristics of participating farmers are presented in chapter three. The fourth chapter describes the methodology used to collect data and analyse results. IDPs for the three Local Municipalities (Ingwe, Mkhambathini and Msinga) are analysed in chapter five to evaluate the programmes planned to address services and infrastructure relevant for market participation. The results and discussions are presented in chapter six. Finally, a summary of results, conclusions and recommendations is presented in chapter seven.

Chapter 2

Literature review

2.1 Introduction

Market participation is both a cause and a consequence of economic development (Makhura, 2001). For instance, some niche agricultural markets offer smallholder farmers the opportunity to sell specialised produce and thereby enjoy profits from trade (Boughton *et al*, 2006). In Asia, during the 19th century, recognition of the potential of agricultural markets as engines of economic development and structural transformation gave rise to a market-led paradigm shift in agricultural development (Reardon & Timmer, 2006). This transformation was accompanied by a widespread promotion of market liberalisation policy programmes and great investment in agriculture, in order to create a conducive environment for smallholder farmers (Hazell, 2005).

Despite two decades of experience with market liberalisation in sub-Saharan Africa, structural transformation is progressing slowly with unequal distribution of the limited gains (Boughton *et al*, 2006). Part of this may be due to sharp differences in the evident returns to participation in different markets, differentiated by commodity, function (e.g. storage, transport and retailing) and barriers to entry (Barrett *et al*, 2004 & Haggblade *et al*, 2004). Smallholder farmers may choose to move out of agriculture entirely rather than move from subsistence to commercialised agriculture, because the challenges they face are too risky (Boughton *et al*, 2006). For instance, in Mozambique, some rural households that were engaged in farming left these areas to seek employment in urban areas which are unable to provide adequate employment and social services for unskilled labourers from rural farmers (Boughton *et al*, 2006).

As in other developing countries, South African smallholder farmers find it difficult to participate in markets because of challenges in market access (Makhura, 2001). These challenges, as identified by numerous studies, are:

- A lack of access to land for farming,
- Limited access to productive land,
- Lack of provision of and access to water,

- Lack of access to markets,
- Illiteracy and related problems,
- Minimal access to financial assistance,
- High transaction costs,
- Poor infrastructure, such as roads,
- Minimal access to cooperatives and marketing organisations,
- Lack of knowledge about existing farmer organisations or unions,
- Lack of access to appropriate information, technology and extension services, and
- Lack of access to agricultural education and institutions (Senyolo *et al*, 2006; Mthembu, 2005; Machethe, 2004; Matungul, 2002; Makhura, 2001; Harris *et al*, 2001; Delgado, 1999; Isaacs, 1996 & Coetzee, 1995).

Many smallholder farmers face a range of barriers that limit their ability to participate in markets. Against this background, this chapter reviews the existing literature to investigate the barriers to market participation among smallholder farmers.

2.2 Barriers to market access among smallholder farmers

The extent to which market access for smallholder farmers has improved with market liberalisation varies across crops and countries (Dorward *et al*, 1998). Although new opportunities might have emerged for some farmers, formal markets are difficult to access because of the challenges that smallholder farmers face (Boughton *et al*, 2006). Even in more accessible areas, smallholder farmers require more assurance that they will be able to sell what is produced and obtain a reasonable price (Dorward & Kydd, 2003). Literature indicates that smallholder farmers face a range of barriers that hamper improved market access and market participation (Boughton *et al*, 2006; Haggblade *et al*, 2004; Maltoglou & Tanyeri-Abur, 2005; Machethe, 2004 & Makhura *et al*, 2001).

2.2.1 Transaction costs as a barrier to market participation

Transaction costs are defined as the “costs of arranging a contract *ex-ante* and monitoring a contract *ex-post* or more generally the costs of running the economic system” (Maltsoglou & Tanyeri-Abur, 2005). Transaction costs can be classified as information, negotiation, monitoring and enforcement costs (Maltsoglou & Tanyeri-Abur, 2005; Makhura *et al*, 2001 & Matungul, 2002). Information costs (*ex-ante*) relate to the costs incurred in obtaining information relative to the undertaking of the transactions (price information, market location, etc.) (Maltsoglou & Tanyeri-Abur, 2005). Negotiation costs represent the costs incurred while the transaction is being carried out (negotiating terms of exchange, drawing up the contract, etc.) (Matungul, 2002). Monitoring and enforcement costs (*ex-post*) are the costs incurred once the transaction is completed and in order to ensure that the terms agreed upon *ex-ante* are kept to (payment arrangements) (Maltsoglou & Tanyeri-Abur, 2005). Delgado (1999) states that transaction costs differ among households due to asymmetries in access to assets, market information, extension services and remunerative markets (table 2.1).

Table 2.1 Transaction costs that occur when farmers produce and market crops (Maltsoglou & Tanyeri-Abur, 2005 & Delgado, 1999)

Direct costs	Indirect costs
Hiring labour.	Reorganisation of household labour and other resources in order to produce enough for markets.
Hiring vehicle to transport agricultural inputs.	Costs of searching for trading partners.
Hiring tractor to prepare land.	Costs of screening trading partners.
Transporting products from farms to markets.	Costs of bargaining.
Trading partners' commission.	Costs of monitoring and enforcement.
	Costs of search for information (pricing, market location).

Transaction costs also include the costs resulting from relative distance from markets, poor infrastructure, high marketing margins, imperfect information, supervision and incentive costs (Machethe, 2004). Smallholder farmers are often located in remote areas, far away from service providers and major consumers of farm products (Matungul, 2002). The distance from markets, together with weak infrastructure,

poor access to assets and information is shown in high exchange costs (Matungul, 2002 & Makhura, 2001).

In order to participate in markets, smallholder farmers must determine who to deal with, what the terms of trading are, negotiate bargains, draw up contracts and undertake the inspections needed to make sure that the terms of the contract are being observed (Makhura, 2001). This process is often very costly and farmers may not realise or account for these costs (Maltsoglou & Tanyeri-Abur, 2005). Transaction costs tend to reduce the net benefits of exchange resulting in low, or no market participation by smallholder farmers (Matungul, 2002).

Several studies show that transaction costs contribute significantly to create barriers to market participation by resource-poor farmers (Holloway *et al*, 2000 & Delgado, 1999). For instance, in Peru, participation was low among smallholder potato producers because of the high transaction costs and formal markets became inaccessible (Maltsoglou & Tanyeri-Abur, 2005). A case study from the Philippines also shows that high transaction costs played a significant part in decreasing market participation among smallholder livestock producers (Lapar *et al*, 2003). In South Africa, a study carried out in the Limpopo Province, showed that even indirect costs (e.g. costs of searching for market location) limit the participation of smallholder farmers who do not have access to markets (Makhura, 2001).

2.2.2 Lack of market information as a barrier to market access

The provision of basic market information in smallholder agriculture is a service that aims to increase efficiency of agricultural markets and contribute towards participation in these markets (Janowski *et al*, 2006). For instance, provision of information on pricing and market location would assist smallholder farmers in making better decisions on where to sell their produce and negotiate prices (David-Benz *et al*, 2004). Shepherd (1997) states that market information services assist smallholder farmer decision making and identification of possible marketing

opportunities. Frick & Groenewald (1998) also identify several roles of market information:

- Creating stimuli by indicating market opportunities;
- Stimulating competition among suppliers and traders and
- Encouraging suppliers to adopt the growth of demand for produce.

Chowdhury *et al* (2005) give several reasons for the lack of market information as a barrier to market access, resulting in ineffective market participation by smallholder farmers. Firstly, the reliability of information may vary over time. Information that was once correct may become outdated. Secondly, collecting relevant information for production and marketing may involve costs. Thirdly, smallholder farmers may be unable to process the information gained to suit their situation (Chowdhury *et al*, 2005). In most cases smallholder farmers do not have sufficient knowledge to process the available information correctly (Chowdhury *et al* 2005). This is due to low literacy levels amongst smallholder farmers in rural areas that inhibits record keeping (Matungul, 2002).

The availability of market information is very limited in developing countries (Lapar *et al*, 2006 & Montshwe, 2006). Insufficient market information is common due to the large number of smallholder producers, inefficient communication systems, low levels of literacy and information administration (Fenyess & Groenewald, 1985). There are several problems associated with the provision of market information. First, acquisition of market information can be a very expensive activity, beyond reach of smallholder farmers (Matungul, 2002). However, market information may be relatively cheap (Shepherd, 1997). It can be provided through services such as radio, newspapers, internet, e-mail, mobile phones and notice boards to farmers, traders, government officials, policy-makers, development agencies and consumers (Shepherd, 1997).

The second problem associated with the provision of market information is that exchanging relevant information creates opportunities for some marketing agents (middlemen) to use that information to their advantage (Kirsten *et al*, 1998). This process increases transaction costs of exchange (Kirsten *et al*, 1998). Due to a lack of

service delivery, smallholder farmers are not able to access services such as the internet, government officials and other services to gain the required information to access markets (Janowski *et al*, 2006 & Todes, 2005). Smallholder farmers in Bata, in Uganda, did not participate in markets because, among other problems, they did not have enough information about prices, demand and supply of products, market outlets and how to access markets, even for markets closer to their village (Ferris *et al*, 2006).

In the South African context, information sources used by smallholder farmers include family members, neighbours, friends, extension services and to some extent newspapers and radio (Matungul, 2002). In some areas of South Africa, extension services do not exist, or are limited (Machethe, 2004). However, the Ministry of Agriculture and Land Affairs (MALA) (1998) indicates that for many smallholder farmers and resource-poor farmers, the extension service represents the main source of information on improved technology and market access. Lack of market information, or differential access to market information, creates direct barriers to market access, which limits farmer participation.

2.2.3 Poor infrastructure as a barrier to market access

High transaction costs are one of the major factors constraining growth of smallholder agriculture in African countries and this can largely be attributed to poor infrastructure (Chaminuka *et al*, 2006 & NEPAD, 2002). Provision of good infrastructure is said to be a requirement for achieving higher levels of agricultural productivity and profitability (van Zyl *et al*, 2006). An American experience in smallholder agricultural growth shows that there can be no agricultural development without services that flow from the required infrastructural elements (Cochrane, 1993). Smallholder agricultural growth in Asia shows that physical infrastructure, such as irrigation, roads, storage and others, was a key element in the success achieved by smallholder farmers (Yoshino & Nakahigashi, 2000). Improved infrastructure was critical for smallholder growth in America and Asia because it expanded and opened a range of market opportunities to smallholder producers, and improved linkages between producers and potential buyers (Peacock & Jowett, 2006).

However, in South Africa, inadequate physical infrastructure in rural areas, particularly former homeland areas, remains a major obstacle to smallholder agricultural growth (Kirsten *et al*, 1998). Despite government initiatives to improve the quality and quantity of the infrastructure in rural areas through programmes such as the Community Based Public Works Programme, Consolidated Municipal Infrastructure Programme and the Poverty Relief and Infrastructure Investment Fund, the impact on smallholder farmers has been limited in terms of marketing (Everatt & Zulu, 2001).

Chaminuka *et al* (2006) describes infrastructure as the capital stock that provides public goods and services. Infrastructure is categorised as two types (Wanmali, 1992). “Soft infrastructure” includes transportation services, finance services, input distribution and marketing. “Hard infrastructure” includes roads, telecommunications, electrification and irrigation (Wanmali, 1992). The Development Bank of Southern Africa (DBSA, 1998) describes infrastructure as a direct and important link to agricultural progress in smallholder agriculture because smallholder farmers need both soft and hard infrastructure to succeed. Improved infrastructure reduces the costs of transactions for market participants (Matungul, 2002). If infrastructural services are more accessible, smallholder farmers may use these services more, leading to improved productivity and market participation (Chaminuka *et al*, 2006). For instance, if smallholder farmers have access to telecommunications, such as mobile or public phones, internet and email, they could communicate with potential buyers and negotiate prices without going to markets searching for buyers (Ferris *et al*, 2006). Development of infrastructure can stimulate agricultural and rural development, whilst agricultural development can also stimulate improved infrastructural development (Chaminuka *et al*, 2006). DBSA (1998) states that improved infrastructure can also improve overall development outcomes and economic competitiveness.

However, deficiencies in rural infrastructural services result in poor functioning of domestic markets due to reduced market participation, with little spatial integration, low price transmission and weak international competitiveness (Pinstrup-Anderson &

Shimokawa, 2006). In South Africa, poor road conditions and distant markets have been identified as some of the factors that hamper improved market access for smallholder farmers (Makhura & Mokoena, 2003 and Nieuwoudt & Groenewald, 2003). Poor road conditions also contribute towards inaccessibility of input markets, resulting in low levels of market participation (Machethe, 2004). Factors that determine access to input and output markets include distance to the markets, the state of road networks in communities, the cost of transportation and the frequency of market visitation (Chaminuka *et al*, 2006 & De Janvry *et al*, 1991).

Smallholder farmers in the Limpopo Province supplying the Thohoyandou Spar experienced problems such as poor communication with buyers, transportation problems (availability and high costs of hiring) and minimal processing activities (sorting, washing and bundling) due to inadequate infrastructure (Makhura, 2001). Therefore, inadequate or poor access to infrastructural services does not result in smallholder agricultural growth and it poses challenges to smallholder farmers that reduce market participation.

2.3 Empirical studies of barriers to market participation among smallholder farmers

A study conducted in Mexico, investigated smallholder market participation in maize markets (Key *et al*, 2000). Selling to formal markets tended to significantly increase production and selling for smallholder farmers (Key *et al*, 2000). Ownership of certain assets, such as vehicles, assisted farmers to reach potential buyers. This implies that ownership of assets tends to reduce entry barriers into markets because farmers are able to reach potential buyers using their own resources (Key *et al*, 2000).

In the Ethiopian highlands, a study conducted by Holloway *et al* (2000) sought to identify alternative techniques affecting participation among peri-urban milk producers. One of the findings was that by locating producers closer to markets, travel costs to the markets could be minimised (Holloway *et al*, 2000). This increased the number of participating producers and the level of production. The study concluded that institutional innovations to promote entry into the markets should be

accompanied by a mix of other factors, such as improvements in infrastructure, knowledge and assets accumulation in households involved in smallholder farming. The results of Holloway *et al* (2000) confirm the findings of Matungul *et al* (2001), which emphasise that transaction costs increase with distance, especially for farmers located far from markets. This is exacerbated by increased costs of gathering information and the risk of wastage or spoilage when a buyer is not found in good time (Matungul *et al*, 2001).

Staal *et al* (2000) investigated spatial aspects of producer milk pricing among smallholder farmers in Kenya. In their study the Geographical Information System derived variables for distance and transport costs, combined with survey-derived variables for household characteristics to model market participation and formation of farm-level milk prices. The results differentiate between effects of roads by type and distance on milk pricing, and highlight the importance of milk production density and market infrastructure. The conclusion was that households were unlikely to participate in markets if market infrastructure, such as retail, storage facilities and transportation were absent (Staal *et al*, 2000).

Makhura (1994) determined factors affecting commercialisation of small-scale farmers in the former Kangwane area of Mpumalanga in South Africa. The study suggested that access to agricultural information, the use of formal marketing channels and information management were distinguishing factors and significant for determining level of farmers' participation. Makhura's (2001) study on overcoming transaction cost barriers to market participation among smallholder farmers in the Northern Province of South Africa showed that decreased market participation is due to high transaction costs. Despite many problems faced by smallholder farmers, Matungul *et al* (2001) found that smallholder farmers in some rural areas of KwaZulu-Natal have managed to produce sufficient for their own consumption and sell their surplus to informal markets. The study by Matungul *et al* (2001) tested the hypothesis that participation in product markets is affected by high transaction costs and found that smallholder market participation is likely to decrease when costs of exchange are high.

A discussion document by the Ministry of Agriculture and Land Affairs (MALA) (1998) shows that the agricultural policy in South Africa gives particular attention to creating conducive environments for smallholder farmers so that they become part of large-scale agriculture. Agricultural policy strategically aims to support production and make the agricultural sector more efficient and internationally competitive. It also aims to stimulate increases in the number of new smallholder farmers engaged in agricultural activities and to remove barriers that exist to smallholder farmers entering large-scale agriculture (MALA, 1998).

The study by Kirsten *et al* (1998) of agricultural democratisation of South Africa found that one of the primary challenges facing South African policy-makers is empowerment of previously disadvantaged people in all sectors of the economy. In agriculture, empowerment means giving smallholder farmers more choices about their own future (Kirsten *et al*, 1998). Therefore, agricultural policy reforms are key components and measures to ensure access to other resources and services in order to achieve meaningful and sustained smallholder agriculture development (Kirsten *et al*, 1998).

Senyolo *et al* (2006) conducted a study of factors distinguishing low turnover emerging farmers from high turnover emerging farmers in South Africa. The findings showed that despite new opportunities (through agricultural policy reforms) that have been created to facilitate participation of emerging farmers in the second economy, emerging farmers continue to face a host of challenges ranging from socio-economic to farm based constraints.

2.4 Smallholder farmers in South Africa

Worldwide there has been an increase in agricultural production (average of 2.3%) over the last 40 years (Peacock & Jowett, 2006). In Asia and Africa much of this growth has been in smallholder agriculture (Dorward *et al*, 2004). However, the World Bank (2003) indicates that sub-Saharan Africa lags behind in terms of agricultural yields compared to other regions because of insufficient agricultural investments, weak governance and inappropriate interventions. Due to apartheid

policies and legislations, South Africa is still undergoing a significant transformation in its political, social and economic structures (Senyolo *et al*, 2006 & Ngqangweni, 2000). Agriculture is an important element of this transformation (Senyolo *et al* 2006; Ngqangweni, 2000 & Blackie, 1994). There is a clear distinction between the smallholder farming sector and large-scale farming sector. This is because smallholder farming is still located mostly in the former homelands, impoverished and dominated by low input and labour-intensive forms of production (Aliber *et al*, 2006). Whereas, the large-scale sector is capital-intensive, commercial, engaged in large-scale production and linked to global markets (Aliber *et al*, 2006).

Senyolo *et al* (2006) describe smallholder farmers as previously excluded from the mainstream economy and that now represent the second economy. Most South African smallholder farmers are found in former homelands and are engaged in agricultural activities (Makhura & Coetzee, 1998 & Vink, 1998). The homelands originated from the separate development policies started at the beginning of the twentieth century (Terreblanche, 1998). Under these policies former homeland areas were provided with inadequate infrastructure and services (Chaminuka *et al*, 2006 & Machethe, 2004). Farmers in homeland areas had poor access to resources such as productive land, credit, technology and were excluded from commercial agriculture (Senyolo *et al*, 2006).

The apartheid government believed that low market participation of smallholders in commercial agriculture was due to poor physical conditions, such as transport, climate and farmers' unwillingness to integrate into a western economic system (Makhura, 2001 & Terreblanche, 1998). Therefore, apartheid resulted in different agricultural and marketing policies being applied to white commercial farmers and to black smallholder farmers (Vink, 1998). Despite these historical disadvantages faced by smallholder farmers and limited government support in South Africa, smallholder farmers have continued to produce for markets. There is a need for policies and agricultural investments that would integrate smallholder farmers into lucrative market chains and to promote long-term development.

2.5 Agricultural policy in South Africa

The Ministry of Agriculture and Land Affairs (MALA, 1998) states that, in the past, South African agricultural policies were developed to suit white commercial farmers who were given access to substantial support services. For instance, in the early 1900's over 80 Acts of Parliament were passed giving assistance to the large-scale farming sector, particularly in marketing, leaving smallholder farmers marginalised (MALA, 1998). From the 1980s there was erosion in direct government support to agriculture, which continued in the 1990s with attempts to remove barriers that inhibited smallholder farmers from entering larger scale agriculture (Terreblanche, 1998). To incorporate smallholder farmers, there was also the creation of a less dependent and more market driven agricultural sector through policy reforms in the 1990's (Kirsten *et al*, 1998 and MALA, 1998). The subsections that follow assess current agricultural policy reforms in South Africa and their relevance to integration of smallholder agriculture into mainstream agriculture.

2.5.1 Land reform

Land reform is one agricultural policy reform of post-apartheid South Africa aimed at ensuring the transfer of 30% of all agricultural land, over a period of 15 years, to black people (MALA, 1998). Land reform encompasses three distinct components, namely; land restitution, tenure reform and the redistribution programme (MALA, 2001). MALA (2001) states that the redistribution programme has different components or 'subprogrammes': -

- Agricultural Development - to make land available to people for agricultural purposes,
- Settlement - to provide people with land for settlement purposes and
- Non-agricultural enterprises - to provide people with land for non-agricultural enterprises, for example eco-tourism projects.

Prior to 2000, land redistribution included government grant-assisted land purchases, private purchases, such as mortgage loans and cash transfers, and non-market transfers such as bequests and donations (Lyne & Ferrer, 2006). In 1995, the government launched the Settlement Land Acquisition Grant (SLAG) programme that

attempted to improve access to land for productive purposes to the beneficiaries of land restitution and land redistribution programmes (MALA, 1998). Each beneficiary was given R16 000 to buy a commercial farm (MALA, 2001). These beneficiaries were extremely poor and could not afford productive farmland (Lyne & Ferrer, 2006). As a result, people had to pool grants (up to 500 households formed one group) in order to purchase farms (Lyne & Ferrer, 2006). Farms purchased by these households were too small to support the beneficiaries in the group (Lyne & Darroch, 2003). Some beneficiaries purchased 'cheap' farms for residential and grazing purposes rather than for farming, resulting in a decrease of smallholder agricultural activities (Lyne & Ferrer, 2006 & van Zyl *et al*, 2006).

In 2000, the government introduced the Land Redistribution for Agricultural Development Programme (LRAD), to provide grants to beneficiaries to access land specifically for agricultural purposes (van Zyl *et al*, 2006). Beneficiaries could access grants between R20 000 and R100 000, depending on their personal contribution of labour or cash to purchase land, infrastructure, agricultural inputs and/ or make improvements to farms (MALA, 2001). For instance, beneficiaries were required to provide a contribution of at least R5 000 for a basic grant of R20 000 (Lyne & Ferrer, 2006). The grant and beneficiary contribution is calculated per individual. If people choose to apply as a group, the required contribution and the total grant are both scaled up by the number of individuals represented in the group (MALA, 2001). The net annual rate of redistributed farmland increased to 1.06% in 2002 but fell in 2003 because smallholder farmers could not afford rising prices of farmland (Lyne & Ferrer, 2006). Inability to purchase productive land in order to obtain larger yields decreased smallholder marketing activities because farmers could only produce enough for their own consumption (van Zyl *et al*, 2006). According to Makhura *et al* (2001), an increased area of arable land motivates farmers to participate in markets because it allows for increased production that results into larger yields, providing sufficient for consumption and selling (Makhura *et al*, 2001).

2.5.2 Comprehensive farmer support services

A major criticism of the LRAD programme is that the government paid little attention to the provision of farmer support services to beneficiaries of the programme (van Zyl *et al*, 2006). Global experience shows that it is ineffective to embark on land reform

programmes without ensuring access to farmer support services (Rukuni & Eicher, 1994). In South Africa, evidence shows that some beneficiaries of land reform were left to deal with the problems encountered thereafter without institutional support (van Zyl *et al*, 2006). These problems include a lack of farmer support services and ongoing support (van Zyl *et al*, 2006). There were no arrangements made to support smallholder farmers with services, such as extension services and access to credit to purchase inputs and working implements (Machethe, 2004).

Machethe (2004) indicates that smallholder agricultural growth cannot be achieved without access to farmer support services. Such farmer support services are presented in table 2.2. International experience has shown that, with adequate access to farmer support services, smallholder farmers can significantly increase agricultural productivity and production (Yoshino & Nakahigoshi, 2000). For instance, farmers in Zimbabwe doubled maize and cotton production in the 1980's when extension, finance and marketing services were provided (Rukuni & Eicher, 1994). In these examples of successful efforts to raise smallholder agricultural productivity and market participation, a variety of farmer support services were provided (Peacock & Jowett, 2006).

Table 2.2 Farmer support services relevant for smallholder market participation (Machethe, 2004; Yoshino & Nakahigoshi, 2000; Kirsten *et al*, 1998 & Rukuni & Eicher, 1994)

Farmer support services	
<ul style="list-style-type: none"> • Roads, • Credit institutions, • Suppliers, • Subsidies, • Farmer associations or organisations, • Middlemen or brokers, • Market information services, • Extension services and research. 	<p>In 2004, the Comprehensive Agricultural Support Programme was introduced in South Africa to address the problem of a lack of access to farmer support services (van Zyl <i>et al</i>, 2006). This programme appears to have incorporated some of the lessons from smallholder agriculture from agricultural development</p>

experience of the 1960's (van Zyl *et al*, 2006). This observation is based on the programme's attempts to provide a wide range of services simultaneously rather than emphasising only one element of a progressive rural structure (van Zyl *et al*, 2006). Senyolo *et al* (2006) argues that the approach of this programme needs to be

broadened to include smallholder agriculture in the former homelands, where farmers require comprehensive farmer support services consecutively.

For many smallholder farmers and resource-poor farmers, the most common farmer support service that represents the main source of information on relevant improved technology and market access, is the public extension service (MALA, 1998). Extension service provides access to other opportunities for agricultural progress through links to training, research, sources of input supplies and possible markets (Machethe, 2004 & Kirsten *et al*, 1993). For instance, in the southern region of the Philippines and Cambodia, provision of training, related to crop production and marketing through capacity building workshops, strengthened farmers' ability to market their crops in formal markets (Lapar *et al*, 2003).

Evidence from sub-Saharan African countries, such as Uganda and Namibia, shows that farmers who receive extension service appreciate it (Peacock & Jowett, 2006). However, the problem is that the coverage is low and biased towards better-off farmers (Peacock & Jowett, 2006). In South Africa and Africa as a whole, the quality of the extension service in rural areas is not satisfactory and the demand exceeds supply (van Zyl, 1998 & Kirsten *et al* 1993).

2.5.3 Financial support for smallholder farmers

Lack of capital is a feature of poverty and the poor generally lack both savings and borrowing opportunities (Peacock & Jowett, 2006). While micro-finance institutions have taken financial services to many people who previously did not have access to financial services, micro-finance institutions have failed to reach poorer rural areas and smallholder agricultural producers whose livelihoods are characterised by seasonal investments, risks and returns (Dorward *et al*, 1998 & Morduch, 1999). Government provision of seasonal agricultural credit had significant impact on the successful green revolution in Asia and Africa, but high costs, poor recovery records and the failure to provide savings services led to its abandonment (Peacock & Jowett, 2006).

In South Africa, a number of financial support programmes regarding farming, developed during the apartheid era, assisted commercial farmers only (Kirsten *et al*, 1998). The post- apartheid government took a number of measures in 1994 to restructure rural financial markets, land credit and other credit options (through banks) with the objective of building, from bottom up, a system of financial services that provided much broader access for all farmers (MALA, 1998). Access to agricultural finance (credit) is also an important element in the empowerment process of smallholder farmers after the apartheid era (Kirsten, 1998). However, most smallholder farmers still remain without access to credit (Aliber *et al*, 2006).

Due to the requirements put forward by formal providers of credit, such as the Land Bank, Commercial Banks and co-operatives, smallholder farmers cannot obtain credit (Kirsten *et al*, 1998). Access to financial support is often more important for smallholder farmers, as the majority of them do not have formal employment, and therefore, may not have sufficient income to finance their projects (Mthembu, 2005). Since the majority of smallholder farmers do not have formal employment and live in communal areas, farmers do not have collateral that could be used when borrowing money from financial institutions such as banks (Coffey, 1998). Smallholder farmers require access to some form of external capital to purchase agricultural inputs, working implements, and to pay for labour in order to produce enough crops and sell to markets (Peacock & Jowett, 2006).

The risks associated with borrowing credit for agricultural inputs in rain-fed African production conditions and the high value of seasonal production inputs relative to the total asset base of households, means that access to credit may need to be backed by crop and livestock insurance (Peacock & Jowett, 2006). In some areas, an emphasis on rural finance, rather than exclusively agricultural finance, is justified. For instance, in rural Ethiopia credit schemes were operated by advancing loans to groups of women farmers to undertake various commercial activities, such as breeding goats (Peacock & Jowett, 2006). These women chose different methods of engaging in income generating activities, some dividing all available funds between all members of the group so that each member could manage her own funds, while others provided larger loans with 10% interest to a few members at a time in rotation (Peacock &

Jowett, 2006). This strategy assisted these women to generate more funds to fund their projects.

In South Africa, the most popular way of acquiring credit is through micro-lenders and formal financial institutions (Coetzee, 2003). High transaction costs and lack of surety from smallholder farmers cause formal financial institutions, such as commercial banks, to be unwilling to extend services to smallholder farmers (van Zyl *et al*, 2006). The property right deficiencies in communal farming are another barrier in financing agriculture in smallholder farmers (Kirsten *et al*, 1998). For example, there is no market for land in communally owned parts of KwaZulu-Natal (Wynne & Lyne, 2003). Smallholder farmers in South Africa lack access to credit, which reduces their ability to invest in agriculture and transaction costs, associated with accessing credit, are substantial (Wynne & Lyne, 2003).

2.5.4 Agricultural trade

In many developing countries, production and trade in agricultural products play a crucial role in economic growth and development (Kirsten *et al*, 1998). However, developing countries often face a number of constraints that limit smallholder agricultural trade (NEPAD, 2002 & Kirsten *et al*, 1998). These include, among other constraints, costs for storage, packaging, grading, transportation, marketing and burdensome bureaucracy, such as delays in obtaining licences (Amani, 2005).

Most countries in the world have implemented a series of economic reform measures since the mid 1980's (NEPAD, 2002). In South Africa, extensive reforms in agricultural marketing were undertaken in the early 1990s aimed at encouraging participation of the agricultural sector in production, marketing, processing and trading of agricultural commodities (Kirsten *et al*, 1998). The most important trade relationships, such as the Southern African Development Community and South Africa-Zimbabwe Bilateral Agreement, were established in the Southern African region to develop a free-trade protocol that allowed farmers to sell their produce to other countries within the region (NEPAD, 2002). These reforms also allowed farmers in South Africa to engage in agricultural trade locally, nationally and

internationally (NAMC, 1999). However, in smallholder agriculture, trade potential was severely limited because of challenges that farmers faced, such as low yields, lack of access to productive land, lack of irrigation infrastructure and lack of finance (Kirsten *et al*, 1998).

Amani (2005) states that in most African countries, even when all trade barriers are addressed and markets are available, several factors continue to limit smallholder engagement in trade. First, there is the issue of poor quality products produced by smallholder farmers, caused by low levels of technology (production and irrigation) and lack of quality control (NEPAD, 2002). Another challenge in agricultural trade is that smallholder farmers are not used to trading standards (e.g. fertilisers used on crops, packaging and labelling) as most sell in local markets (Kariuki, 2005 & van Rooyen *et al*, 1987). Production and supply capacity is also constrained by limited quantities that are too low for demanding commercial markets (NAMC, 1999). Even when smallholder farmers have good produce they sometimes do not meet the trading standards (Nieyemer & Lombard, 2003). It is important for smallholder farmers to meet trading standards because there is stiff competition among farmers and buyers do not compromise on quality (Adams, 2004). Access to roads is important when farmers are engaged in trading because farmers need to transport products from farms to market depots or to consumers (Matungul, 2002). Appropriate facilities for storage, washing, processing and packaging are crucial in agricultural trade in order to retain quality and add value to products (Nieyemer & Lombard, 2003).

Agricultural policy in South Africa has changed significantly since 1994 to incorporate smallholder farmers. However, smallholder farmers are still faced with a number of barriers to market participation. These changes have had significant positive and negative effects on the agricultural sector, particularly in smallholder agriculture. For example, smallholder farmers may engage in agricultural trade but are unable to meet trading standards because they lack access to irrigation infrastructure, finance to hire labour and working implements in order to produce and supply competitive products. The following section outlines the reform of agricultural marketing systems aimed at addressing barriers that exist for smallholder

farmers, to enable them to enter large-scale agriculture in terms of marketing agricultural products in South Africa.

2.6 Reform of the agricultural marketing system in South Africa

In the past, South African agricultural producers traded within a highly protected environment, supported by intervention measures that were subsequently argued to be harmful both in terms of efficiency and equity (MALA, 1998). This resulted in severe distortions in the economy, such as reduced incentives, poor performance and reduced competitiveness (Kirsten *et al*, 1998). With the introduction of a liberalised international trading system and coupled with domestic market deregulation efforts, producers, including smallholder farmers, were increasingly exposed to market forces, such as stiff competition from resourced farmers (van Zyl *et al*, 2006). Liberalisation of agricultural markets meant that smallholder farmers could also market products in formal, local and international markets and compete with well-established and experienced farmers (NAMC, 1999). Liberalised markets required smallholder farmers to have knowledge and skills of marketing and market realities (Makhura, 2001).

The post-apartheid government intervened in the agricultural sector by passing legislation (e.g. the Marketing Agricultural Products Act of 1996) to save a number of industries from harsh and competitive global markets, for example; wine, sugar, tobacco, maize, livestock and dairy (Terreblanche, 1998). Farmers had to market through a cooperative network that became well established (MALA, 1998). Credit was ultimately made available through cooperatives to encourage smallholder agriculture participation (Vink, 1998). In this way, over- and under-supply problems were overcome with a government-funded infrastructure that provided market information, credit, research data and appropriate extension (MALA, 1998). By contrast, most smallholder farmers in the homelands received weak support services, supplied at a high fiscal cost with narrow coverage (Makhura, 2001). Smallholder farmers find it difficult to participate in markets with inadequate market information, inappropriate trained extension officers, and limited access to productive land and finance (Machethe, 2004; Shepherd, 1997 & van Rooyen *et al* 1987).

Agricultural policy reform, initiated by the South African government after 1994, led to the transformation of agricultural markets, from a highly regulated to an essentially free marketing dispensation (MALA, 1998). Deregulation of agricultural markets was intended to align the agricultural marketing environment to government's broad economic policies, which favour free markets and encourage an economic environment that promotes the development of smallholder agriculture alongside large-scale conventional agriculture (MALA, 1998). The National Department of Agriculture (2005, pg 5) states that "the new dispensation aims to meet the objectives of increasing market access for all market participants, marketing efficiency, optimisation of export earnings and enhancement of viability of agricultural sector and related agricultural marketing value chains".

Since the deregulation of markets, there has been a significant positive response to deregulation by farmers, traders, processors and other service providers along agricultural marketing chains for most commodities (NAMC, 1999). Deregulation of markets has, therefore, created many opportunities and resulted in increases in the number of new entrepreneurs participating in different sectors of agricultural marketing value chains, ranging from production, processing, trade and provision of supplementary marketing services (NDA, 2005). The reform of the agricultural marketing system went one step further than deregulation of markets by the adoption of the new Marketing Agricultural Products Act in 1996 (No. 46) (MALA, 1998).

2.6.1 The Marketing of Agricultural Products Act of 1996

The passing of the Marketing of Agricultural Products Act (No. 47 of 1996) changed domestic marketing of agricultural products (MALA, 1998). The Marketing Agricultural Products Act of 1996 represents a clear departure from the previous Marketing Act of 1968 (NAMC, 1999). The 1996 Marketing Agricultural Products Act's starting point was that there should be no pricing intervention by government in agricultural marketing and support for smallholder market participation (MALA, 1998). Kirsten *et al* (1998) explains that there are three ways in which the new Act attempts to protect the interests of all interested groups of farmers, as opposed to the interests of only a few farmers: -

- Clear description of the objectives of the act,
- Stipulation of the establishment, composition and functions of the National Agricultural Marketing Council (NAMC) and
- Establishment of certain procedures that the state should follow when interfering (except pricing) with marketing of agricultural products.

The objectives of the Act included increasing market access for all market participants; promotion of efficient marketing; optimisation of export earnings and enhancing the viability of the agricultural sector (Kirsten *et al*, 1998). The Act removed statutory regulations and services for agricultural marketing but failed to set up an alternative delivery system to meet the real needs of smallholder farmers (Vink, 1998). When the problem of market access was analysed by NAMC (1999), it was indicated that a lack of market access is the result of a long list of difficulties faced by smallholder farmers, ranging from producing products of high quality acceptable to markets, a lack of farmer services, to access to marketing infrastructure and information. The current South African government structure indicates that Municipalities are responsible for delivering enabling services for agricultural development, among other responsibilities. The following section outlines the functions of municipalities in supporting smallholder farmers.

2.7 The functions of municipalities in supporting smallholder farmers

Since 1994, the government has established three levels of operation, at national, provincial and local (municipalities) level. The government describes programmes and projects in the form of national development plans, called Key Performances Areas (KPAs) (NEPAD, 2002). KPAs are undertaken in various parts of the country and define the time frame for each programme or project (NEPAD, 2002). National government also provides funds, identifies the roles to be played by various ministries, departments, local authorities and private sector, and makes policies to direct development processes (Peacock & Jowett, 2006). At provincial level, the ministries, departments and other state organs prepare sector programmes, projects and budgets as inputs for national development plans (NEPAD, 2002). Municipalities are responsible for delivery of such programmes, co-ordination and maintaining links with provincial and national departments to make sure that people are provided with

the services they need and want (Todes, 2005). This section outlines municipalities' functions in addressing relevant issues in agricultural market participation. NEPAD (2002) and Peacock & Jowett (2006) also describe the following points as relevant issues in enabling or necessary conditions for agricultural growth: -

- Good infrastructure,
- Good communications,
- Market linkages,
- Access to finance,
- Access to water and productive land,
- Access to cost-effective technology,
- Skills development.

Several studies (Makhura & Wasike, 2003; Yoshino & Nakahigashi, 2000; DBSA, 1998 & Wanmali, 1992) have shown that good infrastructural services are necessary for agriculture and rural development. Infrastructural development can stimulate agricultural and rural development, while agricultural development can also stimulate improved infrastructural development (Chaminuka *et al*, 2006). Improved and accessible infrastructure reduces transaction costs for market participants and can improve overall development outcomes and economic competitiveness (DBSA, 1998).

In South Africa, municipalities have introduced a range of programmes and policies to stimulate local economies (Senyolo *et al*, 2006). However, these programmes, including Community Based Public Works Programme, the Consolidated Municipal Infrastructure Programme and the Poverty Relief and Infrastructure Investment Fund, have had a limited impact on many rural people (Everatt & Zulu, 2001).

The role of municipalities in South Africa is to integrate planning through a framework called the Integrated Development Plan (IDP) (Todes, 2005). IDPs outline future plans to address local economic development (Todes, 2005). The Association for Rural Advancement (AFRA) (2006) suggests that public participation must feed the IDP with information from start to conclusion for communities to truly support the final plan and so that programmes initiated are what the public needs or

wants. Smallholder farmers need to be empowered by relevant stakeholders in development, not only to demand that farmer support services are delivered to them, but also to hold service providers and municipalities accountable for how these services are delivered (Everatt & Zulu, 2001). For example, smallholder farmers in Konso in southern Ethiopia live in a challenging environment of low rainfall and recurrent droughts (Peacock & Jowett, 2006). Konso smallholder farmers, together with the Konso Development Association and Farm-Africa's support, developed an innovative approach for the use of natural resources, by drawing a map of their agricultural, residential and community lands and identifying current use and major problems (Peacock & Jowett, 2006). In this way the real needs of the community are identified and met with its own labour. The next step would be to integrate these plans into district plans that are resourced from regional government budgets (AFRA, 2006).

Oettle *et al* (1997) note that the institutional capacity needed at municipal level to create the necessary conditions for agricultural growth among smallholder farmers is lacking. In some cases, agricultural policy reforms relevant for smallholder agriculture are mismatched with municipal programmes and there is a lack of adequate communication between national, provincial and local governments (Oettle *et al*, 1997). AFRA (2006) and Oettle *et al* (1997) identify supportive programmes that smallholder farmers need and which should be provided by municipalities: -

- A secure framework for land reform,
- Cost-effective linkages to credit, information sources, service providers and markets,
- Infrastructural development,
- Advocacy to improve the policy environment,
- Inter-smallholder support such as sharing of labour, working implements and links to other smallholder farmer groups or organisations.

Institutional links between smallholder farmers and service providers, such as for credit or land reform, are weak (Kirsten *et al*, 1998 and van Zyl *et al*, 2006). In addition, institutional links to smallholder farmers are fragmented between different levels of government, with different competencies for planning, budgeting and

implementation resulting in a breakdown between policies and municipal functions to address development issues (AFRA, 2006). Some municipalities are financially under-resourced to implement planned local economic development based programmes (Peacock & Jowett, 2006). Where smallholder farmers are trying to access government support in programmes such as land reform, few smallholder farmers possess information, linkages or capacities to obtain assistance from the departments involved (AFRA, 2006).

Smallholder farmers need institutional support and the relevant enabling conditions because agriculture has a key role in initiating rural economic growth (Machethe, 2004). Institutional support and enabling conditions would assist many farmers who are engaged in agricultural marketing even when they face many challenges (Hazell, 2005).

2.8 Channels used by smallholder farmers for marketing their products

Most smallholder farmers sell products in markets within their surrounding areas using different ways of marketing (Gausi *et al*, 2004). For example, figure 2.1 shows how smallholder poultry farmers in Malawi sold products using different marketing channels (Gausi *et al*, 2004). In the Hai district of Tanzania, smallholder farmers sold products directly to consumers, small traders, cooperatives and retailers regardless of a number of constraints they faced in market participation (Mdoe & Nyange, 1995). In South Africa, some smallholder farmers, such as those in Impendle and Swayimana districts of KwaZulu-Natal, produce for consumption and markets using informal marketing channels, such as neighbours, local shops and monthly markets at pension pay-outs (Matungul *et al*, 2001). This evidence shows that some marketing channels that can be used by smallholder farmers exist. These are discussed in detail in the next section, together with constraints faced by farmers when using these channels.

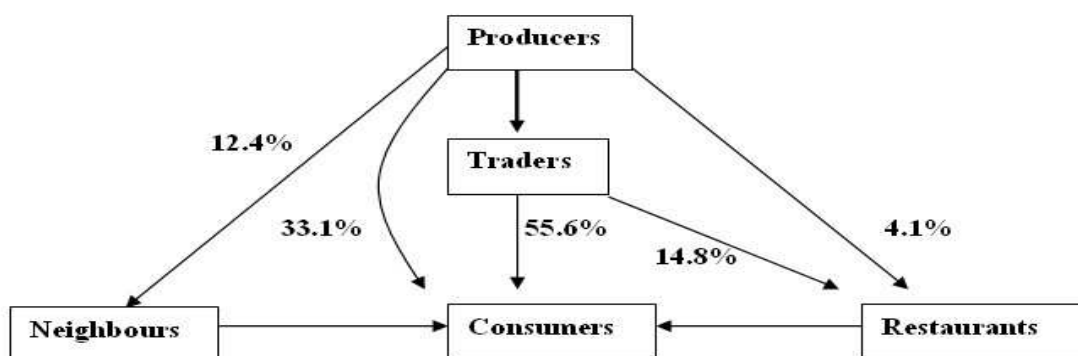


Figure 2.1 Marketing channels used by smallholder farmers in Malawi (Gausi *et al*, 2004).

2.8.1 Farm-gate marketing

Farm-gate marketing involves selling at the place where the product is produced, for example selling vegetables from a garden or broilers from a broiler unit (Adams, 2004). The advantages of farm-gate marketing are that there are no transport costs and the products are sold by the farmer, reducing transaction costs, although prices may be low (Adams, 2004 & Makhura, 2001). Problems faced by farmers using farm-gate techniques are that the farmers have to accept the local price for produce even when they are not making a profit (Senyolo *et al*, 2006). For example, smallholder organic farmers who do not have access to established markets use farm-gate marketing and sell produce at local prices, not enjoying the premium prices of marketing organically (Niemeyer & Lombard, 2003).

The farmers are constrained by geographical location and physical infrastructure, such as roads that prevent selling (Machethe, 2004 & Makhura, 2001). Potential buyers from other places might not be able to reach farmers. Furthermore, costs of transporting products to distant markets would increase once the local market's demand is satisfied and farmers seek other markets further away (Gausi *et al*, 2004 & Matungul *et al*, 2001). For instance, smallholder milk producers in Pembe, in the Wete district of Zanzibar, had an adequate supply of milk all year round but small milk traders and dairies from the Southern region found it difficult to reach Pembe because of poor infrastructure and the transaction costs increased when farmers transported the milk to the Southern region (Mshangama & Suleiman, 1995).

2.8.2 Marketing products directly to consumers

Adams (2004) explains marketing products directly to consumers as a channel that provides a development on marketing from the farm because the farmers take products to the consumer. At its most simple level, farmers selling their own produce, (progressing through to individual stallholders selling on behalf of local farmers) may operate a farm stall. Generally, the type of product that would be marketed at a farm stall is perishable, such as fruit and vegetables (Adams, 2004). The problem with marketing directly to consumers arises when farmers sell processed products such as pickles, jams and cooked maize as they lack the necessary facilities for processing, packaging and storage to add value to their products (Niemeyer & Lombard, 2003). International evidence shows that smallholder farmers encounter problems when processing products, as the farmers typically use home equipment that is time consuming while they could be engaging in other farming activities (Mhazo *et al*, 2001).

In countries like Zimbabwe, the supply of processed products was unpredictable and seasonal because farmers sold only when fresh products were available (Mhazo *et al*, 2001). Production constraints and lack of appropriate technology for processing in Zimbabwe was related to scant knowledge farmers have of their customers' preferences regarding product range, taste and packaging (Mhazo *et al*, 2003).

Transport to markets of produce may pose difficulties to smallholder farmers who do not have transport, increasing transaction costs (Matungul *et al*, 2001). The quality of produce is sometimes not competitive due to inappropriate storage, packaging, handling and transportation (Matungul, 2002).

2.8.3 Marketing through a marketing agent or middleman

Some smallholder farmers access markets through marketing agents, commonly known as middlemen, on commission to sell their products, in order to obtain higher premiums (Adams, 2004). Middlemen have maintained a stronghold on the market scene because they are able to provide farmers with resources essential to their work, such as quick credit, little bureaucracy and quick payment for their goods and good organisational skills (Kisamba-Mugerwa, 2005). The middlemen remain essential for

products that require time, storage, space and energy inputs; for instance, for products that must be dried, stored, transported, processed and packaged before distribution (Adams, 2004). In many cases these products are sold and bought several times, adding value at each step, before reaching the consumer (Adams, 2004). The technology and finance to perform these functions are usually beyond the reach of low-income farmers and are left to middlemen who have the resources (Kisamba-Mugerwa, 2005).

In South Africa, some smallholder farmers supplying to various retail outlets, such as the SPAR group, use middlemen (Adams, 2004). Smallholder farmers producing bananas and mangoes in some areas of Limpopo Province use marketing agents as a way of selling products (Makhura, 2001). From 2002 to 2003 in KwaZulu-Natal, a group of smallholder farmers, the Ezemvelo Farmers Organisation (EFO), collectively sold organically grown products to a supermarket chain, Woolworths, through a middleman who supplied the products to a packhouse (Ndokweni, 2002). EFO has since changed this approach by selling directly to a different packhouse who in turn supply Woolworths.

In developing countries, smallholder farmers have low levels of education, have many inabilities to identify and develop reliable marketing networks and calculate premium prices for products when using marketing agents (Harris *et al*, 2001). For example, a combination of farmers' lack of knowledge of actual market prices and poor marketing skills increased costs when smallholder farmers wanted to access formal markets in Asia, as the middlemen exploited the farmers by charging more than was necessary and by giving them low incentives (Pswarayi-Riddihough & Jones, 1995). Wynne & Lyne (2003) stated that there are many costs involved in the search for middlemen, screening of trading partners, bargaining and decision-making and costs of transferring products, such as transportation, processing, packaging and securing title. Transaction costs are even higher when farms are isolated from markets and information sources due to inadequate infrastructure (Makhura, 2001). Sometimes transaction costs are higher than the gains made by smallholder farmers (Matungul *et al*, 2001).

2.8.4 Direct or contract marketing

In direct or contract marketing, farmers sell directly to retailers and contracts are often concluded between the two parties (Adams, 2004). The retailers are often fairly flexible in their volume and supply demands, to ensure good publicity as supporters of smallholder farmers, but they do not compromise quality (Adams, 2004). Some black empowerment companies, such as ZAKHE in KwaZulu-Natal, have managed to secure large government contracts with the Department of Correctional Services who prefer buying contractually from the smallholder sector for political reasons (Adams, 2004). In Limpopo Province a group of smallholder farmers also collectively sells vegetables to Thohoyandou Spar using direct marketing (Makhura, 2001).

Advantages of engaging in direct or contract marketing are that the marketing margins can be reduced, the producer can obtain a higher price for products and sales volume is guaranteed (Adams, 2004). The disadvantages are that the farmer must ensure sufficient produce of acceptable quality to supply the customer or retailer at all times and that the quality of the produce meets retailer standards (Adams, 2004). When the farmer cannot meet the needs of the retailer, the farmer will have to buy in produce to make up the quantity required, thereby losing some profit (Adams, 2004). Smallholder farmers in Limpopo, selling to Thohoyandou Spar, experience transport problems and minimal processing activities (sorting, washing and bundling), which would add value to their produce, due to inadequate infrastructure, such as a packhouse (Makhura, 2001).

It is evident that smallholder farmers are faced with a number of constraints in marketing. Problems in marketing range from poor infrastructure, lack of relevant marketing information and skills and high input costs to limited processing capacity. The majority of smallholder farmers live in areas with poor roads that make transport services unavailable and costly (Matungul, 2002).

2.9 Summary

Smallholder farmers face challenges in participating or entering formal markets despite existing agricultural reforms. The challenges that farmers face include high transaction costs, lack of marketing information, lack of training in agricultural

marketing, little access to the necessary resources, geographical location barriers and poor infrastructure, regardless of the marketing channels they use. Most literature asserts that smallholder farmers might not participate in markets when the value of participation is outweighed by a number of constraints and barriers. Participation of smallholder farmers in markets makes a substantial contribution to rural income growth and creates income diversification. Evidence from other parts of the world shows that smallholder farmers with access to farmer support services are able to progress to commercial agriculture and overcome barriers. To help distribute the benefits of agricultural growth more widely, there is a need for good implementation of policies and agricultural investments that would allow smallholder farmers to enter formal markets and promote long-term development. Market participation is essential to drive much needed agricultural reform and to contribute to income growth in rural areas. However, opportunities to make such a contribution are still too limited among smallholder farmers due to current and historical barriers, yet agriculture has the potential to improve rural incomes.

Chapter 3

Characteristics of farmers in the participating groups

Three farmer groups were selected from Centocow, Mbumbulu and Muden in KwaZulu-Natal to participate in this study. The three farmer groups were involved in conventional and organic production. One group (Mbumbulu) is fully certified in organic production, while Muden and Centocow groups were considering organic production. Farmers from Mbumbulu have access to a formal organic market but also sell to local informal markets. Farmers from Centocow and Muden use informal markets. The three farmer groups are located in different local Municipalities but these Municipalities share common features. The local Municipalities are mostly traditional authority areas (rural areas), characterised by low levels of education, formal employment and predominated by subsistence agriculture (Isibuko se-Afrika, 2006; Isikhungusethu, 2005 & Uddi, 2005).

3.1 Centocow (Izwi Lamadoda)

Centocow falls under the Ingwe Local Municipality (Amakhuze Traditional Authority) (figure 3.1). Centocow is cold in winter and hot in summer. The annual rainfall is on average 879mm. The participating group is called Izwi Lamadoda (figure 3.2) and is comprised of 15 men. Izwi Lamadoda's membership includes leaders from the Emakhuzeni Traditional Authority community. Izwi Lamadoda was initiated by a non-governmental organisation called The Valley Trust in 2003. The group received some training in organic crop production and compost making. The Valley Trust's idea of initiating Izwi Lamadoda was that if community leaders take on farming activities it would be easier to influence the rest of the community to do the same. Izwi Lamadoda farms homestead gardens and larger farmland further from their homes. Market participation during the course of the research included selling vegetables at monthly pension payouts and to neighbours. Although Izwi Lamadoda is a group, each farmer sells as an individual after dividing the harvest among them.

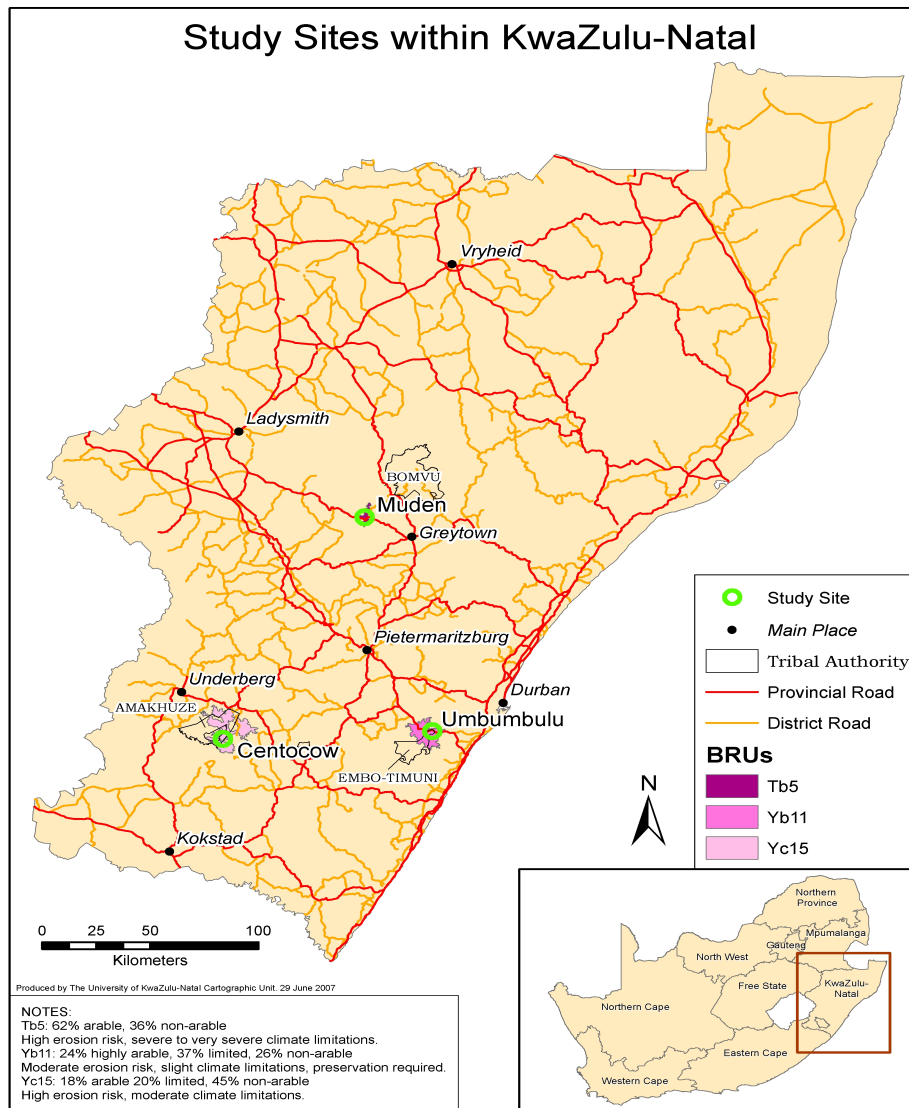


Figure 3.1 Map showing Centocow (Amakhuze Traditional Authority), Mbumbulu (Makhambathini Traditional Authority) and Mudén (Bomvu Traditional Authority) (Produced by the University of KwaZulu-Natal Cartographic Unit, 2007).



Figure 3.2 Some members from Izwi Lamadoda holding seed.

Ingwe Local Municipality's IDP for 2005-06 indicated that Ingwe is made up of rural tribal areas. In 2005, about 29.3% of the people in Ingwe Local Municipality were unskilled labourers. Figure 3.3 shows that approximately 37% are engaged in agriculture, informal trade and social services. Only 5.7% of the people had professional jobs in 2005. Approximately 38.6% of all households had no income and 24.8% earned below R10 000 per annum. Low levels of education in Ingwe Local Municipality impacted negatively on information flows, local entrepreneurial development and limited local employment.

The Ezemvelo Farmers Organisation (EFO) is situated in Mbumbulu (Embo-Thumini tribal authority) under the Mkhambathini Local Municipality (figure 3.1). Mbumbulu is situated along the coast, is humid and moderate in winter but hot in summer. EFO was founded in 2001. In 2002 the KwaZulu-Natal Department of Economic Development and Tourism, in partnership with the University of KwaZulu-Natal, Woolworths (Pty) Ltd and the Provincial Department of Agriculture and Environmental Affairs, supported EFO as an organic pilot project (Ndokweni, 2002). This project aimed to alert smallholder farmers to the importance of indigenous crops and to help farmers realise the economic value of their indigenous knowledge and practices and to expand the practices of certified organic farming (Ndokweni, 2002).

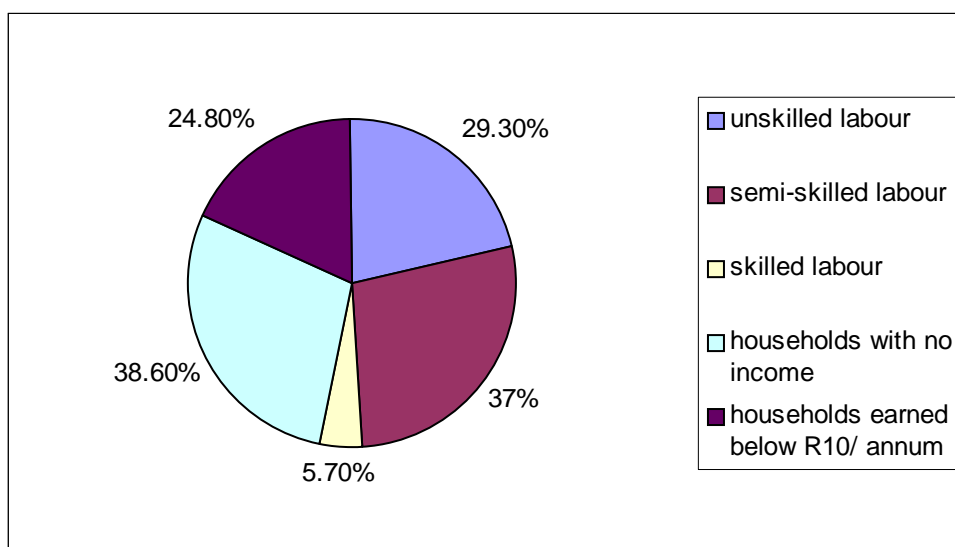


Figure 3.3 An illustration of the level of employment and income within Ingwe Municipality households in 2005.3.2 Mbumbulu (Ezemvelo Farmers Organisation)

In 2003, EFO was certified by Ecocert/Afrisco and began selling organic produce to Woolworths through a middleman with a certified organic packhouse (Assegai Organics) in Durban (figure 3.1). In March 2006, EFO stopped supplying Assegai Organics and started supplying *amadumbe* to Farmwise Distributors (Pty) Ltd in Amanzimtoti. Farmwise Distributors employed one farmer from EFO to gain packhouse experience and write progress reports for EFO. During the course of this study in 2006, EFO had approximately 200 members. Farmers were made up of approximately 80% female farmers and 20% male farmers, including young people. Due to the involvement of the above mentioned partners, EFO's youth have had training that improved organic crop production skills in the form of workshops and internal monitoring for organic group certification and record keeping. This training enhanced EFO's knowledge of organic production and the specific requirements for organic producers, such as regular record keeping.

Mkhambathini Local Municipality is made up of urban areas and five rural tribal areas. Figure 3.4 indicates that, in 2006, about 17% of the people were skilled and had professional jobs (Isibuko se-Africa, 2006). The rest of the population is either

semi-skilled or unskilled and is mostly rural, with 6.2% operating commercial agricultural activities. Mkhambathini Municipality has a high rate of people with no formal schooling (Isibuko se-Africa, 2006).

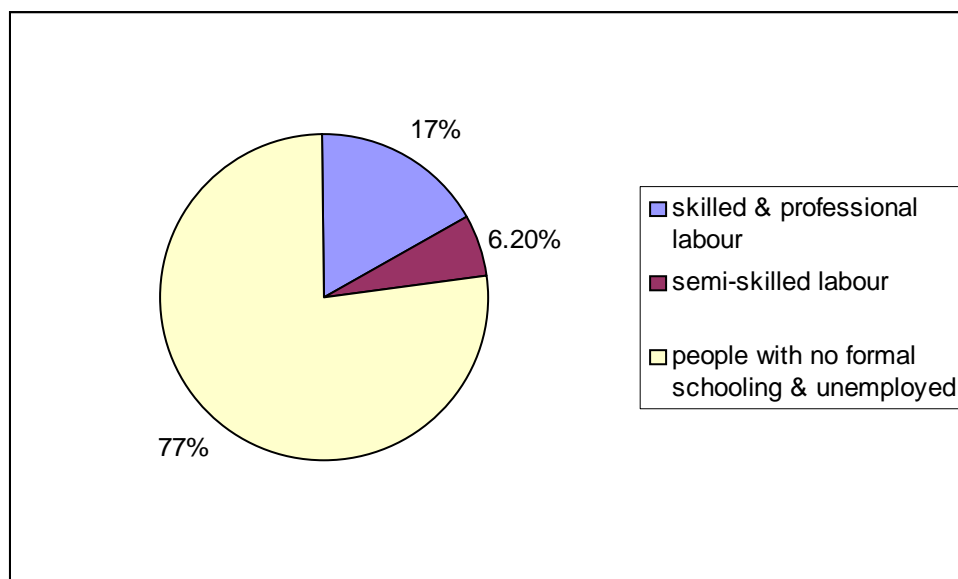


Figure 3.4 An illustration of the 2006 level of education and employment in Mkhambathini Municipality.

The impact of low education levels and unemployment is reflected in the income profile of households earning below R6000 per annum. Mkhambathini Local Municipality's IDP of 2006-7 shows that the majority of households in rural areas earn less than R3000 per annum and are regarded as living below the poverty line.

3.3 Mudén (KwaNxamalala farmer group)

Muden is situated in Bomvu Traditional Authority (figure 3.1) under the Msinga Local Municipality. Mudén is hot (mean T 24, 7) in summer and cold and dry in winter (mean T 18,1). The annual rainfall is 674mm. The participating group of 109 farmers had approximately 90% female members. Mudén is situated in a rural community called KwaNxamalala at the lower end of the Mooi River. The group is called KwaNxamalala (figure 3.5). Mudén farming areas are along the Mooi River banks and are divided into fifteen blocks. KwaNxamalala farmers utilise farming

areas in block 14 and 15, which are at the lower end of the river. Block 14 and 15 farmers were chosen for this study because they showed an interest in organic crop production and marketing. When the study was conducted, KwaNxamalala farmers had no access to a formal market but were selling to community members in Muden.

Msinga Municipality is made up of six traditional authority areas making it approximately 100% rural. Muden is dominated by strong Zulu cultural beliefs and customs that encourage farming



Figure 3.5 Members of KwaNxamalala farmers from Muden, 2005.

In 2005, approximately 68% of the population in Msinga had low levels of education and the majority of these are females (Udidi, 2005). Only a third of the Municipality's population is economically active, resulting in high unemployment (73%) and high engagement in subsistence farming and other informal activities (Udidi, 2005).

Chapter 4

Study Methodology

The study investigated barriers to market participation in smallholder farmers in three communal areas in KwaZulu-Natal. The study used triangulation to check and establish the validity of the results (Guion, 2002). Triangulation included comparison of the analysis of agricultural policy reforms, Integrated Development Plans (IDPs) analysis and focus group discussions where farmer agricultural policy perceptions and market participation experiences and barriers were established (figure 4.1).

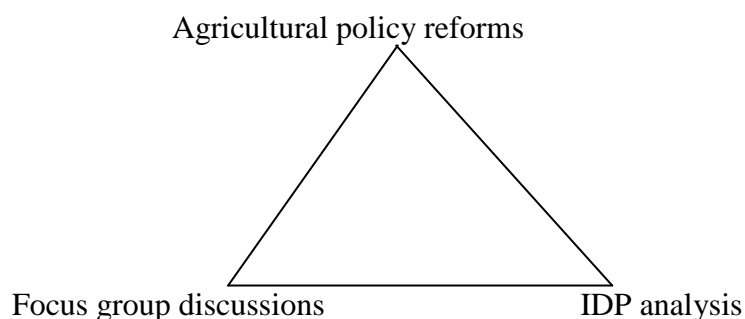


Figure 4.1 A triangulation used to compare barriers to market participation among three farmer groups of rural areas in KwaZulu-Natal, farmer agricultural policy perceptions and the role of IDPs in providing a conducive marketing environment.

An interview guide was designed based on agricultural policy reforms, which were drawn from literature. This guide was used to direct discussions among farmers with the purpose of collecting in-depth information about groups' perceptions of agricultural policy reforms and marketing experiences (appendix A). The interview guide consisted of relevant topics that allowed farmers to discuss marketing barriers and perceptions on the South African agricultural policy.

The integrated Development Plans (IDPs) from the three Local Municipalities were analysed to evaluate agricultural activities related to development of agricultural marketing. The IDP analysis also assisted to determine how far each Local Municipality had gone to address Key Performance Areas (KPAs) necessary for smallholder market participation, such as infrastructure, services and local economic development.

Focus group discussions conducted with farmer groups were an important part of the study as they provided opportunities to investigate critical issues as perceived by farmers (Lewis, 1995). The information obtained from the discussions was compared with agricultural policy reforms from literature review and IDP analysis to identify marketing barriers. Meyer (1997) explains that a focus group discussion is a method used in collecting in-depth qualitative information about groups' perceptions, attitudes and experiences on a defined topic. In this study, focus group discussions were used to gain an in-depth understanding of perceptions, challenges and experiences in market participation that would assist in deciding barriers to market participation for smallholder farmers.

The focus group discussions were conducted among three farmer groups in rural communities in KwaZulu-Natal (Centocow, Mbumbulu and Muden) using the interview guide (appendix A). Discussions with several farmers from each group were conducted in workshops. At Muden, an extension officer from the Department of Agriculture and Environmental Affairs was present and participated in the discussion. Workshops started with greetings and acknowledgements of previous communication. The objectives of the workshop and of the study were explained. Topics in the interview guide were posed to create discussions and farmers responded. Farmers generally expressed issues that affect them as smallholder farmers. When there was disagreement, further discussion followed until consensus was reached. A consensus was reached through the researcher encouraging further discussion among the farmers and facilitating the discussions. If there was no consensus after further discussion, more than one answer was recorded. A trained research assistant recorded farmers' responses.

4.1 Analysis of the number and size of the focus groups

Lewis (1995) states that six to twelve people are suitable for a focus group discussion. One consideration that governs the size of the group is that the group size should not be too large as this prevents adequate participation by members, nor should the group be so small so that it fails to provide substantial coverage (Lewis, 1995).

In Centocow, eight farmers out of fifteen participated in the focus discussion. In Muden, ten farmers and an extension officer participated. In Mbumbulu, due to unforeseen problems, only four farmers participated but had good information to share in relation to the topic. In all focus groups (except EFO) the participation including the chairperson and deputy of the executive committee. In Mbumbulu (EFO), the group consisted of a former chairperson and other successful certified farmers. These groups were selected because they are part of ongoing research that is being conducted by the University of KwaZulu-Natal. Workshop participants were members of groups who attended on the day.

Lewis (1995) believes that one tool is never enough to adequately observe dynamics, which is why three sources of data (focus groups, IDP analysis and agricultural policy reforms) were used in discussing results to draw comparisons and to triangulate information.

4.2 Integrated Development Plan analysis

An IDP is a "roadmap" to guide municipalities in service delivery, infrastructure development and to address identified Key Performance Areas (KPA's) (Todes, 2005). IDPs were analysed so that comparisons and conclusions could be drawn with regards to service delivery and provision of infrastructure relevant for smallholder marketing activities. The purpose of analysing IDPs was also to validate the findings obtained from focus group discussions in preparation for triangulation. Group discussions were analysed by using comparative tables on farmer perceptions of agricultural policy and current marketing challenges. Recent IDPs, between 2005 and 2007, available for each local Municipality, were obtained from the KwaZulu-Natal Department of Local Government and Traditional Affairs website.

Each IDP was analysed by reviewing the Local Municipality's vision, KPA's and socio-economic status. Planning and implementation processes, such as budget allocations, were evaluated by examining programmes planned to address relevant KPA's for smallholder marketing activities. Conclusions were drawn with regards to how far each municipality had gone in providing services to encourage smallholder farmer participation in markets.

4.3 Conclusion

This chapter provided a description of the methodology applied in this study. The focus was mainly on the research topic: perceptions of barriers to market participation among three farmer groups in rural KwaZulu-Natal. The data collection was mainly based on farmer responses and was conducted in the form of focus group discussion, IDP analysis and agricultural policy reform obtained from the literature. The premise was to do a comparison of farmers' responses, IDP analysis and agricultural policy reform in order to check and validate the results.

Chapter 5

Analysis of Ingwe, Mkhambathini and Msinga Local Municipality Integrated Development Plans

Every municipality in South Africa is required to produce an Integrated Development Plan (IDP), in which local municipality's plans are mapped over the short, medium and long-term goals that align with national development goals, called Key Performance Areas (KPA's). Each local municipality has its own KPA's. Table 5.1 shows the KPA's and programmes planned to address each KPA for the three study areas. The role of a District Municipality is to integrate development planning for the district as a whole ensuring a joint district strategy and alignment with other municipality IDPs (Todes, 2005). District Municipalities are responsible for co-ordination of links with provincial and national departments (Todes, 2005).

Table 5.1 Defining KPA's relevant for smallholder market participation drawn from Municipal IDPs of the three study areas (Isibuko se-Africa, 2006; Isikhungusethu, 2005 & Uddi, 2005)

KPA's	Programmes or projects planned to address KPA's
Democracy and governance	<ul style="list-style-type: none"> • Improve efficiencies in service provision e.g. compiling an IDP. • Information dissemination. • Sector planning e.g. Integrated Environmental Plan.
Infrastructure and services	<ul style="list-style-type: none"> • Providing telephones where needed. • Emergency services e.g. disaster management plans. • Information access facilities and training centres. • Education (improvement of schools and adult education). • Providing electricity where needed. • Maintenance of roads and bridges. • Water provision including irrigation infrastructure.
Local economic development	<ul style="list-style-type: none"> • Agricultural development e.g. community gardens and fencing. • Commercial and manufacturing e.g. establishment of farming co-operatives in support of poverty alleviation.
Social development	<ul style="list-style-type: none"> • Land reform e.g. providing people with grants to purchase land for agricultural purposes.

The role of local municipalities, among others, is to provide leadership and create conducive environments for development including enabling conditions for smallholder marketing through service provision, infrastructure development and administrative requirements (Todes, 2005). The researcher envisaged that services and infrastructure development provided by local municipalities would encourage community members to use available local resources and for earning a living. For example, smallholder farmers not only farm for subsistence but could engage in marketing activities if enabling conditions were created by municipalities. Such services could include good road networks, extension services and access to credit.

The following subsections outline Ingwe, Mkhambathini and Msinga Local Municipality's planned IDP and programmes relevant for marketing.

5.1 Ingwe Local Municipality's 2005-6 IDP (Centocow)

Ingwe Local Municipality's vision is to promote a quality social and economic environment that is sustainable and competitive, while providing opportunities for all residents to grow and prosper (Isikhungusethu, 2005). Ingwe Municipality is characterised by high levels of illiteracy and unemployment. The IDP states that most people in traditional authority areas are engaged in farming activities as subsistence survival. Ingwe Local Municipality intends to create convenient accessibility to goods and services required by its communities. Ingwe Local Municipality's KPAs relate to infrastructure, services, and local economic development (table 5.1).

5.1.1 Ingwe Local Municipality infrastructural development, service provision and local economic development

The process of addressing KPA's is through the establishment of projects relevant to community specific needs. Ingwe Local Municipality identified service providers and ward councillors as responsible for delivering some of the major projects. These projects are presented in table 5.2.

Table 5.2 Projects per KPA that were relevant for smallholder marketing activities in Ingwe Local Municipality IDP, 2005 (Isikhungusethu, 2005)

KPAs	Project type	Ward, service provider or municipal project (who should deliver?)	Responsibility for coordinating: - Local Municipality (LM) or District Municipality (DM)	Budget/ implementation status
Infrastructure & services	Telephones,	Ward	LM	Budgeted for but not implemented.
	Electricity,	Ward	LM	Budgeted for but not implemented.
	Roads,	Ward or service provider	LM	Not budgeted for and not implemented.
	Water.	Ward or service provider	DM	Not implemented.
Local economic development	Community garden,	Ward	LM	Centocow not included.
	Fencing,	Ward	LM	Centocow not included.
	Co-ops.	Municipal	LM	Centocow not included.

Table 5.2 shows that some projects planned by the Ingwe Local Municipality, which in this study were identified as relevant for Izwi Lamadoda's (Centocow) marketing activities, did not include Centocow. In Ingwe Local Municipality, agriculture should be part of local economic development because most rural areas in the district have potential for agriculture. Agriculture has the highest potential to combat poverty in poor communities when compared to other types of businesses (e.g. textile, mining industry, etc.) because it represents food and quick cash to smallholder farmers (Aliber *et al*, 2006) and should be part of the development strategy in this local Municipality. Ingwe's 2005-6 IDP showed that local economic development was focused on developing railway lines for tourist attraction and only a few agricultural projects, such as fencing cooperative gardens, were planned for selected communities. None of these projects benefited Izwi Lamadoda during 2005 and 2006. Projects such as providing telephones, water, roads and electricity were either not budgeted for or budgeted for but not implemented by the Ingwe Local Municipality.

5.1.2 Ingwe Local Municipality budget allocation

The comparison in table 5.3 reveals the possibility of serious limitations to Ingwe's capital budget. In relation to capital requirements identified in the IDP over the next five to ten years, services that were much needed by communities (like Centocow) such as electricity, roads and water included higher budgets than the actual capital provided. Capital budget is presented in table 5.3.

Table 5.3 Ingwe municipality capital expenditure and funding period of 2004-05 and 2005-06 (Isikhungusethu, 2005)

	2004-05	2005-06
	Budgeted	Budgeted
Current income	R50,000	R100,000
Internal loan		R375,000
Equitable share grants	R10,972,944	R6,025,000
Other external grants	R260,000	R1,630,000
Total	R11,282,944	R8,130,000
<i>Actual budget</i>		
Current income	R53,415	R25,000
Equitable share grant	R6,624,557	R3,971,823
Other external grants	R1,022,960	R878,067
Total	R7,700,932	R4,874,890

Table 5.4 shows sector projects as outlined in Ingwe 2005-6 IDP that could have benefited Izwi Lamadoda. Since Izwi Lamadoda is a smallholder group of farmers, agricultural projects, such as community gardens and fencing, may have benefited farmers if the municipality had not over-committed itself. Since these projects did not happen, Izwi Lamadoda continued to face challenges, such as a lack of fencing, even though they had applied for it.

Table 5.4 Summary of sector projects that were relevant for marketing and budget for each project (Isikhungusethu, 2005)

Project	Budget for projects
Agriculture	R3,860,000
Communications	No information available
Electricity	R79,250,000
Local economic development	R1,995,000
Total estimated 5 year capital budget required	R85,105,000

Efforts to create a conducive environment for better marketing in Ingwe Local Municipality were planned, but the IDP did not define the projects that needed to benefit farmers, such as Izwi Lamadoda, for the reasons that are discussed in the following section.

5.1.3 Ingwe Local Municipality IDP implementation difficulties

The key difficulties experienced by Ingwe Local Municipality in the implementation of its IDP were a lack of participation by service providers and ward councillors in the preparation and implementation of the plan (Isikhungusethu, 2005). This situation was compounded by the fact that much of the funding intended for the Ingwe Local Municipality was administered by the Sisonke District Municipality. This means that

Ingwe Local Municipality had to apply for authorisation from Sisonke District Municipality before they could access funds for intended or planned projects. The priorities for funding allocation at District level did not match those at local level, resulting in many projects in the IDP not being implemented (Isikhungusethu, 2005). Furthermore, Sisonke has five local municipalities competing for funds.

Some of the conclusions drawn from Ingwe's 2005-6 IDP were that Ingwe Local Municipality experienced a number of difficulties in implementation of prioritised projects by service providers and ward councillors. This could be the reason why service delivery had not taken place in areas like Centocow (Isikhungusethu, 2005). Ingwe 2005-6 IDP further illustrates that it would appear that low service delivery was due to a lack of capital grants but may also be due to circumstances such as: -

- Service providers and ward councillors did not participate in the preparation of the IDP at local level and, as a result, they were not aware of decisions taken in the planning process and their responsibilities in service delivery.
- Service providers and ward councillors were allocated funding for projects in Ingwe and this did not reflect in the Municipal budget or IDP, resulting in lack of integration and not following guidelines as shown in the IDP.
- There were different priorities between Sisonke District and Ingwe Local Municipalities resulting in a lack of integration and planning between municipalities to deliver services and provide infrastructure.

Ingwe Local Municipality attempted to address some KPAs but Centocow was not part of those programmes (table 5.2). Most services, such as electricity, needed by smallholder farmers for their marketing activities were under-budgeted for and not implemented. Some of the services relevant for market participation were the provision of roads and communication which were not funded and, therefore, not implemented. Lack of funding, integration, participation and commitment between service providers, ward councillors and municipal officials could be the reason why a number of projects were not implemented and some not allocated funds. With regards to local economic development, Ingwe's attention was on improving railway lines as part of tourism development and the municipality compromised on developing the agricultural sector because railway lines were regarded as having the potential to

create rural income. The municipality was going to achieve increased rural income by employing local people to develop the railway lines. Smallholder farmers, such as Izwi Lamadoda, were unlikely to benefit from improved railway lines because there are no railway lines in Centocow. Therefore, efforts to create a conducive environment for smallholder market participation failed in Ingwe Local Municipality in terms of Centocow farmers.

5.2 Mkhambathini Local Municipality's 2006-7 IDP (Mbumbulu)

Mkhambathini Local Municipality's vision for 2006-7 IDP is to strive to empower its communities socially and economically (Isibuko se-Africa, 2006). KPAs, as indicated in the 2006-7 IDP review, were to promote equitable access to infrastructure and basic services, such as roads and electricity and to create a conducive environment for sustainable social and economic development. The following section discusses infrastructural development, service delivery and local economic development as key elements of KPAs for Mkhambathini Local Municipality.

5.2.1 Mkhambathini Local Municipality infrastructural development, service provision and local economic development

Water supply infrastructure within Mkhambathini Local Municipality varies. Urban areas are better serviced than traditional authority areas. Water supply infrastructure in Mbumbulu is not available for smallholder farmers. As a result, smallholders are not able to irrigate their crops during dry seasons. Table 5.5 shows that a water supply project had been planned and implemented in Mkhambathini to address the lack of water. In Mbumbulu, boreholes were introduced, as a pilot project, to ten households for irrigation. This could impact negatively on EFO members who need to constantly produce crops such as green beans and meet market demand. Table 5.5 shows projects planned by Mkhambathini Local Municipality to address KPAs, project implementation, budget status and service providers.

The Mkhambathini 2006-7 IDP indicated that road networks within Mkhambathini Local Municipality reflect the previous apartheid planning system (Isibuko se-Africa, 2006). This indicates that the former whites-only areas are characterised by high

quality tarred roads and well-developed district roads to the boundary of each farm (Isibuko se-Africa, 2006).

Table 5.5 Projects per KPA that were relevant for smallholder marketing activities in Mbumbulu (Isibuko se-Africa, 2006)

KPAs	Project type	Responsible service providers	Funding status/ amount	Implementation status
Social development.	Community gardens.	Municipality.	R65 000.00.	Mbumbulu not included in social development projects.
Local economic development.	Emerging farmer support programme.	Gijima KZN.	No information available.	Not implemented.
Infrastructure and services	Telephones.	No information available.	No information available.	No information available.
	Electricity.	Eskom.	R6 903.53 per connection.	Not implemented.
	Roads.	Municipality.	R1 141 741.00.	Not implemented.
	Water.	Municipality and Dept. of Agriculture and Environmental Affairs.	R1 238 709.00.	Implemented in Mbumbulu as a pilot project (boreholes).

The quality of roads in most traditional authority areas is generally poor and requires substantial upgrading and maintenance. The state of roads in previous homeland areas has a negative impact on the development of these areas as it is well known that roads play a crucial role in economic development (Todes, 2005).

The agricultural sector in the Mkhambathini Local Municipality area is characterised by apartheid-based inequalities. This is noticeable in the separation between the well-developed and productive commercial sector in wards three and four, and the underdeveloped, under resourced subsistence agriculture in wards one, two, five, six and seven (traditional authority areas, including Mbumbulu) (Isibuko se-Africa, 2006). Lack of resources limits smallholder farmers' ability to be transformed into smallholder commercial farmers. Commercial farming requires farmers to have adequate resources and expertise to produce quality crops and be competitive producers.

Local economic development in Mkhambathini Local Municipality, as illustrated in the 2006-7 IDP, is predominantly agricultural. However, Mkhambathini has a high

potential for tourism development. The N3 road between Pietermaritzburg and Durban, which carries trade and tourist traffic, runs through Mkhambathini and provides the opportunity for local economic development. The 2006-7 IDP shows that Mkhambathini Local Municipality's attention is on developing tourism as a way of addressing high unemployment rates and slow economic growth. Smallholder farmers may benefit from this project if they were closer to the N3 road and had transport, or if the road network to rural communities was good.

By 2005, approximately 42.4% of the households in Mkhambathini had access to electricity. However, in 2005 54.8% of the households in traditional authority areas did not have electricity. The Mkhambathini Local Municipality 2006-07 IDP review indicated that projects such as Embo-Thimuni Tribal Authority Future Electrification Programme and Embo-Thimuni and iSimahla Tribal Authority Electricity Programme are aimed at addressing the lack of electricity for residential purposes. The Local municipality had not implemented these projects and the 2006-7 IDP did not show a budget committed for these projects (table 5.5). The planned year for implementing action was also not included but stated that ESKOM would be responsible for these projects (table 5.5). The following section discusses several reasons why projects relevant for market participation were not implemented.

5.2.2 Mkhambathini Local Municipality IDP implementation difficulties

One of the difficulties faced by Mkhambathini Local Municipality was the limited resources available to the municipality to address problems faced by its people in terms of service delivery and infrastructure (Isibuko se-Africa, 2006). Addressing problems such as those mentioned above may assist in creating an enabling framework for social and economic development.

Another important problem facing Mkhambathini Local Municipality was a lack of sufficient capacity to plan, implement and integrate IDP processes among Mkhambathini Local Municipality officials (Isibuko se-Africa, 2006). The Mkhambathini 2006-7 IDP states that Mkhambathini Local Municipality was developed on the foundation of the Camperdown Transitional Local Council that was small and did not have sufficient capacity to address issues such as the service

delivery backlog and to implement projects. Efforts to create a conducive environment for better smallholder marketing were planned and a few projects, such as provision of water, were implemented. A number of projects that address KPAs that are relevant for market participation were not implemented.

5.3 Msinga Local Municipality's 2005-6 IDP (Muden)

Msinga is a poverty stricken area with few economic resources and little economic activity (Udidi, 2005). Msinga Local Municipality's 2005-6 IDP illustrates that the Municipality's vision is to ensure local development through good management and development support. Msinga Local Municipality's KPAs include provision of infrastructure and services, and social and economic development. The following section discusses infrastructural development, service provision and local economic development in Msinga Local Municipality.

5.3.1 Msinga Local Municipality infrastructural development, service provision and local economic development

Msinga Local Municipality's 2005-6 IDP review reveals that, Msinga Local Municipality has the lowest levels of basic service delivery (water, electricity and roads) when compared with other municipalities in the Umzinyathi District. Electricity is only provided in the urban centres of Pomeroy, Tugela Ferry and Keates Drift. Msinga's 2005-6 IDP did not show any programmes in place to provide rural communities with electricity within Msinga Local Municipality, because ESKOM indicated that the current grid was overloaded and, therefore, could not accommodate any further connections. Lack of electricity is a threat to smallholder marketing activities because farmers need appropriate storage facilities to retain quality of crops and facilities for processing and packaging to add value to their crops and to reduce transaction costs (Matungul *et al*, 2002).

Road networks to and within communities were not in good condition and needed attention (Udidi, 2005). An amount of R3.3million was allocated to attend to access roads in the 2005-6 financial year (Udidi, 2005). However, a review of KPAs, illustrated in the 2005-6 IDP, budget and sources of funding for roads did not appear

but showed that this programme was to take place between 2005 and 2007. Limited access to communication services, such as public telephones, in the remote areas was a major concern for Msinga Local Municipality (Udidi, 2005). Msinga's 2005-6 IDP showed that communication services would be provided in institutions like schools and forums to communicate with the South African Police Services for safety and security reasons.

In relation to local economic development, subsistence agriculture is still largely practiced in Msinga. Msinga's 2005-6 IDP showed that traditional authority areas do not have productive land for agricultural development because of poor soil quality, adverse climatic conditions and poor agricultural practices such as overgrazing. This hinders the ability to expand farming activities and enter markets. Despite the large irrigation potential linked to the Tugela and Mooi Rivers, communities experience water shortages during dry seasons and smallholders are not able to irrigate crops during dry seasons. The 2005-6 IDP indicated that 1967 hectares of land were cultivated, of which 767 hectares are under irrigation. However, during winter, water is not available for irrigation. Lack of water during dry seasons could result in low yields, reducing projected premiums.

The Msinga 2005-6 IDP showed that trade and commerce, mainly in Pomeroy, Tugela Ferry and Keates Drift, accounted for 11% of economic activity and appeared to be relatively established and reliable for smallholders to participate. There is a refrigerated vegetable packhouse built by the municipality at Tugela Ferry but it is not used because smallholder farmers are unable to supply adequate quantities. Numerous community garden groups cultivate vegetables on 89 hectares of land and this indicates a willingness to be involved in crop production if the necessary support is provided. The following section discusses difficulties faced by Msinga Local Municipality when implementing its IDP.

5.3.2 Msinga Local Municipality IDP implementation difficulties

The Msinga Local Municipality 2005-6 IDP showed that Msinga Municipality had limited resources to address service backlogs and to create the desired impact on

social and economic development as one of its KPAs (Udidi, 2005). Absence of spatial planning in the past was due to lack of effective management in Msinga Local Municipality to address key issues facing the municipality and its communities (Udidi, 2005). In relation to financial planning, there were no guidelines available to direct Msinga Local Municipality in planning, budgeting and implementing projects. There was a lack of efficient participation among service providers and the municipality to implement programmes that the Msinga Local Municipality had planned. In the 2005-6 IDP review only one community garden project was included in the budget because Msinga Local Municipality Council decided to attend to infrastructure, such as roads, rather than investing in community garden projects.

5.4 Summary

Key Performance Areas (KPAs) relevant for smallholder marketing are infrastructure and services such as water, electricity, communication and roads, and social and economic development. Provision of infrastructure (e.g. roads) and services are regarded as creating enabling conditions or conducive marketing environments for smallholder farmers and encouraging farmers to participate in markets. Mkhambathini and Msinga Local Municipalities made little effort to plan and include services relevant for smallholder marketing in their IDPs in the form of relevant KPAs. For example, Msinga built a vegetable packhouse in Tugela Ferry and tried to install electricity but was constrained by an overloaded current grid. Mkhambathini implemented a water reticulation pilot project in Embo-Thumini. However, in general, these local municipalities failed to implement the necessary marketing services, such as credit access, water supply, electricity, telephones and roads that were planned in the IDPs.

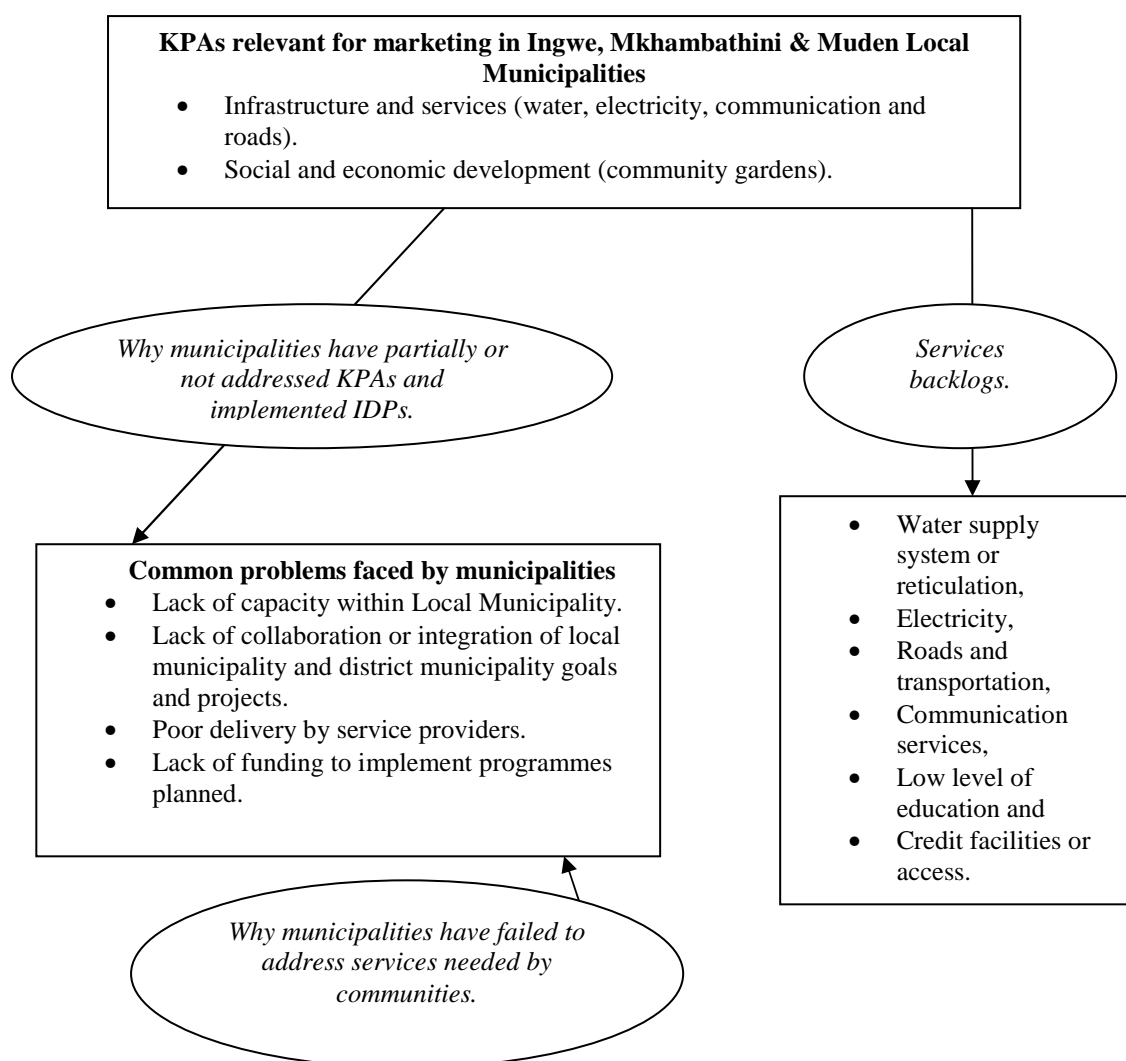


Figure 5.1 Outline of KPAs for Centocow, Mbumbulu and Muden, and problems experienced by municipalities and the major services which are lacking to enable market participation by smallholder farmers.

It is not evident whether communities were consulted in the IDP process. The key to the progress of IDPs is the integration of plans by all stakeholders. Public participation must feed the IDP process with information from start to finish, ensuring that farmers' needs are catered for. If communities are not included in the planning of the IDP process, municipalities are likely not to plan what communities require most. Based on a review of KPAs and delivery of projects during the 2005 financial year, Ingwe partially met its obligations for the implementation of projects. Ingwe delegated most of the projects to service providers and ward councillors who were not committed to do their job, resulting in many projects not being implemented (Isikhungusethu, 2005). This was a similar problem in Msinga Local Municipality

where full participation of service providers in implementing projects was lacking (Udidi, 2005). The problem with Mkhambathini Local Municipality was insufficient capacity in planning, budgeting and implementing programmes that address service backlogs caused by the apartheid system.

Mkhambathini Local Municipality's 2006-7 IDP revealed that smallholder farmers within the municipality were faced with a number of problems that limited participation in agricultural and marketing activities. The problems experienced by Mkhambathini smallholder farmers included, among many others, lack of finance and credit facilities, training and physical infrastructure (Isibuko se-Africa, 2006). The local economy in three municipalities is predominately agricultural. However, Mkhambathini and Ingwe Local Municipalities concentrated on tourism development, which was unlikely to benefit smallholder farmers, given the fact that in Centocow there are no railway lines and Mbumbulu is far (45km) from the main road (N3).

Chapter 6

Results and Discussion

To facilitate the investigation of perceptions of barriers to market participation among smallholder farmers, the study investigated: -

- Three farmer groups members' perceptions of what agricultural policy reforms mean to them as smallholder farmers.
- Marketing channels used by the three groups.
- Constraints related to marketing.
- Barriers in accessing markets.

The results are discussed according to each subproblem as mentioned above.

6.1 Farmer groups' perceptions of what agricultural policy reforms mean to them as smallholder farmers

Current South African agricultural policy was developed, after the apartheid era, to remove barriers that hindered smallholder farmers from entering large-scale organised agriculture. Kirsten *et al* (1998) and MALA (1998) reported that four agricultural policy reforms were made to support production, invite smallholder farmers to enter mainstream agriculture and increase rural economic activity. First, land reform was aimed at assisting farmers acquire more land for agricultural purposes or claim back land that was taken during the apartheid era. Second, agricultural trade aimed at improving smallholder participation in trade within and outside South Africa. Third, provision of financial support was improved so that farmers have access to credit and could increase agricultural productivity and access markets. The fourth reform was the comprehensive farmer support programme that aimed at ensuring farmers have the necessary support in terms of production and marketing information and training to identify suitable markets. The main aim of assessing agricultural policy reform was to evaluate what has been done and to investigate farmer perceptions of these agricultural policy reforms.

Results on elements of the agricultural policy and farmer perceptions from each community are presented in table 6.1. Integrated Development Plans for Local

Municipalities (Ingwe, Mkhambathini and Msinga) were also used to analyse infrastructural development and service delivery aimed at creating enabling conditions for market participation. Table 6.1 shows elements of South African agricultural policy that were reformed to incorporate smallholder farmers and perceptions of each farmer group to these reforms. Questions from an interview guide were presented to farmers in a focus group discussion on elements of the agricultural policy.

Table 6.1 Elements of the agricultural policy and farmer perceptions, using focus group discussions, 2006

Elements of agricultural policy in South Africa	Centocow	Mbumbulu	Muden
1) Land reform (restitution, redistribution & land tenure reform)	Farmers had little knowledge about land reform and programmes that could benefit them. Farmers had never met Department of Land Affairs officials.	Farmers had little knowledge about land reform and programmes that could benefit them. Farmers had never met Department of Land Affairs officials.	Farmers had little knowledge about land reform and programmes that could benefit them. Farmers had never met Department of Land Affairs officials.
2) Agricultural trade	Izwi Lamadoda had limited knowledge in relation to opportunities created by reformed agricultural trade. Farmers indicated that they would not be able to take advantage of these opportunities because farmers lacked marketing skills (searching for potential buyers, negotiating, pricing), knowledge, resources and support.	EFO members were aware of opportunities created by reformed agricultural trade and regarded supplying to Woolworths as one of the opportunities. Farmers indicated they had limited land for expansion in order to improve yields to expand their markets. EFO indicated that they lacked resources (working implements, labour and finance), marketing skills (searching for potential buyers, negotiating, pricing) and knowledge to engage in international trade.	KwaNxamalala farmers were not aware of opportunities created by reformed agricultural trade. Farmers indicated that they were farming mostly for subsistence and selling to community members. KwaNxamalala farmers indicated that they would not be able to take advantage of these opportunities because farmers lacked marketing skills (searching for potential buyers, negotiating, pricing), knowledge, resources and support.
3) Financial support	Izwi Lamadoda had not applied for financial support because they had applied for water reticulation infrastructure and fencing several times to the governments but did not receive any response. Izwi Lamadoda thought that the government had forgotten about them.	Farmers have not received cash but have received financial support for fencing and certification. EFO thought that the government's idea to decide what farmers need, without consulting them, is not assisting farmers.	Farmers had not received any kind of financial support but submitted their needs in the form of a business plan to the Department of Agriculture and Land Affairs but did not receive any response. KwaNxamalala farmers thought that the government was not keeping its promises.
4) Farmer support services	Services such as extension services may be helpful but Izwi Lamadoda has had no extension service for many years.	Provision of extension service trained in organic farming.	Has good extension service i.e. an extension officer.

Land reform includes other programmes such as land restitution, redistribution and land tenure reform that farmers did not know about. For instance, EFO is constrained

by limited land availability and if these farmers had been aware of the national land redistribution programme they could have accessed it to acquire more land for commercial farming. Perhaps if other farmers knew about the land redistribution programme they would try to access it.

In relation to agricultural trade, both Izwi Lamadoda and KwaNxamalala farmers were farming for subsistence and selling to community members. However, Izwi Lamadoda showed potential for expanding informal marketing activities that they were involved in. These farmers were not only selling to neighbours but were also selling at pension payouts. Izwi Lamadoda's level of market participation was more diverse than the KwaNxamalala farmers because most members of Izwi Lamadoda had vehicles to transport their produce. Ezemvelo Farmers Organisation (EFO) members had knowledge of the opportunities created by agricultural trade reform and indicated that as smallholder farmers producing organic products and supplying Woolworths they benefited from this reform through selling organic produce to the chain store.

However, farmers indicated that meeting trading standards, such as quality and quantity, in domestic markets was a challenge and they anticipate further challenges in international trade. Challenges were attributed to constraints by limited land size, low yields, lack of resources, relevant marketing skills and the expertise to be involved in highly developed agricultural trade (table 6.1). Izwi Lamadoda and KwaNxamalala farmers had little knowledge about agricultural trade reform and trading standards as these farmers sell in informal markets. Farmers indicated that since they lacked water reticulation infrastructure, sufficient income, relevant marketing skills and training they would not be able to meet international trading standards of many countries they may wish to export to. The farmers' perception was that when accessing formal markets they would experience difficulties.

Ingwe Local Municipality's (Centocow) IDP illustrated that agriculture in traditional settlement areas had potential but was constrained by poor road infrastructure, lack of effective farmer support services to provide access to inputs, credit, advice and markets (section 5.1.1). Local economic development that could be aimed at supporting smallholder farmers through community garden projects, cooperatives and

fencing was rather aimed at developing tourist attractions in Ingwe Local Municipality. Mkhambathini Local Municipality's (Mbumbulu) IDP showed that agriculture within the Municipal area was characterised by apartheid inequalities between well-developed and well-resourced commercial sectors and underdeveloped and resource-poor smallholder sectors found in traditional areas. Farmers indicated that little effort had been invested to address this issue. In Msinga Local Municipality (Muden), according to the IDP, agriculture was one of the most important economic aspects but was still largely practiced for subsistence because of the limited capacity of the land for productive agricultural development due to poor soil quality, lack of irrigation during dry seasons and an inability to find sustainable markets for the sale of local produce. As a result, KwaNxamalala did not produce enough good quality crops that could be sold to other markets other than community members.

Izwi Lamadoda (Centocow) and KwaNxamalala farmers (Muden) did not receive financial support from government to assist in expanding projects, whereas EFO (Mbumbulu) received fencing and water reticulation infrastructure from the Department of Agriculture and Environmental Affairs. However, the provision of water in Mbumbulu was still a pilot project and fewer than ten farmers had benefited. Therefore, a number of farmers in Mbumbulu did not have access to water reticulation infrastructure to irrigate crops and produce quality crops. Farmers' perception in relation to financial assistance was that the government decided what the needs of the farmers were without consulting farmers. In this case, EFO needed cash to buy working implements, seeds and pay for tractor hire, labour and certification (inspection) costs. The farmers' perception of government's efforts to improve smallholder agriculture was that it lacked public participation.

Izwi Lamadoda had applied for fencing and water reticulation infrastructure numerous times from the Department of Agriculture and Environmental Affairs, Sisonke District and Ingwe Local Municipality but had not received any responses. Izwi Lamadoda had not tried to apply for financial support because farmers felt forgotten by the government due to the lack of response concerning their previous applications.

In Muden, some farms had been fenced and farmers had access to water infrastructure provided by the Department of Agriculture and Environmental Affairs. Every year

KwaNxamalala farmers and their extension officer procedurally compiled a business plan that was submitted to the Department of Agriculture and Environmental Affairs but no delivery from government has taken place. Farmers' perceptions were that the government did not keep promises made, even when farmers were working with government officials to write applications for funding or other assistance. EFO members indicated that other grants that were received from government had unrealistic terms and conditions. For instance, farmers were given fencing and were required to produce competitive products that would be comparable with well-developed farmers. Such terms and conditions disregarded the fact that smallholder farmers lacked water reticulation infrastructure which they felt should have been provided by the Municipalities. Machethe (2004) and Makhura (2001) confirm that in the market place, smallholder farmers are often unfairly compared with well-established farmers who produce high quality products. As a result, smallholder farmers experienced difficulties when participating in formal markets in terms of quality. Aliber *et al* (2006) and Kirsten *et al* (1998) argue that deregulation of markets and removal of all financial protection for farmers by government was implemented too soon for smallholder farmers who lack expertise and resources to participate effectively in markets.

Izwi Lamadoda and KwaNxamalala farmers had not tried to access credit from other financial institutions such as banks. EFO members tried to access credit but failed because farmers were regarded as not creditworthy as they did not meet the requirements stipulated by commercial banks. The farmers' perception was that as long as they do not have collateral, such as property since they live on communal land, accessing credit from formal financial institutions would be a challenge. Table 4.1 illustrates that Ingwe (Centocow), Mkhambathini (Mbumbulu) and Msinga (Muden) Municipality did not offer direct or appropriate financial support to smallholder farmers. Without private (bank) or municipal financial support, smallholder farmers were unable to fund their agricultural projects.

Izwi Lamadoda had not received extension services since 2003. Farmers believed that they were missing out on opportunities created by extension services such as training and advice. EFO had access to extension services. However, the present extension officers are not trained in organic farming. Machethe (2004) supports this

finding by stating that extension services are not available to the majority of smallholder farmers in rural areas of South Africa. Where farmer support services are available, often only a single or a few of the services are provided and officers do not visit farmers frequently. KwaNxamalala farmers worked closely with their extension officer who gave farmers advice and linked them with suppliers for inputs.

According to the Marketing Agricultural Products Act No. 46 of 1996, smallholder farmers should by now have equal opportunities to market products in formal markets which allow market access and participation (MALA, 1998). However, focus group discussions show areas of difficulty. Table 6.2 defines the agricultural marketing system and Marketing Agricultural Products Act of 1996 in relation to Centocow, Mbumbulu and Mudén.

Table 6.2 Defining the agricultural marketing system and Marketing Agricultural Products Act of 1996 in relation to Centocow, Mbumbulu and Mudén, using focus group discussions, 2006

Elements of marketing policy and the 1996 Marketing Act	Centocow	Mbumbulu	Mudén
Market access	Selling to neighbours and at pension payouts. No formal market access.	Selling to Woolworths (Pty) Ltd. Market access depends on organic certification.	Selling to community members. No formal market access.
Market performance	Selling as individuals, no chance to compete with large companies.	Selling as a group (collective marketing).	Selling as individuals.
Marketing skills and knowledge (establish and maintain reliable market, negotiating contracts and prices)	Lacking appropriate marketing skills and knowledge.	Lacking appropriate marketing skills and knowledge but use a middleman.	Lacking appropriate marketing skills and knowledge.
Increased productivity levels	Yes, to some extent, but demand for crops is seasonal. Lack access to resources.	Yes, but not all products are sold to Woolworths.	No, constrained by lack of finance to hire tractor and labour and to purchase inputs.
Changed production pattern	No, constrained by lack of finance to hire tractor and labour and to purchase inputs.	Yes, organic production demands diverse methods of production.	No, constrained by lack of finance to hire tractor and labour and to purchase inputs.
Increased overall income	Depends on how much is sold	Yes, since they started marketing directly to Amanzimtoti packhouse.	Depends on how much is sold.
Supportive extension services	Lacking	Conventional, need organic trained extension service	Available.

Izwi Lamadoda had not accessed a formal market but was selling to neighbours and at pension payouts in Centocow. Izwi Lamadoda indicated that the supply of fresh produce was seasonal as farmers could only sell during harvest time. Izwi Lamadoda

did not plant all year round due to constraints related to finance and water. KwaNxamalala farmers only sold to neighbours and did not sell at pension payouts. KwaNxamalala farmers did not take the opportunity of expanding their marketing to Keates Drift, Tugela Ferry and Pomeroy where most economic activity took place. EFO was the only group of certified organic smallholder farmers in KwaZulu-Natal supplying a supermarket chain, Woolworths.

Market access for EFO members depended on organic certification. If farmers were suspended from organic certification because of violation of organic standards they could not sell to organic markets until they were inspected and recertified. EFO members viewed their market as risky and unstable, especially if farmers within the group did not abide by organic standards. Organic standards are restrictive, especially in group certification where all farmers need to be uniform with production patterns, pest and disease control plans. If one farmer within a group chooses to use chemicals that are not organic the whole group may be suspended as organic producers. The challenges that EFO is faced with could hamper market participation because organic certifiers are very strict in ensuring that all rules are followed before certifying products as organic.

All three groups did not have the relevant marketing skills and knowledge. Farmers stated that this hindered their ability to establish and maintain reliable markets, especially for Izwi Lamadoda and KwaNxamalala farmers. Farmers' perceptions were that although smallholder farmers could participate in formal markets, necessary conditions for better marketing had not been created. One reason Izwi Lamadoda and KwaNxamalala farmers had not accessed formal markets was the lack of relevant marketing skills and knowledge. Chapter 5 showed that people in traditional authority areas (Ingwe, Mkhambathini and Muden Local Municipalities) have low levels of education and little formal employment. Chowdhury *et al* (2005) explained that smallholder farmers may be unable to collect and process information needed to sustain agricultural marketing activities, such as prices and location of market depots.

Apart from *amadumbe*, potatoes and sweet potatoes sold at Woolworths, EFO members produced other crops, such as organic ground nuts, beans, maize and green beans and farmers needed a niche market to supply because the informal market could

not afford EFO's prices. EFO members indicated that sometimes farmers sold crops at the same price as the informal markets so that products were affordable for local consumers. This strategy caused farmers to lose out on premium organic prices in formal markets. Makhura (2001) also found that when smallholder farmers in Limpopo Province could not sell their products to identified markets, farmers tended to sell to informal markets. Eventually, when farmers were not reaping the anticipated rewards, market participation decreased.

Even though agricultural policy reforms were aimed at removing the barriers for smallholder farming to enter large-scale farming, table 6.2 showed that smallholders still face challenges in farming and marketing activities. Table 6.3 illustrates municipalities' responsibility in developing programmes that enable smallholder farmers to promote agricultural processes, such as expanding marketing activities into commercial markets. Table 6.3 also illustrates the relevance of programmes implemented or to be implemented by municipalities to increase smallholder farmers' market participation.

Table 6.3 Planned and implemented programmes that farmers could access provided by Local Municipalities, using IDP analysis and focus group discussions, 2006

<i>Municipality</i>	<i>Programmes planned</i>	<i>Programmes implemented</i>
Ingwe (Centocow)	<ul style="list-style-type: none"> • Telephones. • Electricity. • Roads. • Water. • Community gardens. • Fencing. • Co-operatives. 	<ul style="list-style-type: none"> • Fencing and co-operatives were implemented in other areas but not in Centocow.
Mkhambathini (Mbumbulu)	<ul style="list-style-type: none"> • Water. • Electricity (to be installed). • Telephones. • Roads. • Emerging farmer support programme. 	<ul style="list-style-type: none"> • Implemented a pilot project in Mbumbulu.
Msinga (Muden)	<ul style="list-style-type: none"> • Build a vegetable packhouse • Electricity. 	<ul style="list-style-type: none"> • Vegetable packhouse with appropriate facilities for processing, storage, grading and bundling in Tugela Ferry was built. • Tried to implement electricity project but constrained by the current grid that is overloaded

In chapter 5, table 5.2 showed that the projects illustrated in table 6.3 were either not budgeted for and therefore, were not implemented and not included in IDPs. Izwi Lamadoda indicated that they had applied for fencing and water reticulation infrastructure several times but had never obtained any response to this application.

The fact that Izwi Lamadoda did not have extension services to support and guide farmers through the right channels when requesting support from government also acted as a barrier to effective participation in the markets. Table 5.2 illustrated that Centocow was not included in programmes aimed at addressing local economic development, which focused on improving railway lines for tourist attraction. Evarett & Zulu (2001) are in agreement in stating that municipalities have introduced a range of programmes but these programmes have had limited impact on rural populations. In this case, tourist attraction development may not impact on Izwi Lamadoda because there are no railway lines near Izwi Lamadoda, while Ingwe Local Municipality had the potential for agricultural growth.

Table 5.5 in the previous chapter showed that the Embo-Thumini Traditional Authority, which includes Mbumbulu, would be provided with electricity. However, this programme had not been implemented but it was budgeted for. Mkhambathini had tried to address the lack of water reticulation infrastructure in Mbumbulu but it was implemented as a pilot project that benefited only a few farmers. Most members of EFO did not have access to water reticulation infrastructure to irrigate crops. Table 5.5 also showed that no information was available to address the lack of communication services in Mkhambathini Local Municipality (table 5.5). EFO stated the need to have communication services, such as landline telephones, and the lack of cell phone reception in some areas to communicate with potential buyers, to minimise time and money spent on searching and negotiating with potential buyers.

Section 5.3.1 (Msinga Local Municipality infrastructural development, service provision and local economic development) showed that farmers in the Msinga Local Municipality farm mostly for subsistence. During the focus group discussions KwaNxamalala farmers stated that they were constrained by problems related to finance to expand activities (table 6.1). Msinga Local Municipality had however attempted to implement programmes that could create a conducive environment for smallholders to participate in markets (table 6.3). For example, there is a storage, processing and bundling vegetable packhouse in Tugela Ferry that could be used by smallholder farmers. KwaNxamalala farmers knew that this packhouse exists. However, low farmer yields have led to minimal use of the Tugela Ferry facility even

though Keates Drift and Tugela Ferry are stable market places for trade and commerce.

6.2 Marketing channels used by three farmer groups in KwaZulu-Natal

Regardless of challenging agricultural and marketing situations illustrated in tables 6.2 and 6.3, smallholder farmers are still able to participate in various markets such as selling to neighbours and during monthly pension pay-outs and some farmers to even bigger markets, such as Woolworths. A number of marketing channels used by smallholders to participate in markets, including farm-gate marketing, marketing directly to consumers, marketing through a middleman and direct or contract marketing was described in the literature review (section 2.8). Matungul *et al* (2001) showed that smallholder farmers in rural districts of KwaZulu-Natal (Swayimana and Impendle) were able to trade under difficult circumstances. Focus group discussions also showed that the three farmer groups were willing to engage in marketing activities.

This section will discuss marketing channels that are used by Izwi Lamadoda (Centocow), EFO (Mbumbulu) and KwaNxamalala farmers (Muden). Conditions that enable market participation, such as infrastructure, will also be discussed to assess how enabling they are to market participation among smallholder farmers. Table 6.4 illustrates marketing channels used by Izwi Lamadoda, EFO and KwaNxamalala farmers and problems experienced when participating in markets.

Table 6.4 illustrates that all the three farmer groups used farm-gate marketing. Izwi Lamadoda and KwaNxamalala farmers have to accept the price neighbours could afford to pay, as they did not have access to other markets (table 6.2). Senyolo *et al* (2006) also reported similar findings in their study.

Unlike KwaNxamalala farmers who only sold to neighbours, Izwi Lamadoda farmers (Centocow) sold products at pension payouts in other villages in Centocow. Pension payouts in Centocow only happen once a month and supply of products was seasonal and unpredictable (only when fresh products were available). Izwi Lamadoda did not plant all year round in order to meet the demand due to constraints related to lack of

finance and farmer support services. Izwi Lamadoda lacked facilities for processing, packaging and storage, therefore, could not add value to their products and attract a bigger market.

Table 6.4 Marketing channels used and problems encountered by Izwi Lamadoda (Centocow), EFO (Mbumbulu) and KwaNxamalala farmers (Muden), focus group discussions, 2006

Marketing channels	Centocow	Mbumbulu	Muden	Advantages	Problems encountered
Farm-gate marketing (selling products at farm place to neighbours or community members).	✓	✓	✓	<ul style="list-style-type: none"> No transport costs. Products may be sold by the farmer. Products can be left on the ground. 	<ul style="list-style-type: none"> Farmers accepted local prices. Lack negotiating skills (e.g. prices).
Village marketing (e.g. selling at pension payouts).	✓	✗	✗	<ul style="list-style-type: none"> Farmers have hands-on marketing skills. Appropriate for processed products. 	<ul style="list-style-type: none"> Demand was seasonal & unpredictable.
Marketing using a middleman or marketing agent.	✗	✓	✗	<ul style="list-style-type: none"> Provide wider market exposure. Usually has sufficient capital to market farmers' products directly to markets. 	<ul style="list-style-type: none"> Farmers lacked direct communication with their market. Lacked marketing skills & knowledge to negotiate prices and contracts. Great reliance on middleman. Marketing costs were higher than prices paid to farmers.
Direct or contract marketing.	✗	✓	✗	<ul style="list-style-type: none"> Marketing margins can be reduced. Sales volume is guaranteed to the farmer. 	<ul style="list-style-type: none"> Supply is low and demand of products is very high. Only <i>amadumbe</i> are sold to Farmwise Distributors.

EFO, the oldest certified smallholder organic group in South Africa, pools and sells produce grown individually by its members to a packhouse near Durban. Fully certified members represent different levels of participation in this collective marketing action where some farmers are partially certified. EFO used to employ a middleman to access formal markets. In March 2006, farmers began selling directly to Farmwise Distributors (packhouse) in Amanzimtoti. Smallholder farmers use marketing agents or trade partners, commonly known as middlemen, on commission to sell products in order to obtain higher premiums (Adams, 2004). However, Molapo's (2006) study showed that EFO made more money when selling to other markets and using other marketing channels rather than a middleman (table 6.5). These findings suggest that EFO experienced high transaction costs (negotiating contracts, transport, storage, packaging costs and commission) while using a middleman. Molapo (2006) indicated that EFO did not gain from employing a middleman and farmers doubled their profit when they were directly involved with other markets because most of the transaction costs did not occur (transport, storage, packaging costs and commission).

Table 6.5 EFO members' income in 2005-6 (Molapo, 2006)

Crops grown	Total area planted	Sales (packhouse in rands)	Sales (other markets)	Total income from organic produce (packhouse and other markets)
Amadumbe	0.15	R327	R694	R1021
Potatoes	0.7	R152	R477	R629
Sweet potatoes	0.5	R181	R456	R637
Green beans	0.3	R85	R319	R404
Total	1.65	R745	R1946	R2691

EFO members stated that since the farmers were not in direct contact with their market and lacked the relevant knowledge and skills in marketing, this allowed for exploitation by the middleman. For instance, EFO members indicated that sometimes Woolworths rejected products because they did not meet quality standards and the middleman would sell those products to other markets at conventional prices without consulting the farmers. EFO members stated that the middleman would claim that the farmers' products had been rejected, but this could not be verified. As a result farmers lost projected profit. Low levels of education and lack of relevant marketing

skills were stumbling blocks to EFO, resulting in poor communication with the middleman while relying on him to negotiate contracts and prices on their behalf. Machethe (2004) and Wynne & Lyne (2003) support this finding by stating that a lack of relevant information creates opportunities for exploitation of farmers and increases transaction costs for smallholder farmers.

Since March 2006 prices had been on an upswing from EFO members' point of view and farmers were now waiting for only one month to be paid compared to a longer wait previously. Farmwise Distributors encouraged farmers to increase production because there was a great demand for *amadumbe*. However, EFO members indicated that their biggest constraint was insufficient farmland to increase production.

6.3 Transaction costs as a barrier to market participation

A number of barriers exist among three farmer groups preventing effective participation in markets. This section aims to present transaction costs as a barrier to market participation. Other barriers to market participation are discussed in the following section. Table 6.4 illustrated marketing channels used by smallholders and problems encountered by farmer groups that are associated with a lack of infrastructure and other services that should be provided by local municipalities.

Regardless of the marketing channels farmers used, whether in formal or informal markets, farmers faced numerous transactions costs. These transaction costs include hiring a tractor, purchasing agricultural inputs and reorganisation of household resources, such as income, in order to produce enough for markets. Table 6.6 illustrates the transaction costs faced by smallholder farmers and factors that contributed to the increase of transaction costs. Delgado (1999) states that transaction costs differ among farming households due to asymmetries in access to assets, market information, extension services and remunerative markets.

Table 6.6 Transaction costs as barriers that hamper market participation among farmer groups, focus group discussions, 2006

Farmer group	Transaction Costs	Factors that increased transaction costs	Challenges faced when participating in markets
Izwi Lamadoda (Centocow)	Hiring a tractor to prepare land. Purchasing inputs. Transporting products to pension payouts. Reorganisation of household resources such as income in order to produce enough for markets.	Lack of extension services (advice, provide information and introduce new technologies). Low level of education (pricing, negotiating). Poor road conditions. Poor proximity to markets.	Lack of access to relevant market information (market location and appropriate pricing). Lack of relevant marketing skills and knowledge. Poor road network and poor access to main road (inability to reach potential buyers). Lack of relevant facilities for storage, processing and packaging to retain quality and add value to products. Transaction costs.
EFO (Mbumbulu)	Hiring a tractor to prepare land. Purchasing inputs. Costs of searching for trading partners with whom to exchange. Costs of screening partners. Costs of bargaining. Transporting the products to Farmwise Distributors. Hiring labour. Reorganisation of household resources such as income and labour in order to produce enough for markets.	Low level of education (pricing, negotiating). Lack of own transport. Proximity to markets. Poor road conditions. Lack of relevant extension services (advice, provide information and introduce new technologies).	Limited productive land for expansion. Lack of own transport. Lack of access to relevant market information. Lack of relevant marketing skills and knowledge. Poor road network and poor access to main road (inability to reach potential buyers). Lack of relevant facilities for storage, processing and packaging to retain quality and add value to products. Transaction costs.
KwaNxamalala farmers (Muden)	Hiring a tractor to prepare land. Purchasing inputs. Reorganisation of resources such as income in order to produce enough for consumption and markets.	Low level of education (pricing, negotiating). Poor road conditions. Proximity to markets.	Lack of productive land to increase production. Lack of access to market information. Lack of relevant marketing skills and knowledge. Poor road network and poor access to main road (inability to reach potential buyers). Transaction costs.

Table 6.7 illustrates the services needed for better market participation that could play a role in decreasing transaction costs. Table 6.7 also compares results from the IDP analysis (figure 5.1) and farmers' responses to service delivery. Some of these services were indicated by NEPAD (2002) as enabling conditions for agricultural growth. Kirsten *et al* (1998) stated that there is a need to afford smallholder farmers access to existing agriculture markets and also a need to ensure that farmers have a chance to sustain their activities and prosper.

Table 6.7 Conditions related to service delivery to create enabling conditions for market participation using IDP analysis and focus group discussions, 2006

Services needed for marketing activities	IDP analysis (Chapter 5)	Farmers' response
Physical infrastructure <ul style="list-style-type: none"> Roads, Electricity, Water reticulation. 	Ingwe municipality <ul style="list-style-type: none"> Key Performance Areas listed projects not funded or implemented. Lack of integration between District & Local municipalities' priorities. Lack of participation & commitment from service providers (Service Centres & Wards). Lack of funding. Mkhambathini municipality <ul style="list-style-type: none"> Poor road network in tribal areas characterised by apartheid planning system. Urban areas better serviced than rural areas. Lack of sufficient municipality capacity. Programmes to provide electricity in tribal areas are still to be implemented. Msinga municipality <ul style="list-style-type: none"> Poor access to roads in traditional authority areas. Electricity only provided in urban centres (Pomeroy, Tugela Ferry & Keates Drift). Present electricity grid is overloaded preventing further connections. 	Izwi Lamadoda <ul style="list-style-type: none"> Not well located to expand their market because of poor road network. Lack of electricity poses a problem in quality of products (storage, processing and grading). Need cold rooms, processing & packaging facilities. EFO <ul style="list-style-type: none"> Road network is poor increasing transaction costs. Lack electricity to process, store & package their products, rely on middleman. KwaNxamalala farmers <ul style="list-style-type: none"> Roads not in good condition. Lack electricity.
Facilities for processing, packaging, grading and storage e.g. packhouse.	Ingwe Municipality <ul style="list-style-type: none"> Facilities are not present. Mkhambathini Municipality <ul style="list-style-type: none"> Facilities are not present. Msinga Municipality <ul style="list-style-type: none"> Vegetable packhouse in Tugela Ferry. 	Izwi Lamadoda <ul style="list-style-type: none"> Quality of products is compromised due to inappropriate storage & packaging. EFO <ul style="list-style-type: none"> Lack of facilities increases transaction costs. Previous great reliance on middleman. KwaNxamalala farmers <ul style="list-style-type: none"> Could be processing their products (adding value) if they had appropriate facilities.
Communication services <ul style="list-style-type: none"> Telephones, Cell phone reception, Faxes & e-mail. 	Ingwe Municipality <ul style="list-style-type: none"> Not present in some traditional authority areas. Mkhambathini Municipality <ul style="list-style-type: none"> Not present in some traditional authority areas. Msinga Municipality <ul style="list-style-type: none"> Limited access to communication services in remote (rural) areas. Limited resources to address service backlog. 	Izwi Lamadoda <ul style="list-style-type: none"> Lack landline telephones. Cellphone reception is not good. Ability to communicate with potential markets is hindered. EFO <ul style="list-style-type: none"> Do not have landline telephones. Some members do not have cellphone reception. Poor communication with markets, middleman and potential buyers. KwaNxamalala farmers <ul style="list-style-type: none"> Do not have landline telephones. Cellphone reception is not good.

Izwi Lamadoda, EFO and KwaNxamalala farmers are not well serviced in terms of physical infrastructure, such as roads. Once local market demand has been supplied Izwi Lamadoda and KwaNxamalala would have to look to more distant markets and this will increase transactions costs. Potential buyers from far could also encounter problems when trying to reach farmers because of poor local road networks and access to main roads. EFO is also not well located geographically, as farmers are living far from the main road between Pietermaritzburg and Durban (N3) and this could increase transaction costs. The cellphone reception in the three communities is not good and as a result the use of cellphones to distribute and access market prices is limited.

The road network in Mbumbulu was in a poor condition during this study. Farmers living far from pick-up points in Mbumbulu and farmers whose farms were far from the road used donkeys to transport their produce to pick-up-points (where middleman used to collect their products). EFO now hire a vehicle and transport *amadumbe* directly to Farmwise Distributors but they still need to transport crops from farms and homesteads to the vehicle collection point. KwaNxamalala farmers were the only group that have access to a vegetable packhouse if they wanted to expand markets. Due to constraints related to a lack of financial resources and lack of access to productive land, KwaNxamalala farmers planted small plots that only produced enough crops for subsistence and selling to community members.

6.4 A summary of marketing constraints and barriers in accessing markets faced by farmer groups.

When investigating barriers to market participation among smallholder farmers, it was important to examine what kind of constraints farmers face that hinder their ability to participate in markets or accessing markets. The previous sections in this chapter have presented areas of concern with regard to high transaction costs among smallholder farmers. This section will critically evaluate the implications of marketing constraints and barriers in order to illustrate some other barriers to market participation among farmer groups.

EFO and Izwi Lamadoda lacked facilities for storage and handling to retain quality so that even when products were off-season consumers could still buy them (table 6.6). EFO produced organic crops individually and marketed them collectively to a packhouse in Amanzimtoti. The packhouse supplied a retail chain, Woolworths, well-known for its high quality products. Due to poor roads in Mbumbulu, farmers transported crops to pick-up points by carrying them on their heads or transporting by donkeys. Some of the crops were damaged, increasing chances of products being rejected. Adams (2004) illustrated that some retail supermarkets supplied by smallholder farmers do not compromise on quality.

When EFO was using a middleman, after producing farmers managed storage (leaving crops on the ground) and transportation of products to pick-up points while product inspection and market access was managed by a middleman: problems arose in both instances. The reason why farmers left crops in the ground was because EFO did not have appropriate storage facilities, such as cold rooms and appropriate storage sheds. The impact of leaving potatoes in the ground is currently being investigated by a PhD study at the University of KwaZulu-Natal.

There were some problems associated with collective marketing among EFO members because EFO was a big group. In the past, EFO members produced similar crops (*amadumbe*, sweet potatoes and potatoes) that were sold at the same market (Woolworths) by a middleman. During a focus group discussion, EFO members indicated that some of their crops were not sold at Woolworths because, according to the middleman, their market was saturated. The middleman sold products that were not sold at Woolworths to conventional markets. EFO indicated that they were not sure if they were obtaining correct profits and since they were marketing collectively farmers were not sure if the distribution of incentives was accurate (table 6.2).

Table 6.7 indicated that one of the major constraints faced by the farmer groups was that farmers were not well serviced in terms of physical infrastructure and were far from markets and potential buyers. Road networks in Centocow, Mbumbulu and Muden were not good and were a challenge for farmers to reach other markets. Izwi Lamadoda is located in a remote area far away from service providers. KwaNxamalala farmers are located near urban centres like Keats Drift and Tugela

Ferry, close to service providers and consumers of farm products. The distance to markets, together with poor infrastructure, poor access to resources and information (table 6.1) could result in decreased or no market participation.

IDP analysis for all municipalities in chapter 5 revealed that the level of education was low and the unemployment rates very high in Centocow, Mbumbulu (traditional areas) and Muden. Low levels of education and lack of relevant marketing skills and knowledge among farmer groups created an inability to negotiate better deals when it came to market access, whether farmers were using farm-gate marketing or middlemen. Table 6.7 also illustrated that the farmer groups faced similar problems even if one group had access to a formal market but still encountered similar challenges that farmers selling to informal markets did. Farmers' perceptions were that agricultural marketing reform had little impact on smallholder farmers since they faced similar barriers in formal and informal marketing.

Little effort has been made to implement agricultural policy reforms. Farmers' perceptions indicate that these reforms have not made any positive impact on smallholder agricultural and marketing activities. This chapter has also shown barriers that smallholders face when participating in markets. Most of these barriers are due to lack of service provision, infrastructure development and local economic development that does not benefit smallholder farmers.

Chapter 7

Conclusions and Recommendations

The main objective of this study was to investigate barriers to market participation among three farmer groups in rural areas (Centocow, Mbumbulu and Muden) of KwaZulu-Natal. This investigation used triangulation as a method to check and establish validity of the results. Triangulation included comparison of the analysis of agricultural policy reforms, focus group discussions and Integrated Development Plan analysis. Agricultural policy reforms identified from literature and included as topics in an interview guide were used to conduct focus group discussions. After conducting focus group discussions, available 2005-6 to 2006-7 IDPs for Ingwe, Mkhambathini and Msinga Local Municipalities was analysed. This was done to determine if Municipalities had created conducive marketing environments for smallholder farmers and validated farmers' responses.

To facilitate this investigation, the following subproblems were investigated: -

- Farmer perceptions of agricultural policy reforms were investigated to establish the implications of these to them as smallholder farmers.
- Marketing channels used by the farmer groups were also investigated to assess ways in which farmers were participating in markets.
- Constraints related to marketing were investigated among farmer groups.
- Barriers to accessing markets among farmer groups were investigated.

7.1 Conclusions

Agricultural policy reforms aimed at incorporating smallholder farmers into commercial agriculture by removing barriers that hinder smallholder farmers from entering larger scale agriculture have failed for the three groups. One of the government's strategies to address problems faced by people was to create IDPs through municipalities that would translate policy reforms, including agricultural policy, into action. Despite these considerable reforms, farmers perceived agricultural policy reforms as non-existent or inapplicable to their needs. Local municipalities failed to implement relevant projects, such as improving roads, water reticulation

infrastructure, electricity, access to telephones and marketing services. Results from IDP analysis show that due to lack of commitment from contracted service providers, some of the projects were planned and budgeted for but were not implemented. This resulted in farmers needs not being addressed. Ward councillors (Ingwe Local Municipality) lacked commitment and participation to implement the planned programmes.

Lack of experience with agricultural policy reforms, service delivery, infrastructure and local economic development explains the current challenges faced by smallholder farmers. The following barriers to market participation are also regarded as threats to smallholder agriculture: -

- Lack of access to relevant market information (market location, pricing and crop management: handling),
- Lack of relevant marketing skills and training,
- Poor road networks and poor access to main roads (inability to reach potential buyers),
- Lack of relevant facilities for storage, processing and packaging to retain quality and add value to products,
- Lack of communication services,
- Lack of infrastructure for irrigation,
- Lack of access to credit,
- Lack of own transport,
- Limited productive land for expanding productivity and

Nevertheless, such challenges have not stopped smallholder farmers from participating in formal and informal markets using different marketing channels. This showed the farmers' willingness to participate in the markets even when conducive environments for better market participation were absent. Regardless of the marketing channels farmer groups were using, farmers were still not geographically well located to fully participate in the markets, making it difficult to reach formal and informal markets. Therefore, smallholder farmers need appropriate infrastructure (e.g. roads to transport produce to market) and services (e.g. credit to finance agricultural inputs) to enhance production and marketing.

Improving market access among smallholder farmers through policies and acts is inadequate. Farmer perceptions of agricultural policy reforms are that smallholder farmers have not been integrated and assisted to enter commercial agriculture. Smallholder farmers need sustained support to ensure that they produce quality products that are acceptable to the markets. Institutional innovation, such as farmer services, is required to overcome these problems. This could assist to improve access to markets, credit, appropriate training, provision of infrastructure and service delivery relevant for marketing. Therefore, options to stimulate the transition of smallholder farmers to fully participate in the markets need to be explored.

7.2 Policy implications and recommendations for improvement of smallholder farming and marketing

Effective public participation is encouraged in the IDP process because farmers would be able to identify programmes relevant to their specific needs and who to hold responsible when projects are not implemented. This involvement will improve policy implementation and farmer perceptions may change because they have contributed. Wards councillors could play a role in facilitating public participation and empowering farmers to make such a contribution. The agricultural marketing reform lacks training programmes to incorporate smallholder farmers. Good training from relevant stakeholders, such as the Department of Labour (through programmes for skills and development) is needed so that smallholder farmers are able to market produce using marketing channels that are suitable.

Furthermore, smallholder farmers with low levels of education need to be empowered with the relevant marketing skills and knowledge through training links that may be provided by extension services. The recommendation is that government, in particular, consider introducing extension officers who are knowledgeable in areas such as marketing and organic production to ensure sustainability of smallholder farmers' projects. This may require training of extension officers through formal college education or other appropriate accredited training. Extension officers who are

well versed in marketing may increase market participation of smallholder farmers and decrease some of the constraints farmers face.

An implication for policy making is that investment in good physical infrastructure may encourage smallholder farmers to participate effectively in better markets. Agricultural market deposits should be brought closer to farmers in order to address the problems of proximity to markets. This may be done by establishing market infrastructure that includes collection points and appropriate transport systems (from the fields to collection points). Farmers could deliver their products to the nearby distribution points if they have the right equipment. This initiative could be undertaken by the private sector. Addressing the above problems will remove some the barriers faced by smallholder farmers and will also assist farmers to overcome these barriers.

Strategies to give effect to agricultural policy need further attention to overcome implementation problems. Therefore, creative thinking and greater commitment by all parties (policy-makers, relevant government departments, district and local municipalities) involved in agriculture are needed to overcome implementation problems.

7.3 Implications for further research

Given the nature of smallholder farmers in South Africa, outlined in this study, critical public investments in infrastructure development are required to promote smallholder agriculture. Smallholder agriculture is said to be a small but growing sector and this study has shown that even under difficult conditions smallholder farmers continue to participate in markets. Although smallholder farmers participate in informal markets, this contributes to development of skills and knowledge that can be instrumental in the formal market. Further research could investigate new areas of public investment required to support smallholder farmers or investigate how market performance can be formulated to enable poor smallholder farmers to access commercial markets. This study also identified the lack of financial support and provision of services as barriers to market participation. Options for financing

smallholder farmers and delivery of such services to rural areas should be investigated.

REFERENCES

- ADAMS HB (2004). *Agricultural marketing extension and training*. Paper no. 1 of marketing services. Food and Agriculture Organisation Project, United Nations.
- ASSOCIATION FOR RURAL ADVANCEMENT, (AFRA) (2006). *Genuinely integrating integration land and local government: problem and potential*. Part 2 of the quarterly bulletin. AFRA Newsletter no.62, pg 9.
- ALIBER M, KIRSTEN M, MAHARAJ R, NHLAPO-HLOPE J & NKOANE O (2006). Overcoming underdevelopment in South Africa's second economy. *Development Southern Africa* 23(1):45-61.
- AMANI HRK (2005). *Critical issues in agricultural trade: what does Africa want from agriculture negotiations?* World Trade Organisation. [WWW document]. URL http://www.tralac.org/pdf/Amani-Africa_in_the_WTO.doc (Accessed 2006, December 6).
- BARRETT CB, MOSER CM, MCHUGH OV & BARISON J (2004). Better technology, better plots or better farmers? Identifying changes in productivity and risk among smallholder farmers. *American Journal of Agricultural Economics* 86 (4):869-888.
- BARRETT CB, MARENYA PP, MINTEN B & WANGILA J (1997). The nature of the firm. *Economia* 4 (2): 386-405.
- BLACKIE MJ (1994). Realising smallholder agricultural potential. In: RUKUNI M & EICHER CK (eds). *Zimbabwe's agricultural revolution*. Harare: University of Zimbabwe Publications, pg 39.
- BOUGHTON D, MATHER D, BARRETT C, BENFICA R, ABDULA D & CUNGUARA B (2006). *Market participation by rural households in a low-income country: an asset-based approach applied to Mozambique*. [WWW document]. URL <http://www.aem.cornel.edu/faculty/sites/cbb2Markets%20Participation%20Mozambique%20Dec2006> (Accessed 2007, March 24).
- BRYANT E (2005). *A viable future for small farmers?* [WWW document]. URL <http://www.ifpri.org/pubs/newsletter/ifpriforum/if200509.asp> (Accessed 2007, March 24).
- CHAMINUKA P, SENYOLO GM, MAKHURA MN & BELETE A (2006). *Service infrastructure and emerging farmers in South Africa: a factor analysis approach*. Proceedings of the Agricultural Economics Association of South Africa, 16-19 October. Pretoria: South Africa.
- CHOWDHURY S, NEGASSA A & TORERO M (2005). *Market institutions: enhancing the value of rural-urban links*. International Food Policy Research Institute Research report no. 195. United States: Washington, DC, pg 22.

COCHRANE WW (1993). *The development of American agriculture: a historical analysis*, 2nd ed. Minneapolis: University of Minnesota Press.

COETZEE GK (2003). Agricultural finance in South Africa. In: NIEUWOUDT L & GROENEWALD J (eds). *The challenge of change*. Pietermaritzburg: University of Natal Press, pg 22.

COETZEE GK (1995). Credit. In: SINGINI R & VAN ROOYEN CJ (eds). *Serving small-scale farmers: an evaluation of the Development Bank of Southern Africa's farmer support programmes*. Development paper no. 44. Midrand: Development Bank of Southern Africa, pg 29.

COFFEY E (1998). *Agriculture finance: getting the policies right*. [WWW document]. URL http://www.fao.org/ag/ags/agsm/RuralFinance/pdf/afr2_e.pdf (Accessed 2006, December 15).

DAVID-BENZ H, WADE I & EGG J (2004). *Market information and price instability: an insight into vegetable markets*. Paper presented at an International Symposium on improving the performance of supply chains in the transitional economies, September 13-16. Belgium: International Society for Horticultural Science.

DE JANVRY A, FATCHAMPS M & SADOULET E (1991). Peasant household behaviour with missing markets: some paradoxes explained. *The Economic Journal* 101 (3): 1400-1417.

DELGADO C (1999). Sources of growth in smallholder agriculture in Sub-Saharan Africa: the role of vertical integration of smallholders with processors and marketers of high value-added items. *Agrekon* 38 (3): 165-189.

DELGADO C (1998). *Sources of growth in smallholder agriculture in sub-Saharan Africa: the role of vertical integration of smallholders with processors and marketers of high value-added items*. Proceedings of the Inter-Conference Symposium of the International Association of Agricultural Economists, August 10-16. South Africa: Badplaas, pg 108.

DEVELOPMENT BANK OF SOUTHERN AFRICA, (DBSA) (1998). *Infrastructure: a foundation for development*. In: HYMANS C & THORNE-ERASMUS J (eds). *Infrastructural development in the South Africa*. Midrand: DBSA, pg 1.

DORWARD A, KYDD J, MORRISON J & UREY I (2004). A policy agenda for pro-poor agricultural growth. *World Development* 32 (1):73-89.

DORWARD A & KYDD J (2003). Implications of market and coordination failures for rural development in least developed countries. *Journal of International Development* 16 (7): 951-970.

DORWARD A, KYDD J & POULTON C (1998). *Smallholder cash crop production under market liberalization: a new institutional economics perspective*. Wallingford: CAB International.

EVERATT D & ZULU S (2001). Analysing rural development programmes in South Africa, 1994-2000. Development update. *Quarterly Journal of the South African National Non-Governmental Coalition and INTERFUND* 3 (4):1-38.

FENYES TI & GROENEWALD JA (1985). Aspects of agricultural marketing in Lebowa. *Development Southern Africa* 2 (3): 133-140.

FERRIS SE, KAGANZI R, BEST R, OSTERTAG C, LUNDY M & WANDSCHNEIDER T (2006). *A market facilitator's guide to participatory agro-enterprise development*, 1st ed. Colombia: Cali, pg 71-82.

FRICK A & GROENEWALD JA (1998). The need for agricultural information in the new South Africa. *Agrekon* 38 (2): 241-254.

GAUSI JCK, SAFALAUH ACL, BANDA JW & NG'ONG'OL DH (2004). Characterisation of smallholder marketing systems in rural Malawi: a case study of Malingunde Extension Planning Area. *Livestock Research for Rural Development* 16 (12): 72-75.

GUION LA (2002). *Triangulation: establishing the validity of qualitative studies*. Institute of Food and Agricultural Science. Gainesville: University of Florida Press.

HAGGBLADE S, HAZELL P & KIRSTEN I (2004). African agriculture: past performance, future imperatives. In: INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE, 2020 Vision. *Building on successes in African agriculture*. United States: Washington, DC, pg 33.

HARRIS PJC, BROWNE AW, BARRETT HR & CADORET, K (2001). *Facilitating the inclusion of resource-poor inorganic production and trade: opportunities and constraints posed by certification*. [WWW document]. URL <http://www.hdra.org.uk/pdfs/international-programme/FacilitatingtheResurcePoor.pdf> (Accessed 2005, July 19).

HAZELL P (2005). *Is agriculture still important for economic development and poverty reduction?* [WWW document]. URL <http://www.ifpri.org/PUBS/newsletters/IFPRIForum/200509/IF12comment.asp> (Accessed 2007, March 24).

HOLLOWAY GJ, NICHOLSON C, DELGADO C, STAAL S & EHUI, S (2000). Agroindustrialisation through institutional innovation: transaction costs, cooperatives and milk-market development in the East African Highlands. *Agricultural Economics* 23 (5):279-288.

ISAACS J (1996). *A profile of resource-poor farmers and research opportunities to address their needs*. Discussion paper submitted to the South African Embassy, France.

ISIBUKO SE-AFRICA DEVELOPMENT PLANNERS (2006). *Mkhambathini local municipality Integrated Development Plan: 2006/ 2007*. [WWW document]. URL http://devplan.kzntl.gov.za/idp_reviewed_2006_7/IDPS/KZ226/Adopted/Mkambathini%20IDP%20Review%202006-07_.pdf (Accessed 2006, August 14).

ISIKHUNGUSETHU ENVIRONMENTAL SERVICES (2005). *Ingwe local municipality Integrated Development Plan 2005/ 2006*. [WWW document]. URL http://devplan.kzntl.gov.za/idp_reviewed_2005_6/IDPS/KZ5a1/0b-INGWE%20JAN%202005%20IDP%20final%20REPT.pdf (Accessed 2006, August 14).

JANOWSKI CC, KHERALLAH M, MINOT N, KACHULE R, SOULE BG & BERRY P (2006). *Impact of agricultural market reforms on smallholder farmers in Benin and Malawi*. [WWW document]. URL <http://www.ifpri.org/divs/mtid/dr/200102/v1toc.pdf> (Accessed 2006, December 15).

KARIUKI LD (2005). Participation of smallholders in international trade. In: RUBEN M, SLINGELAN D & NIJHOFF H (eds). *Agro-food chains and networks for development*. Netherlands: Springer Publishers, pg 204-225.

KEY N, SADOULET E & DE JANVRY A (2000). Transactions costs and agriculture household supply response. *American Journal of Agricultural Economics* 82 (9): 245-259.

KIRSTEN J, GOUSE M & JENKINS L (2002). *Bt cotton in South Africa: adoption and the impact on farm incomes amongst small-scale farmers*. Proceedings of the Sixth International Consortium on Agricultural Biotechnology Research, 11-14 July. Italy: Ravallo.

KIRSTEN J, VAN ZYL J & VINK N (1998). *The agricultural democratization of South Africa*, 1st ed. Cape Town: IPA/ Francolin publishers.

KIRSTEN J (1998). Commercialising subsistence farming. In: KIRSTEN J, VAN ZYL J & VINK N (1998). *The agricultural democratization of South Africa*. Cape Town: AIPA/ Francolin publishers, pg 139-147.

KIRSTEN JF (1994). *Agricultural support programmes in the developing areas of South Africa*. Unpublished PhD thesis. Department of Agricultural Economics, Extension and Rural Development. Pretoria: University of Pretoria.

KIRSTEN JF, SARTORIUS VON BACH HJ & VAN ZYL J (1993). *Evaluation of the farmer support programme: sub-assignment III (Venda, Lebowa and KaNgwane)*. Final Report on Agricultural Economic Analysis. Unpublished Report. Department of Agricultural Economics, Extension and Rural Development. Pretoria: University of Pretoria.

KISAMBA-MUGERWA W (2005). *The politics of and policies for smallholder agriculture*. Proceedings of the Future of Small Farms workshop, 26-29 June. United Kingdom: Wye, pg 14.

LAPAR LA, BINH VT, SON NT, TOINGO M & STAAL S (2006). *The role of collective action in overcoming barriers to market access by smallholder producers: some empirical evidence from Northern Vietnam*. Research workshop on collective action and market access for smallholders, 2-5 October. Colombia: Cali.

LAPAR LA, HOLLOWAY G & EHUI C (2003). Policy options promoting market participation among smallholder livestock producers: a case study from the Philippines. *Food Policy* 28 (6):87-211.

LEWIS M (1995). *Focus group interviews in qualitative research*. [WWW document]. URL <http://www.scu.edu.au/schools/gcm/ar/arr/arrow/rlewis.html#origins> (Accessed 2006, May 24).

LYNE MC & FERRER SRD (2006). 1997-2003: A focus on land redistribution including restitution. *Development Southern Africa* 5 (2): 116-122.

LYNE MC & DARROCH MAG (2003). Land redistribution in South Africa: past performance and future policy. In: NIEUWOUDT WL & GROENEWALD J (eds), *The challenge of change: Agriculture, land and the South African economy*. Durban: University of Natal Press, pg 65-86.

MACHETHE CL (2004). *Agriculture and poverty in South Africa: can agriculture reduce poverty?* Paper delivered at the United Nations Development Programme, Human Science Research Council & Development Bank of Southern Africa Conference on overcoming under-development in South Africa's second economy, 22-26 October. University of Pretoria. South Africa.

MAKHURA M & MOKOENA M (2003). Market access for small-scale farmers in South Africa. In: NIEUWOUDT L & GROENEWALD J (eds.). *The challenge of change*. Pietermaritzburg: University of Natal Press, pg 137-148.

MAKHURA MN & WASIKE WSK (2003). Patterns of access to rural service infrastructure: The case of farming households in Limpopo Province. *Agrekon* 42 (2):129-143.

MAKHURA MT (2001). *Overcoming transaction costs barriers to market participation of smallholder farmers in the Northern Province of South Africa*. Unpublished PhD thesis. Department of Agricultural Economics, Extension and Rural Development. Pretoria: University of Pretoria.

MAKHURA MT, KIRSTEN J & DELGADO C (2001). *Transaction costs and smallholder participation in the maize market in the Northern Province of South Africa*. Paper presented at the Seventh Eastern and Southern Africa Regional Maize Conference, 11-15 February 2002. Department of Agricultural Economics. Pretoria: University of Pretoria.

MAKHURA MT & COETZEE GK (1998). A cluster analysis of commercialisation of farmers in developing rural areas of South Africa. *Development Southern Africa* 15 (3): 75-80.

MAKHURA MT (1994). *Theoretical and econometric models of commercialization behaviour of households in the developing areas of South Africa*. Unpublished MSc Thesis. Department of Agricultural Economics. Pennsylvania State University, State College.

MALTSOGLU I & TANYERI-ABUR A (2005). *Transaction costs, institutions and smallholder market integration: potato producers in Peru*. [WWW document]. URL <http://ideas.repec.org/p/fao/wpaper/0504.html> (Accessed 2007, April 9).

MATUNGUL MPM (2002). *Marketing constraints faced by communal farmers in KwaZulu-Natal, South Africa: a case study of transaction costs*. Unpublished PhD thesis, Discipline of Agricultural Economics, School of Agricultural Sciences and Agribusiness. Pietermaritzburg: University of Natal.

MATUNGUL MPM, LYNE MC & ORTMANN GF (2001). Transaction costs and crop marketing in the communal areas of Impendle and Swayimana, KwaZulu-Natal. *Development Southern Africa* 11 (3): 347-361.

MDOE NSY & NYANGE D (1995). *Competitive performance of formal and informal milk marketing channels in Northern Tanzania: the case of Hai district*. [WWW document]. URL <http://www.fao.org/docrep/x55661e0u.htm> (Accessed 2007, March 26).

MHAZO N, HAYANI-MLAMBO B, PROCTOR S, NAZARE RM (2001). *Constraints to small scale production and marketing of processed food products in Zimbabwe*. [WWW document]. URL <http://foodafrica.nri.org/enterprises/enterprisespapers/SharonProctor.doc> (Accessed 2005, May 30).

MEYER MD (1997). *Qualitative research*. [WWW document]. URL <http://www.qual.auckland.ac.nz> (Accessed 2006, May 24).

MINISTRY OF AGRICULTURE AND LAND AFFAIRS, (MALA) (2001). *Land redistribution for agricultural development: a sub-programme of land redistribution programme*. Pretoria: National Department of Agriculture.

MINISTRY OF AGRICULTURE AND LAND AFFAIRS, (MALA) (1998). *Agricultural policy in South Africa*. A discussion document. Pretoria: National Department of Agriculture.

MOLAPO M (2006). *The contribution of organic agriculture to household income: the case study of Mbumbulu farmers*. Unpublished Honours research project. Discipline of Community Resources, School of Agricultural Sciences and Agribusiness, Pietermaritzburg: University of KwaZulu-Natal.

MONTSHWE BD (2006). *Factors affecting participation in mainstream cattle markets by small-scale cattle farmers in South Africa*. Unpublished Masters thesis, Department of Economics, School of Natural and Agricultural Sciences. Bloemfontein, University of Free State.

MORDUCH J (1999). The microfinance promise. *Journal of Economic Literature* 10 (4): 1569-1614.

MSHANGAMA RM & SULEIMAN OD (1995). *Milk producers role, needs and responses to market demands and conditions in Zanzibar*. [WWW document]. URL <http://www.fao.org/docrep/X5661E/x5561e.htm#6> (Accessed 2006, April 9).

MTHEMBU N (2005). *Investigating constraints faced by small-scale farmers in organic farming*. Unpublished Honours research project, Discipline of Community Resources, School of Agricultural Sciences and Agribusiness. Pietermaritzburg: University of KwaZulu-Natal.

NATIONAL AGRICULTURAL MARKETING COUNCIL, (NAMC) (1999). *Investigation into market access*. Report on phase 1 of enhancing smallholder agriculture in South Africa. Pretoria: Midrand.

NATIONAL DEPARTMENT OF AGRICULTURE, (DOA) (2005). *Norms and standards for the establishment of agricultural marketing infrastructure*. Directorate: Marketing, Pretoria.

NIEUWOUDT L & GROENEWALD J (2003). Demands on and challenges for South African agriculture. In: NIEUWOUDT L & GROENEWALD J (eds), *The challenge of change: agriculture land and the South African economy*. Pietermaritzburg: University of Natal Press, pg 61-75.

NDOKWENI M (2002). *Improving sustainable livelihoods through organic produce marketing opportunities: evaluation of Ezemvelo Farmers Organisation*. Unpublished Master's dissertation, Discipline of Community Resources, School of Agricultural Sciences and Agribusiness. Pietermaritzburg: University of Natal.

NEW PARTNERSHIP FOR AFRICA'S DEVELOPMENT, (NEPAD) (2002). *Comprehensive Africa agriculture development programme*. [WWW document]. URL <http://www.fao.org/docrep/005/y6831e/y6831e00.htm> (Accessed 2006, December 5).

NGQANGWENI SS (2000). *Promoting income and employment growth in the rural economy of the Eastern Cape through smallholder agriculture*. Unpublished PhD thesis, Department of Agricultural Economics, Extension and Rural Development. Pretoria: University of Pretoria.

NIEMEYER K & LOMDARD J (2003). *Identifying problems and potential of the conversion to organic farming in South Africa*. [WWW document].

http://www.organicagcentre.ca/DOCs/res_policy_Niemeyer.pdf (Accessed 2005, May 30).

OETTLE N, FAKIR S, WENTZEL W, GIDDINGS S & WHITESIDE M (1997). *Encouraging sustainable smallholder agriculture in South Africa*. Environment and England: Development Consultancy Ltd.

PEACOCK C & JOWETT A (2006). *Investments in smallholder agriculture in sub-Saharan Africa*. [WWW document]. URL <http://www.farmafrica.org.uk/documents/20.pdf> (Accessed 2007, March 24).

PINSTRUP-ANDERSON P & SHIMOKAWA S (2006). *Rural infrastructure and agricultural development*. Paper prepared for presentation at the Annual Bank Conference on Development Economics, Tokyo, Japan, 29-30 May, 2006. [WWW document]. URL <http://siteresources.worldbank.org/INTDECABCTOK2006> (Accessed 2006, December 19).

PSWARAYI-RIDDIHOUGH I & JONES N (1995). *Some marketing problem faced by smallholder farmers in Asia*. United States: Washington DC, World Bank, pg 45.

REARDON T & TIMMER CP (2006). Transformation of markets for agricultural output in developing countries since 1950: How has thinking changed? In: EVENSON RE, PINGALI P and SCHULTZ TP (eds). *Handbook of Agricultural Economics Volume 3. Agricultural development: farmers, farm production and farm markets*. Amsterdam: Elsevier, pg 15-22.

RUKUNI M & EICHER CK (1994). Zimbabwe's agricultural revolution: lessons for Southern Africa. In: RUKUNI M & EICHER CK (eds). *Zimbabwe's agricultural revolution*. Harare: University of Zimbabwe Publications, pg 105-118.

SENYOLO GM, MAKHURA MN, CHAMINUKA P & BELETE A (2006). *Factors distinguishing low turnover emerging farmers from high turnover emerging farmers in South Africa*. Proceedings of the Agricultural Economics Association of South Africa, 16-19 October. South Africa: Pretoria.

SHEPHERD AW (1997). *Market information services: theory and practice*. Rural Infrastructure and Agro-Industries Division (AGS) bulletin no. 125. Food and Agricultural Organisation. Italy: Rome, pg 72.

STAAL SJ, DELGADO C, BALTEWECK I & KRUSKA R (2000). *Spatial aspects of producer milk price formation in Kenya: a joint household-GIS approach*. Paper submitted to the International Association of Agricultural Economics meeting in August 2000, Berlin.

TERREBLANCHE SJ (1998). Empowerment in context: the struggle for hegemony in South Africa. In: KIRSTEN J, VAN ZYL J & VINK N (eds). *The agricultural democratization of South Africa*. Cape Town, AIPA/ Francolin Publishers, pg 13-60.

TODES A (2005). *An assessment of the integrated development plan: agenda 21 case studies on sustainability in local governance*. Annual report. South Africa: United Nations Development Programme, pg 7-40.

UDIDI (2005). *Msinga local municipality Integrated Development Plan 2005/ 2006*. [WWW document]. URL http://devplan.kzntl.gov.za/idp_reviewed_2005_6/IDPS/KZ5a1/0b-MSINGA%20JAN%202005%20IDP%20final%20REPT.pdf (Accessed 2006, August 14).

VAN ROOYEN CJ, VINK N & CHRISTODOULOU N (1987). Access to the agricultural market for small farmers in Southern Africa: the farmer support programme. *Development Southern Africa* 4 (2): 207-223.

VAN ZYL J, VINK N & KIRSTEN JF (2006). *South African agriculture in transition: the 1990's working paper: 2000-06*. Unpublished departmental report, Department of Agricultural Economics, Extension and Rural Development. Pretoria: University of Pretoria.

VAN ZYL J (1998). Favouritism in agricultural policy and support services. In: KIRSTEN J, VAN ZYL J and VINK N (eds). *The agricultural democratization of South Africa*. AIPA/ Francolin publishers: Cape Town, pg 71-82.

VINK N (1998). Black disempowerment in South African agriculture: a historical perspective. In: KIRSTEN J, VAN ZYL J and VINK N (eds), *The agricultural democratization of South Africa*. AIPA/ Francolin publishers: Cape Town, pg 61-70.

YOSHINO N & NAKAHIGASHI M (2000). *The role of infrastructure in economic development*. [WWW document]. URL http://www.2c.bioglobe.ne.jp/m_naka/official/research (Accessed 2006, March 18).

WANMALI S (1992). *Geography of rural services system in India*. New Delhi, India: B.R Publishing Corporation.

WORLD BANK (2003). *World development indicators*. United States: Washington, DC.

WYNNE AT & LYNE MC (2003). An empirical analysis of factors affecting the growth of small-scale poultry enterprises in KwaZulu-Natal. *Development Southern Africa* 20 (5): 563-575.

Appendix A

INTERVIEW GUIDE

1. South African agricultural policy reforms and smallholder farmers:
 - Land reform
 - Agricultural trade
 - Finance
 - Farmer support services
2. Smallholder farmers' response to these reforms, in general.
3. Could the results of these reforms to smallholder farmers be:
 - access to markets?
 - increased productivity?
 - changed production patterns?
 - increased overall income?
4. Market access and availability.
5. Marketing knowledge and skills, present and lacking.
6. In relation to marketing policy and the new Marketing Act, have markets become more competitive?
7. Has market performance improved in terms of lower marketing costs and better services?
8. Describe marketing channels that you use and problems encountered. (Also investigating marketing constraints).
9. Enabling conditions for better market participation (what are these conditions, their benefits and what is lacking?): -
 - infrastructure (roads)
 - transportation

- facilities for storage, packaging etc.
- and other support services such as extension officers

10. Describe the marketing costs that you encounter (transaction costs).
11. Major constraints that you are faced with when participating in the markets and when trying to access markets (barriers to market access).
12. Management structure to negotiate (prices, contracts, etc.) with your markets (does it exist?).
13. In your opinion, what factors and policy changes are still needed to move agricultural policy reforms forward and make them more beneficial for you, as smallholder farmers?
14. What is the appropriate role of the government in a new, liberalised market environment, in your opinion?