



*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

## OWNERS' PERCEPTIONS OF FACTORS THAT CONSTRAIN THE SURVIVAL AND GROWTH OF SMALL, MEDIUM AND MICRO AGRIBUSINESSES IN KWAZULU-NATAL, SOUTH AFRICA

TA Clover & MAG Darroch<sup>1</sup>

### Abstract

*Public and private sector institutions in KwaZulu-Natal (KZN), South Africa (SA) can identify policies and strategies to increase the survival and growth rates of small, medium and micro-enterprise (SMME) agribusinesses if they have more information about the factors that constrain business performance. The sustained growth of these SMMEs could, in turn, help to reduce poverty, income inequality and unemployment problems in the province. The owners of 44 agribusiness SMMEs in a stratified random sample of Ithala Development Finance Corporation clients in KZN were, therefore, surveyed during October 2003 and January 2004 to identify what factors they perceive constrain business survival and growth. The respondents identified eight dimensions of constraints, namely: a lack of access to services; funding constraints at start-up; lack of management capacity in the enterprise; access to tender contracts; compliance costs associated with VAT and labour legislation; liquidity stress; lack of collateral; and lack of institutional support. The provision of appropriate infrastructure and training, development of innovative loan products, and policies to reduce the cost of compliance with legislation affecting agribusiness SMMEs are some possible solutions to help deal with these constraints.*

### 1. INTRODUCTION

Poverty, inequality and unemployment have been identified as the three most serious constraints to economic development in South Africa (Parliament of the Republic of South Africa, 1994). The degree of spatial inequality in SA implies that the development challenges faced by the nine provincial governments differ considerably between provinces, and statistics indicate that KwaZulu-Natal faces disproportionately large development challenges; for example, in 2000, it was the province with the third highest rate of unemployment in SA of 39%, (KZN Department of Economic Development and Tourism, 2000), and 54% of its population survived on an income below the international poverty threshold of US\$ 1 per day, per person, as identified by the World Bank (2000). Rogerson (1999) and a World Bank Task Team (2000) assert that the promotion of Small, Medium and Micro Enterprises is a key area of employment generation, and that a substantial share of new job

---

<sup>1</sup> *Respectively postgraduate student and senior lecturer in Agricultural Economics, School of Agricultural Sciences and Agribusiness, University of KwaZulu-Natal, Pietermaritzburg.*

creation in SA could be provided by agricultural processing and non-agricultural employment in SMMEs.

Bannock (2002) identifies three potential roles of SMMEs in a market economy; they may develop markets, accumulate capital through trading and develop commercial culture and skills within a region. They may also diversify an economy dominated by agriculture, create jobs and complement larger firms in raising productivity (Liedholm *et al*, 1994). Successful SMMEs have the potential to stimulate demand for investment or capital goods (Brunetti *et al*, 1997), and to upgrade human capital when large enterprises in the secondary and tertiary sectors release unskilled labour that SMMEs may employ. An SA study shows that people employed in SMMEs are more likely to start their own businesses (World Bank Task Team, 2000). Most SMMEs in SA, however, are concentrated at the low end of the enterprise size scale, and exist primarily as black survivalist firms with little capacity for sustained survival or growth (Business Referral and Information Network, 2003).

In this context, research that can identify ways to increase the survival and growth rates of agribusiness SMMEs in KZN can contribute to alleviating poverty, income inequality and unemployment by identifying factors that constrain businesses performance. This paper, therefore, aims to identify what factors agribusiness SMME owners in KZN perceive constrain business survival and growth, by surveying a stratified random sample of such clients financed by The Ithala Development Finance Corporation (Ithala) in 2003 and 2004. The results may provide information that financial intermediaries, local and provincial government institutions, and the private sector, can use to develop appropriate policies and strategies that promote the sustained growth of agribusiness SMMEs in KZN. Following Harling (1995), an agribusiness SMME in this paper is defined as 'an individual business operating in the food and fiber sector of the economy' or a business 'having a high degree of interdependence with agricultural production'. This paper used the National Small Business Act's (1996) definition of SMMEs according to number of employees. Small, medium and micro enterprises, in terms of this act, are defined as having 50 or less, 100 or less, and five or less full-time equivalent paid employees, respectively. Classifying agribusiness size in terms of turnover may have been an improved method however his information was unavailable to the researchers.

The paper is organized as follows: Section two reviews past local and international research on the factors that constrain SMME survival and growth. This information provides guidelines for selecting potential constraints that the agribusiness owners are requested to rank in the survey

questionnaire. Section three then describes the sampling procedure, data collection and key characteristics of the survey respondents. Section four ranks and discusses the constraints reported by the agribusiness SMME owners. Section five develops these results further by analyzing how these perceived constraints may affect the owners' perceptions of available business opportunities and information. Finally, section six discusses some policy and strategy implications of the study.

## **2. PAST LOCAL AND INTERNATIONAL RESEARCH ON FACTORS THAT CONSTRAIN SMME SURVIVAL AND GROWTH**

Guzman and Santos (2001) developed a conceptual model showing that socioeconomic and institutional factors, such as macroeconomic policies, in an entrepreneur's external environment, and personal characteristics of the entrepreneur, directly affect enterprise success and economic development. Extending work by Shane (2004), they propose that these socioeconomic and institutional factors also influence the types of, and information about, such opportunities that are available to the entrepreneur. According to Mintzberg (1989), barriers to SMME survival and growth are likely to be faced in all four functional areas of business operation - management, marketing, operations and finance - and may be directly related to the size and start-up conditions of an SMME. This implies that analysis of constraints to enterprise success and economic development must also consider firm level barriers.

This paper thus extends the Guzman and Santos model by analyzing what agribusiness SMME owners in KZN *perceive* are the socioeconomic, institutional, *and firm level* factors that constrain business survival and growth, *and* whether these perceptions influence the owners' perceptions of available business opportunities and information. Potential constraints used in the survey questionnaire are discussed in the following sections, while a model linking owners' perceptions of constraints to their perceptions of business opportunities and information is specified and estimated in section five.

### **2.1 Socioeconomic constraints**

Constraints such as a lack of public infrastructure services and reduced access to profitable markets, may result from an SMME's spatial distance from urbanized areas within the demarcated municipal boundaries in KZN. These boundaries are demarcated by local authorities. Areas situated far from urbanized centers within municipal boundaries can be classified as 'rural' (Smit, 1997, cited by Rogerson, 1999). Rogerson (1998) found that the availability of infrastructure services is often directly linked to the location of

business. The SMMEs located closer to urban centers often have better access to services compared to those in poorer rural areas (Naude, 1998; Berry *et al*, 2002; Klitgaard and Fitschen, 1997; Matangul *et al*, 2001). Necessary services for business survival and growth include access to water, electricity, serviceable roads, telecommunications, postal services and protection from crime.

Lack of access to markets in a SA and KZN context is inseparable from, and inexplicable without reference to, the history of displaced communities that have been separated from mainstream markets (Berry *et al*, 2002). These rural communities have been spatially isolated in areas that typically have a sparse resource base, limited cash circulation, and negligible information about product opportunities outside survivalist trading, services or production activities. Consequently, rural entrepreneurs often compete within a small, location specific with relatively low-income clients, where fewer customers may afford their product. Larger, more developed markets may be situated at prohibitive distances from the entrepreneur's home, and the entrepreneur's proximity to both buyers and suppliers constrains business performance. Lack of own transport markedly increases the transaction costs for enterprises based in remote rural areas or at large distances from main roads (Rogerson, 1998). Moser (1997) found that rural SMMEs, as a result of their greater distance from developed markets, place a high value on social capital or contact networks. A lack, or absence, of such networks potentially places a major constraint on agribusiness SMME survival and growth (Fenwick and Lyne, 1999).

## **2.2 Institutional constraints**

Institutional constraints may arise directly or indirectly from a perceived lack of either government or private sector support for SMMEs.

### *2.2.1 Lack of government support for SMMEs*

Entrepreneurs may interpret the administrative and financial burdens placed on their enterprise by having to comply with a range of government legislated procedures and laws as a lack of government support for the agribusiness SMME sector. Lack of investment, or start-up, capital and difficulty in accessing investment capital have been identified by SMME owners in SA as a major constraint to their business survival and growth. Inadequate property rights and an absence of title deeds in many developing countries results in a lack of collateral necessary to access to investment capital, and creates a lack of incentive to make fixed improvements to land, which compounds the problem

of low collateral. Difficulties in accessing investment capital may also arise from SMME owners' lack of understanding of loan application procedures, or a private lending institution's bias against SMMEs due to the relatively high costs of administering relatively small loans (Bannock, 2002).

Smaller business owners often perceive that SA labour legislation is overly complex and favourably biased toward businesses with less labour relative to capital employed. Bannock (2002) cites the success of labour brokers in SA as evidence of an overly complex labour regulatory system. Specific aspects of SA labour legislation identified as imposing either financial or administrative constraints on SMME operations include paying a skills levy, and managing employees' Unemployment Insurance Fund (UIF) payments (Rogerson, 1998). Owners of SMME have also expressed the perception that government-legislated Value Added Tax (VAT) imposes a disproportionate burden on smaller businesses in SA. This burden is attributed to the complexity of VAT registration and administration, and to cash flow stress - interest is lost prior to receipt of VAT refunds, and VAT is paid at the point of invoice rather than the point of receipt (Bannock, 2002).

Some timber harvester contractors KZN have cited the Forestry Act as a constraint on their business performance. Sugarcane harvest contractors, for example, report that the legislation enforcing 'no controlled burning during weekends' hampers their productivity, as they cannot burn sugar cane tops, which is necessary prior to harvesting, during two days of the week (Pringle, 2003). SA entrepreneurs have also expressed dissatisfaction with government's procurement and tender policies, their access to government tenders and the transparency with which government tenders are awarded. Some SMME owners suggest that government could provide support for the SMME sector by awarding more tenders to smaller businesses and disseminating more information about upcoming tenders to the SMME sector (Naude, 1998). At firm level, however, a lack of skills or training may reduce an entrepreneur's understanding of, and ability to complete, the application process for such tenders (Rogerson, 1999). Fuller (2003) believes that access to government-supplied skills training is a key factor affecting the success or failure of SMMEs in SA. Increased skills training may also improve an entrepreneur's ability to overcome many of the constraints discussed previously in this section.

### *2.2.2 Lack of private sector support for SMMEs*

Once a business has started up, access to expansion or working capital may be restricted by an entrepreneur's difficulties in understanding private sector loan financing schemes, weak organizational arrangements, overly complex

application procedures, and private lending institutions' bias against financing SMMEs (Naude, 1998). Access to markets may also be a constraint if appropriate intermediary and private institutions do not interface with SMMEs to link entrepreneurs with potential buyers and suppliers of inputs. Subcontracting linkages between large enterprises and emerging SMMEs are an important element in facilitating SMME sector growth (Naude, 1998). Private intermediaries and parastatal organizations like development financiers can provide SMME support through training activities, business counseling, advice on contract tenders, and help in securing loans (Mead, 1998).

### **2.3 Firm level barriers**

An SMME owner's lack of knowledge or management skills, or inability to multi-task, and not competing products, may cause business failure (El Namaki, 1990; Hoad and Rosko, 1964). Young small firms may also face severe under-capitalisation and liquidity problems. Knight (1981) states that most enterprises are started with a small equity base that only grows when the firm generates retained earnings from operations. Owners and managers frequently lack the ability to present a convincing business plan to lending institutions, and lending institutions are often biased against financing small business. The issue of loan collateral is important for small businesses, as they seldom own sufficient fixed assets to qualify for bank loans. Cash flow problems can be exaggerated when entrepreneurs invest heavily in start-up equipment (Bhide, 2000).

Escalante (1996) cites low quality, and high turnover, of labour as common obstacles encountered by newly established firms. Smaller firms can seldom afford the wage rates necessary to attract highly qualified or skilled labour and employees rarely remain in small firms as they accept more lucrative employment opportunities from larger, more established firms. The physical facilities and business premises used by many small businesses are often inadequate to provide any long-run competitive threat to larger established enterprises, and many small businesses can seldom afford sufficient technology at start-up (Karlson, 1994 cited by Escalante, 1996).

The biggest threat to new SMMEs in the early part of their business operations is often the well-entrenched, secure position of strong competitors who have already captured a portion of the existing market (Porter, 1979). Combined with the firm level barriers described above, this makes them particularly vulnerable to rivalry from competing sellers, the bargaining power of buyers and input suppliers, the threat of new entrants to their product markets, and the threat from substitute products in other industries (Porter, 1980). A

comprehensive review of 98 articles on factors responsible for the success of SMMEs around the world by Nieuwenhuizen and Kroon (2003) identifies business knowledge, market orientation, financial knowledge and management, and creativity and innovation, as key firm-level factors affecting successful business performance.

The above review shows that the constraints to survival and growth faced by SMMEs may result from one, or a combination of, dimensions such as lack of access to public infrastructure, a lack of public sector support, restrictive government policies, the nature of an emerging SMME, an entrepreneur's lack of management and/or innovation skills, or a lack of private sector intermediary support. Constraints suggested by this review were included in the survey questionnaire for the selected agribusiness SMME owners in KZN to assess. Principal Component Analysis was then used to try and group the respondents' perceptions to see if these dimensions apply to local SMMEs as described in section three.

### **3. SAMPLE SURVEY DESIGN AND RESPONDENTS' CHARACTERISTICS**

#### **3.1 Sample survey design and questionnaire**

Study data were collected via personal interviews with 44 Ithala agribusiness SMME clients during the period October 2003 to January 2004. All of the respondents had secured loans with Ithala to fund either the creation or expansion of their own agribusiness. The 44 clients were selected by applying stratified random sampling to the population of 266 agribusiness SMMEs financed by Ithala in KZN at the time of the study. These 266 SMMEs were divided into mutually exclusive subgroups or strata that were as homogenous as possible given the available information (Barnett, 1991). Ithala classifies clients according to their 'main business category', and these categories were used as the four strata, namely: Harvester contractors (timber and sugarcane), Processors (mainly maize millers and butcheries), Retailers (furniture, farm machinery repair, spaza shop, beer distributor, etc.) and Speculators (cattle traders).

A fixed, constant proportion (sampling fraction) of 20 percent was selected from the N agribusinesses in each of the four strata to make up the stratified random sample. This sampling fraction exceeded the 15 percent that would be sufficiently representative for multivariate analysis and takes into account the relatively high search costs of collecting data from spatially dispersed sampling units (Barnett, 1991; Lyne, 2003; Ramroop, 2003). The reason was that given limited survey resources, and client work schedules, the researchers



could not guarantee being able to interview all of the selected agribusinesses. The final stratified random sample for the study, shown in Table 1, had sample fractions of over 15 percent for each stratum. Sampling fractions are similar across strata, therefore strata can be aggregated without weighting.

The questionnaire presented to the sample respondents identified 36 potential socioeconomic, institutional and firm level constraints on SMME survival and growth that were derived

**Table 1: Sample strata and cases, Ithala agribusiness SMMEs, 2003-2004**

Enterprise type (stratum)	Cases per stratum (N)	Cases in sample (n)	Sample cases as a % of stratum cases (n/N)
Harvester contractors	146	23	15.8
Processors	46	8	17.4
Retailers	45	8	17.8
Speculators	29	5	17.2
<b>Total</b>	<b>266</b>	<b>44</b>	<b>16.54</b>

from the research review in section two, and discussions with Ithala personnel (Pringle, 2003). Respondents were asked to rank each of the 36 potential constraints on Likert-type scales ranging from one (perceived minor constraint) to five (perceived major constraint). Further questions attempted to quantify SMME owners' perceptions of the business opportunities and information available to them. Respondents were asked to agree or disagree with statements about the existence of local, provincial, national and international business opportunities, and information on business opportunities. Response scores ranged from four (strongly agree) to one (strongly disagree).

### 3.2 Characteristics of sample survey respondents

The characteristics of the survey respondents are summarized in Appendix A and discussed in the following sections.

#### 3.2.1 Loan type and size, and number of employees

Almost half of the respondents had secured equipment loans with Ithala, while loans for land and fixed improvements, and working capital made up 34% and 18%, respectively, of the responses. The average approved loan amount (ALA) for the sample was R421,600 compared to average loan collateral (LC) of R943,475. The Harvester contractors and Retailers strata had the highest average ALA's of R623,261 and R731,515 respectively. Speculators had the lowest average ALA of R134,518 but the highest LC to ALA ratio (2.97). The average number of employees in the sample enterprises was 30,

with a sample mode (most frequent size) of five employees. Harvester contractors had the highest average number of staff, while Speculators had the lowest staff complement.

### 3.2.2 *Characteristics of enterprise owners*

Almost half (45%) of the respondents were between 41 and 50 years of age, while 32% were in the 50-60 year range, 20% between 30 and 40 years, and one speculator was under 30 years old. Female owners made up 16% of the sample, and were mainly Retailers. About 41% of respondents had qualified at tertiary level (certificate, diploma or bachelors degree) and 36% had passed Matric. Only nine percent of the sample had a Standard 6 level education, and 14% had completed some high schooling. Nearly 70% of enterprise owners had over five years experience in their current industry at enterprise start-up, with Harvester contractors (83%) and Retailers (88%) being the most experienced. Respondents with less than one year's experience and between one and five years experience accounted for 14% and 18% of the sample, respectively. Bookkeepers were hired either contractually or permanently by 73% of enterprises, and 32% of respondents had supplementary income from one or more other source. Finally, 70% of respondents felt that their business was generating sufficient income to support themselves and their dependents. The next section analyzes the respondents' perceptions of the factors that constrain their agribusiness SMME survival and growth.

## **4. OWNER PERCEPTIONS OF CONSTRAINTS ON AGRIBUSINESS SMME SURVIVAL AND GROWTH**

### **4.1 Mean ratings of potential constraints**

Table 2 shows the mean score for each potential constraint reported in Appendix A for the sample, and for each stratum, in descending order. Insufficient government support for agribusiness SMMEs was ranked the highest constraint overall to business survival and growth (mean score of 3.86 out of five), and it was the main perceived constraint for Speculators and Harvester contractors. Respondents felt that government legislation and policy were biased towards larger businesses, government officials were not sufficiently trained to understand an entrepreneur's job, and government should either reduce the amount of legislation SMMEs must comply with or provide more accessible information and skills enabling SMMEs to cope with these 'rules and regulations'.

**Table 2: Mean scores (out of a potential maximum of five) for potential constraints to business survival and growth for the sample and each stratum**

Rank	Potential constraint	Sample mean score (n = 44)	SPE mean score (n = 5)	HAR mean score (n=23)	RET mean score (n=8)	PRO (mean score (n = 8)
1	Insufficient government support *	3.86	4.20	4.17	3.63	3.00
2	Lack of access to start-up capital	3.45	3.20	3.35	3.88	3.50
3	Cash flow stress	3.27	3.60	2.91	3.88	3.50
4	Lack of access to capital for expansion	3.14	3.40	2.61	3.50	4.13
5	Too many rules and regulations *	3.05	4.00	3.17	2.63	2.50
6	Crime *	3.00	4.20	3.04	2.75	2.38
7	Complex labour legislation*	2.80	3.20	3.00	2.88	1.88
8	Paying and complying with VAT*	2.68	2.60	3.00	2.50	2.00
9	Insufficient private sector support	2.64	2.00	2.96	2.63	2.13
10	Complying with minimum wage legislation*	2.61	2.60	3.09	2.00	1.88
11	Competition	2.50	3.00	2.22	2.50	3.00
12	Lack of access to skills training	2.34	3.00	2.30	2.25	2.13
13	Bargaining power of suppliers	2.27	3.60	2.22	2.00	1.88
14	Lack of access to good roads	2.25	2.40	2.30	2.88	1.38
15	Bargaining power of buyers	2.18	3.00	2.22	2.25	1.50
16	Lack of access to telecommunications	2.05	2.60	1.78	2.88	1.63
17	Lack of management skills	1.98	2.00	2.09	2.38	1.25
18	Low labour quality	1.95	2.80	1.70	2.88	1.25

Rank	Potential constraint
19	Paying a skills levy
20	Threat of new entrants
21	Lack of access to water
22	Insufficient technology
23	Insufficient property rights
24	Substitutes
25	Lack of access to electricity
26	Lack of access to tender contracts
27	Managing employee UIF contributions
28	Scarce information about tender contracts
29	Distance to suppliers
30	Too few customers
31	Too few contacts in my industry
32	Lack of own transport
33	Lack of access to postal services
34	Distance from potential buyers
35	Inadequate business premises
36	Forestry Act

Note: SPE = Speculators; HAR = Harvester contractors; RET = Retailers; PRO = Processors.

\* Denotes constraints (that rank in the top ten) resulting from government legislation.

Access to start-up capital was ranked second overall as a constraint to business survival and growth (mean score of 3.45). Respondents, particularly Retailers, believed that this may be due to private financial institutions being reluctant to finance small business start-ups due to the perceived risk associated with SMMEs. This supports previous research in SA reported by Bannock (2002). Respondents also attributed this constraint to their lack of collateral, or difficulty in understanding and completing loan application procedures. Cash-flow stress was the third ranked constraint (mean score of 3.27), probably due less to the seasonal nature of incomes for agriculture-related enterprises, and more to capital requirements at start-up. The stratum most affected by the seasonality of agriculture-related incomes – Harvester contractors – had the lowest score of the four strata on this constraint (2.91), as many had actively tried to manage this constraint by accessing a revolving loan or purchasing dual-purpose trailers to transport both sugarcane and timber, thus reducing their dependence on seasonal sugarcane harvesting contracts. Respondents also stated that having to comply with VAT legislation added considerably to their cash-flow stress.

Access to capital for expansion, ‘too many rules and regulations’, and crime were ranked fourth, fifth, and sixth overall (mean scores of 3.14, 3.05 and 3.00, respectively). Lack of access to capital for expansion – particularly for Processors, Retailers and Speculators – was again attributed to private financial institutions being reluctant to finance small business start-ups due to the perceived risk. Speculators in this sample seemed to be relatively more affected by crime (average score of 4.20), which they attributed to incidents of livestock theft. Many respondents felt that legislation relating to their businesses was designed for larger corporate sector businesses, and that smaller businesses lacked the skills and management time to handle compliance.

Reports of crime also included theft of inputs such as diesel, fertilizer and chemicals, and of spare mechanical parts and batteries. Three Harvester contractors had been hijacked and their vehicles had not been recovered. Security guards, fences and alarm systems were perceived to reduce the threat of crime but impose another relatively large expense on SMMEs.

Complex labour legislation and minimum wage legislation were ranked seventh and tenth respectively, with the highest ratings from Harvester contractors. Respondents believed that employees were not aware of the rights of employers, and three respondents claimed that some of their HIV positive employees injured themselves deliberately at work in order to claim compensation under the Workman’s Compensation Act. Some Harvester contractors viewed mechanization as the only strategy to deal with current

labour legislation, while others believed that SMMEs would have to just 'get used to' dealing with the legislation. Paying a skills levy was ranked as the nineteenth most limiting constraint. This levy can be reimbursed on application, but over half of the 19 owners who paid the monthly levy considered the procedure was too complicated and that the levy was an extra tax. Harvester contractors' relatively higher scores for the minimum wage constraint probably reflect the impact of their increased demand for casual labour (higher staff complements) during sugarcane and timber harvesting (Nhleko, 2003).

Paying and registering for VAT was ranked the eighth most limiting constraint overall, with a mean score of 2.68. This procedure was generally perceived by respondents to increase their business cash-flow stress. Some businesses were paying a bookkeeper primarily to ensure VAT compliance. The VAT registration procedure was seen as too complex for smaller businesses, while owners also stated that SMMEs not registered could undercut the prices of their competitors who had registered as VAT vendors. These results support conclusions reached by the World Bank Task Team (2000) in SA.

The constraints perceived by this sample of 44 agribusiness SMME owners as major barriers to firm survival or growth are similar to those identified in previous studies on SMMEs in SA. The results suggest the constraints faced by agribusiness SMMEs are not necessarily all distinct from those faced by non-agriculture-related businesses. The next section uses Principal Component Analysis to reduce the 36 potential constraints into fewer components or dimensions (Manly, 1986) in order to try and derive policy and strategy recommendations for addressing these constraints.

#### **4.2 Principal component analysis of owners' perceived constraints on agribusiness SMME survival and growth in KwaZulu-Natal**

Principal Component Analysis (PCA) aims to economize on the number of variables and to summarize the information contained in a number of correlated variables (in this case the 36 constraints) into a smaller set of uncorrelated dimensions with minimal loss of information (Manly, 1986). The decision about which principal components to retain depends on the percentage of the variance accounted for the variable, the absolute variance accounted for by each principal component (PC), and whether the component can be *meaningfully interpreted*. The PC's can be estimated as linear functions of the original 36 variables (constraints) per equation (1) below:

$$PC_i = a_{i1}X_1 + a_{i2}X_2 + \dots + a_{i36}X_{36} \quad (1)$$

where  $i = 1 \dots 36$ ;  $a_{i1} \dots a_{i36}$  = the component loadings; and  $X_1 \dots X_{36}$  = the 36 constraints listed in Appendix A.

Twelve PCs with eigenvalues greater than one were derived from the 36 potential constraints, and these PCs together explained 79.4% of the variance in the data. Varimax rotation was used to transform the components into factors that were more clearly interpretable (Manly, 1986). The first nine factors explained 70% of the variance in the data and factors one to twelve are presented in Table 3. Factors nine to twelve individually explained less than 4.3 % of the variance. The communalities for all of the variables exceed 0.68, implying that at least 68% of each variable's variation is accounted for by the common factors (Jolliffe, 1986).

Factor 1 had relatively high loadings greater than 0.40 for access to electricity, inadequate business premises, lack of own transport, access to water, roads, postal services and telecommunications, and crime. Factor 1 was, therefore, labeled 'Lack of services' as these variables relate to infrastructure services not easily accessible in rural areas. A lack of own transport implies extra expenditure to travel to markets, and crime may be a consequence of poverty prevalent in rural areas (Berry *et al*, 2002). Factor 2 was defined as 'Funding constraints at start-up' as distance to suppliers, insufficient technology, and labour quality had the highest loadings for this factor. Escalante (1996) stated that low quality of labour was a common obstacle encountered by newly established SMMEs, as they can seldom afford the wage rate necessary to attract more skilled labour. Financial constraints at start-up can also result in a lack of access to technology and an inability to procure ideally situated business premises.

Factor 3 represents 'lack of management capacity in enterprise' as the variables competition, threat of new entrants, and threat from substitute products, had the highest positive loadings, while complex labour legislation and 'too many rules and regulations' had high negative loadings. The variables with positive factor loadings describe key aspects of competition in an industry (Porter, 1980). The negative signs on complex labour legislation and 'too many rules and regulations' therefore imply that agribusiness SMME owners that find competition as a threat to profitability had the management ability to overcome the barriers to business growth and survival posed understanding and implementing labour legislation and other 'rules and regulations', and progressed to a stage where competitive forces become affect their business' profitability.

**Table 3: Rotated factor loadings of potential constraints to SMME survival and growth and average factor scores for strata**

Factor		1	2	3	4	5	6	7	8	9	10	11	12
Eigenvalue		6.957	3.690	3.264	2.415	2.300	1.844	1.770	1.538				
Percentage of variance explained		19.32	10.25	9.07	6.708	6.388	5.121	4.917	4.271				
<b>Potential constraints on the survival and growth of the business</b>	Communalities	'Lack of services'	'Funding constraints at start-up'	'Lack of management capacity in enterprise'	'Access to tender contracts'	'Compliance costs'	'Liquidity stress'	'Lack of collateral'	'Lack of institutional support'	Distance to buyers	Lack of bargaining power	Not interpretable	Lack of access to training
Lack of access to electricity	0.837	<b>0.819</b>	0.013	0.020	-0.066	0.070	0.244	0.187	0.014	0.113	0.019	0.219	0.015
Inadequate business premises	0.770	<b>0.734</b>	0.070	-0.039	-0.070	-0.260	-0.152	-0.027	-0.060	0.272	0.112	-0.176	-0.083
Lack of own transport	0.804	<b>0.703</b>	0.046	0.113	-0.159	-0.203	0.059	0.057	0.026	0.433	0.109	-0.065	0.132
Lack of access to water	0.733	<b>0.701</b>	0.131	0.063	-0.227	-0.013	0.352	0.083	-0.068	-0.068	0.152	-0.033	0.080
Lack of access to roads	0.733	<b>0.659</b>	0.153	0.077	0.259	0.147	0.159	-0.202	0.196	-0.212	-0.102	0.065	-0.130
Lack of access to telecommunications	0.790	<b>0.646</b>	0.243	0.027	0.355	-0.095	0.182	0.286	-0.037	-0.049	-0.044	0.240	-0.154
Crime	0.779	<b>0.499</b>	0.136	-0.269	0.326	0.129	0.078	-0.334	0.220	0.212	0.155	-0.198	0.204
Lack of access to postal services	0.829	<b>0.487</b>	0.120	0.245	0.460	-0.104	-0.147	-0.024	-0.092	-0.073	0.453	-0.223	0.065
Lack of contact networks in my area	0.776	<b>0.443</b>	0.292	0.351	0.181	0.164	-0.259	0.014	0.186	0.348	-0.079	0.040	0.285
Lack of customers in my area	0.823	<b>0.493</b>	0.610	0.180	0.109	0.099	-0.222	0.145	-0.140	0.108	0.048	0.218	0.046
Labour quality	0.869	0.285	<b>0.791</b>	-0.040	-0.024	-0.005	-0.004	-0.077	-0.295	0.139	0.121	0.123	0.139
Distance to suppliers	0.887	0.044	<b>0.790</b>	0.226	0.225	0.198	0.110	0.140	0.209	-0.017	0.052	0.029	-0.205
Insufficient technology	0.799	0.156	<b>0.575</b>	0.078	0.397	-0.102	0.312	0.121	0.027	-0.182	0.317	0.096	0.119
Competition	0.747	0.241	0.278	<b>0.695</b>	-0.137	-0.037	-0.045	-0.093	-0.089	0.046	-0.177	-0.074	0.226
Too many rules and regulations	0.773	0.151	-0.037	<b>-0.646</b>	-0.066	0.366	-0.139	-0.096	-0.048	0.323	-0.164	-0.124	0.127
Complex labour legislation	0.881	-0.144	0.397	<b>-0.640</b>	0.119	0.407	0.012	-0.231	-0.054	-0.041	-0.017	0.113	0.209
Threat of new entrants	0.704	0.013	0.286	<b>0.626</b>	0.062	0.199	0.122	0.181	-0.117	0.092	0.299	0.158	0.054
Substitutes	0.768	0.019	-0.002	<b>0.625</b>	0.132	-0.072	0.245	-0.151	-0.257	0.441	-0.073	-0.072	0.022
Lack of access to tender contracts	0.736	-0.050	-0.001	-0.090	<b>0.848</b>	0.036	-0.039	0.016	-0.037	0.025	0.016	0.040	-0.020
Scarce information about tender contracts	0.797	0.000	0.242	0.087	<b>0.831</b>	0.032	0.038	0.007	-0.054	-0.124	-0.013	0.111	0.085
Paying a skills levy	0.728	-0.086	0.143	-0.144	-0.168	<b>0.796</b>	-0.012	0.066	0.019	0.058	0.052	-0.076	-0.044

Managing Employee UIF contributions	0.684	-0.052	0.021	-0.005	0.234	<b>0.736</b>	-0.084	-0.039	-0.022	-0.160	0.071	0.145	-0.153
Paying and complying with VAT	0.889	0.257	-0.119	0.220	0.196	<b>0.438</b>	-0.010	-0.548	0.259	-0.035	0.083	0.392	0.014
Lack of access to expansion capital	0.737	0.235	-0.019	0.085	0.109	-0.011	<b>0.770</b>	0.142	0.056	0.079	0.083	-0.177	-0.024
Cash flow stress	0.757	0.281	0.234	0.188	0.011	-0.385	<b>0.610</b>	-0.134	-0.125	-0.025	-0.145	0.097	-0.048
Lack of access to start-up capital	0.768	0.153	0.246	0.047	0.108	0.196	0.163	<b>0.749</b>	0.136	-0.067	-0.014	-0.096	-0.109
Insufficient property rights	0.889	0.270	-0.280	0.245	0.022	-0.261	-0.063	<b>0.634</b>	0.135	-0.094	0.042	0.315	0.274
Insufficient private sector support	0.807	0.131	-0.099	-0.030	-0.110	-0.086	-0.129	0.053	<b>0.845</b>	-0.124	-0.066	-0.081	0.022
Insufficient government support	0.841	-0.069	0.014	-0.413	0.005	-0.054	0.118	0.069	<b>0.715</b>	0.202	0.110	0.033	0.280
Distance to buyers	0.858	0.169	0.045	-0.018	-0.104	-0.043	-0.062	-0.055	-0.016	<b>0.897</b>	0.038	0.037	0.039
Strong bargaining power of buyers	0.829	0.413	0.214	0.051	-0.292	-0.138	-0.074	-0.143	0.184	0.205	<b>0.581</b>	0.160	-0.204
Strong bargaining power of suppliers	0.884	0.057	0.093	-0.008	0.063	0.174	0.023	0.030	-0.034	-0.041	<b>0.905</b>	0.038	0.117
Minimum wage	0.730	0.072	0.235	-0.025	0.169	0.048	-0.097	-0.041	-0.045	0.007	0.103	<b>0.769</b>	-0.150
Forestry Act	0.706	-0.039	-0.015	-0.048	0.293	-0.021	-0.538	-0.019	0.290	-0.055	0.187	<b>-0.448</b>	0.048
Lack of access to training facilities	0.863	0.025	0.016	0.020	0.061	-0.095	-0.061	-0.019	0.147	0.068	0.084	-0.142	<b>0.889</b>
<b>Average factor scores for each stratum</b>													
Harvesters		-0.17	-0.13	-0.15	0.09	0.04	-0.32	-0.10	0.335				
Retailers		0.76	0.33	-0.02	-0.29	-0.11	0.15	0.38	-0.292	-0.106	-0.003	0.312	-0.044
Processors		-0.52	-0.27	0.72	0.08	0.13	0.52	0.23	-0.502	-0.179	-0.360	0.019	0.095
Speculators		0.38	0.51	-0.42	-0.10	-0.22	0.42	-0.51	-0.273	0.376	-0.170	-0.663	-0.310
										0.174	0.863	-0.405	0.545



Factor 4 was defined as 'Access to contracts' (access to tender contracts and scarce information on tenders scored highly) and may relate to SMME owners' perceptions that government and the private sector in KZN are biased towards larger businesses in awarding tender contracts. Factor 5 was labeled 'Compliance costs' as all variables with higher loadings have financial or administrative costs associated with complying with legislation; paying a skills levy, managing and making UIF contributions, and paying/complying with VAT. Access to expansion capital, and cash flow stress, had the highest loadings on Factor 6, which reflects 'Liquidity stress'. Factor 7 was labeled 'Lack of collateral', as access to start-up capital and lack of a transferable title deed scored highly, implying that uncertain property rights reduce access to loans when a lack of alternative collateral requires property as security for a loan (Bannock, 2002). Factor 8 isolates a lack of public and private institutional support for agribusiness SMMEs and suggests a role for promoting business linkages between SMME's and larger organizations and parastatals to facilitate market access, skills transfer and input procurement.

Table 3 also shows the average score for each stratum for each of the eight rotated factors. Retailers score highest on Factor 1 - 'Lack of services' - supporting the view that communities in spatially isolated areas with a relatively sparse resource base and limited cash circulation have limited information about product opportunities outside survivalist trading or provision of inexpensive services (Berry *et al*, 2002). Retailers and Speculators seem to be relatively more affected by 'funding constraints at start-up', with average scores for Factor 2 of 0.33 and 0.51, respectively. Processors seem to perceive 'Competitive forces' as more of a constraint than do the other agribusiness types. Processors and Speculators also rank 'Liquidity stress' relatively more highly, while perceived 'Lack of (government and private sector) institutional support' is the main dimension for Harvester contractors. The next section examines the relationship between agribusiness SMME owners' perceptions of the constraints to their business and their perceptions of the business opportunities and information available to them.

## **5. DO OWNERS' PERCEPTIONS OF BUSINESS CONSTRAINTS AFFECT THEIR PERCEPTIONS OF BUSINESS OPPORTUNITIES AND INFORMATION?**

The types of business opportunities, and information about these opportunities, apparent to an entrepreneur, are partly determined by the entrepreneur's perceptions about factors in the external environment (Shane, 2004; Guzman and Santos, 2001). The sample agribusiness SMME owners' scores for the 36 constraints to business survival and growth are proxies for their perceptions of

the relative impact of these external factors. Respondent assessments of the statements regarding various potential business opportunities were used to quantify their perceptions of local, provincial, national and international business opportunities, and information regarding business opportunities available to them. Section 5.1 presents empirical models that analyze whether the hypothesized link between these sets of perceptions was supported in the sample of 44 agribusiness SMME owners in KZN.

### 5.1 Empirical models linking owners' perceptions of constraints to owners' perceptions of business opportunities and information

Equations (2) to (4) were estimated by Ordinary Least Squares (OLS) regression in a preliminary analysis of whether the perceived constraints discussed in section four affected the SMME owners' perceptions of whether local (within municipal boundaries) (LOCOPP), provincial (within KZN) (PROVOPP), and international (INTERNOPP) business opportunities and information regarding potential business opportunities (INFO) were available to them (perceptions of national business opportunities were omitted as these were not statistically significantly correlated with any of the 36 constraints):

$$\begin{aligned} \text{LOCOPP} = & 3.733 + 0.101\text{INFO} - 0.096\text{NEWENT} - 0.098\text{BARGSUPP} & (2) \\ & (17.109)^{***} \quad (1.325)^{\text{NS}} \quad -(1.733)^* \quad -(1.876)^* \\ R^2 = & 0.182 \quad F = 2.962^* \end{aligned}$$

$$\begin{aligned} \text{PROVOPP} = & 2.163 + 0.206\text{PROXBUR} - 0.124\text{MANSKILLS} - 0.180\text{BARGSUPP} \\ & (3.178)^{***} \quad (2.239)^{**} \quad -(1.805)^* \quad (3.435)^{***} \\ & + 0.305\text{INTERNOPP} + 0.214\text{LOCOPP} & (3) \\ & (3.465)^{***} \quad (1.339)^{\text{NS}} \\ R^2 = & 0.582 \quad F = 10.582^{***} \end{aligned}$$

$$\begin{aligned} \text{INTERNOPP} = & 0.046 - 0.246\text{COMP} - 0.019\text{MANSKILLS} + 0.321\text{INFO} \\ & (0.082)^{\text{NS}} \quad -(4.356)^{***} \quad -(0.239)^{\text{NS}} \quad (3.608)^{***} \\ & + 0.642\text{NATOPP} + 0.102\text{PROVOPP} & (4) \\ & (5.089)^{***} \quad (0.670)^{\text{NS}} \\ R^2 = & 0.740 \quad F = 21.675^{***} \end{aligned}$$

Where:

INFO	= Perceived availability of information on all potential business opportunities
NEWENT	= Threat of new entrants to owner's product market,
BARGSUPP	= Perceived input supplier bargaining power,
PROXBUY	= Distance from buyers,
MANSKILLS	= Lack of management skills,
COMP	= Competition from other businesses,
EXLEGN	= Excessive legislation,
GOVSUPP	= Lack of government support for SMMEs,
BUSPREM	= Inadequate business premises,

t-statistics are shown in parentheses, and \*\*\*, \*\*, \* and NS imply statistical significance at the 1%, 5% and 10% levels, and non-significance, respectively.

LOCOPP, PROVOPP and INFO are all expected to have a positive effect on perceptions of business opportunities, as more positive perceptions of these variables may encourage an entrepreneur and increase his/her confidence and conviction that business opportunities outside of municipal boundaries, KZN or SA are available. The variables BARGSUPP, NEWENT, PROXBUY, and COMP should negatively affect perceptions of business opportunities, as these were identified as constraints to SMME survival and growth in section two. The variables EXLEGN, MANSKILLS, GOVSUPP and BUSPREM are also likely to negatively affect perceptions of business opportunities, as these variables are constraints that will increase the entrepreneur's difficulty in finding and interpreting information on business opportunities (Kahneman *et al*, 1989; Scottish Enterprise, 2000).

The estimated coefficients for BARGSUPP and NEWENT in equation (2) are statistically significant at the 10% level of probability and have the expected negative signs. Both the perceived bargaining power of suppliers and the threat of new entrants thus negatively affect a respondent's perception of the availability of business opportunities within TLC boundaries. Equation (3) shows that perceptions that business opportunities are available throughout KZN were positively related to strong perceptions of international opportunities (INTERNOPP). The negative estimated coefficients for BARGSUPP and MANSKILL imply that strong bargaining power of suppliers and a lack of management skills reduce perceptions that business opportunities are available throughout KZN. The statistically significant positive coefficient estimate for PROXBUY implies that as perceived problems with distance to markets increase, there are fewer perceived opportunities within KZN and more opportunities in other provinces. In equation (4), positive perceptions of business opportunities throughout SA (NATOPP) and

available information on business opportunities (INFO) increase the available international business opportunities (INTERNOPP) perceived by the survey respondents. The negative estimated COMP coefficient indicates that the perceived strong competition negatively affects an entrepreneur's perceptions that business opportunities are available internationally.

Finally, equation (5) suggests that the respondents' perceptions of whether information on business opportunities was available was negatively affected by their perceptions of insufficient government support and a lack of management skills:

$$\begin{aligned} \text{INFO} = & 4.730 - 0.179 \text{ BUS PREM} - 0.254 \text{ MANSKILLS} - 0.223 \text{ GOVSUPP} \\ & (9.069)^{***} \quad -(1.142)^{\text{NS}} \quad -(2.097)^{***} \quad (2.053)^{***} \\ & -0.137 \text{ EXLEGN} \\ & -(1.404)^{\text{NS}} \end{aligned} \quad (5)$$

$$R^2 = 0.315 \quad F = 4.481^{***}$$

Equations (2) to (5) indicate some support for the Guzman and Santos (2001) hypothesis that an entrepreneur's perceptions about external and firm level factors do affect his/her perceptions about whether business opportunities, and information about such opportunities, is available. Some policy and strategy implications of the results in this section and in section 4 are discussed in section 6.

## 6. CONCLUSIONS AND POLICY IMPLICATIONS

Respondents in a stratified random sample of 44 agribusiness SMME owners in KZN perceived that a lack of government support for agribusiness SMMEs was the major overall constraint to business survival and growth. This resulted partly from the perception that SMMEs have to comply with complex legislation, including VAT registration and labour/minimum wage laws. Many of these owners also consider that they lack the capacity or resources to comply with this legislation. Despite almost 70% of respondents having over five years experience in their current business, and 40% having a tertiary qualification, access to finance was also perceived as a major constraint to business survival and growth.

Further analysis identified eight dimensions of constraints on agribusiness SMME survival and growth, namely: a lack of access to services; funding constraints at start-up; lack of management capacity in the enterprise; access to tender contracts; compliance costs associated with VAT and labour legislation; liquidity stress; lack of collateral; and lack of institutional support. A lack of

collateral and access to services seemed to affect the Retailer stratum relatively more, while Speculators considered lack of capital at start-up to be their major constraint. Harvester contractors and processors seemed to be most affected by compliance costs, while Processors were especially prone to liquidity stress. These results support findings by Wynne and Lyne (2003), which imply that small enterprise growth is constrained by poor access to credit; high transactions costs and unreliable local markets.

Many constraints perceived by the agribusiness SMME owners arise because their businesses are situated in remote rural areas. This reduces access to infrastructure services, exacerbates the problem of a lack of own transport, and increases exposure to crime. These results support findings by Fenwick and Lyne, Matangul, Lyne and Ortmann, and Klitgaard and Fitschen. The policy implication is that SMME survival and growth rates could be raised by providing, or improving the quality of, appropriate infrastructure services in rural areas. This may stimulate markets outside of urban areas by decreasing transaction costs. Lack of finance at business start-up is associated with a SMME's inability to attract skilled labour, to purchase sufficient technology, and to afford business premises close to their suppliers. Difficulty in accessing finance results from formal lending institutions being averse to financing smaller loans due to relatively high administration and information costs in the absence of collateral. Mechanisms to encourage savings mobilization, or the development of innovative loan products to suit the cash-flows of agribusiness SMMEs, and improve the risk-profiles of collateral poor entrepreneurs, could be researched further by potential financiers considering the SMME market to increase the availability of capital.

SMME owners' ability to manage the competitive forces present in their product markets could be improved by the provision of accessible and appropriate skills training services, or appropriate training at school and tertiary level. Such training could emphasize the need to understand the threats and opportunities posed by potential new entrants into product markets, competitors in the same market, and substitutes in other industries. Public and private sector institutions could also facilitate access to tender contracts, by, for example, involving neutral representatives from the private sector in the tender process to promote transparency (and good governance) in respect of resource allocation. The costs associated with complying with legislation such as the payment of skills levies, and VAT registration and payment, and labour issues could be reduced by reviewing processes for agribusiness SMMEs to access skills grants and improving small business representation on labour bargaining councils. The implications of allowing SMMEs to elect to pay income tax and VAT on a cash basis needs further research as this may reduce the a business's

cash-flow stress resulting from paying VAT at the point of invoice and from interest lost before the receipt of VAT refunds.

Liquidity stress due to a lack of access to expansion capital, and compliance with VAT and the payment of skills levies, could be mitigated by developing more flexible loan products, such as graduated payment loans; these could also improve the risk profile of cash and collateral strapped entrepreneurs. Lack of secure title deeds compounds the problem of insufficient start-up capital by reducing business collateral available for loans. A perceived lack of both government and private sector support indicates the need for developing constructive business linkages between agribusiness SMMEs and public or private institutions in KZN to increase market access, skills transfer and input procurement. Finally, business opportunities perceived by agribusiness entrepreneurs depend on the availability of information and the entrepreneur's perception of his or her management skills, proximity to markets and the bargaining power of suppliers. Further research for policy purposes is needed to determine if the constraints identified in this paper apply to agribusiness SMMEs in other provinces in SA, and how the personal characteristics of the entrepreneur, and how entrepreneurial quality and the entrepreneurs' perceptions of his/her own management skills affect business performance when he/she is faced with these constraints.

## REFERENCES

**Bannock G (2002).** *Improving the enabling environment for indigenous enterprise development and investment: Lessons of experience.* A summary of insights from six Southern African workshops. Prepared by the Small Business Project. Website: <http://www.brain.org.za> (accessed on 20 September 2002).

**Barnett V (1991).** *Sample survey principles and methods.* Edward Arnold, London.

**Berry A, Von Bottnitz M, Cassim R, Kesper A, Rajaratnam B & Van Seventer DE (2002).** *The economics of SMMEs in SA.* Trade and industry policy strategies: Draft for comment. Website: <http://www.TIPS.org.za> (accessed on 3 June 2004).

**Bhide AV (2000).** *The Origin and Evolution of New Businesses.* Oxford University Press, New York.

**Brunetti A, Kisunko G & Weder B (1997).** *Institutional obstacles for doing business.* Data description and methodology of a worldwide private sector survey. World Bank Policy Research Working Paper 1759, April 1997. Washington DC, USA.

**Business Referral and Information Network (2002).** *An enabling environment for private sector growth: lessons from international experience.* Website: <http://www.brain.org.za> (accessed on 6 June 2003).

**El Namaki MSS (1990).** Small Business – the myths and the reality. *Long Range Planning* 23(4):78–87.

**Escalante CL (1996).** *Entrepreneurial strategies against barriers to survival and early growth.* Unpublished MSc thesis, Faculty of Graduate Studies, University of Guelph, Canada.

**Fenwick LJ & Lyne MC (1999).** The relative importance of liquidity and other constraints inhibiting the growth of small-scale farming in KwaZulu-Natal. *Development Southern Africa* 16(1):141–154.

**Fuller K (2003).** Director: Lending products, Standard Bank of South Africa. *Interview with E Ryan.* Sunday Times Business Times, 23 March 2003.

**Guzman J & Santos F (2001).** The Booster Function and entrepreneurial quality: An application to the province of Seville. *Entrepreneurship and Regional Development* 13:211–228.

**Harling KF (1995).** Differing perspectives on agribusiness management. *Agribusiness* 11(6):501–511.

**Hoad WM & Rosko P (1964).** *Management factors contributing to the success or failure of new small manufacturers.* Bureau of Business Research, University of Michigan, USA.

**Jolliffe IT (1986).** *Principal Component Analysis.* Springer-Verlag. New York. USA.

**Kahneman D, Slovic P & Tversky A (1989).** *Judgment under uncertainty: Heuristics and biases.* Cambridge University Press, Cambridge, United Kingdom.

**Karlson D (1994).** *Avoiding mistakes in your small business.* Crisp Publications, Maryland, USA.

**Klitgaard R & Fitschen A (1997).** Exploring income variations across traditional authorities in KwaZulu-Natal, South Africa. *Development Southern Africa* 14(3):363–376.

**Knight RM (1981).** *Small business management in Canada.* McGraw-Hill Ryerson Ltd, Canada.

**KZN Department of Economic Development and Tourism (2000).** *Overview of the KZN economy.* Website: <http://www.kzn-deat.gov.za> (accessed on 4 April 2003).

**Liedholm C, McPherson M & Chuta E (1994).** Small enterprise employment growth in rural Africa. *American Journal of Agricultural Economics* 76:1177–1182.

**Lyne MC (2003).** *Personal communication.* Professor, Discipline of Agricultural Economics, University of KwaZulu-Natal, Pietermaritzburg, South Africa.

**Manly BFJ (1986).** *Multivariate statistical methods: A primer.* Chapman and Hall, London.

**Matangul PM, Lyne MC, Ortmann GF (2001).** Transaction costs and crop marketing of Impendle and Swayimana, KwaZulu-Natal. *Development Southern Africa* 18(3):347–361.

**Mead DC (1998).** *Small enterprise growth through business linkages in SA.* In: McEwan T (ed), *A report on six studies of small, medium and micro enterprise developments in KwaZulu-Natal and Northern Province, South Africa.* University of Natal Press Pietermaritzburg, South Africa.

**Mintzberg H (1989).** *Mintzberg on management: Inside our strange world of organizations.* Collier MacMillan Canada, Inc, Canada.

**Moser C (1997).** *Poverty reduction in SA: The importance of household relations and social capital as assets of the poor.* Unpublished Report, The World Bank, Washington DC, USA.

**National Small Business Act (1996).** *Act 102 of 1996: National Small Business Act.* Website: <http://www.info.gov.za/gazette/acts/1996/a102-96.htm> (accessed on 4 April 2003).

**Naude W (1998).** SMMEs and economic development in South Africa. *Africa Insight* 28(3/4):133–145.

**Nhleko S (2003).** *Personal communication.* Client consultant, Ithala Development Finance Corporation, Durban, South Africa.

**Nieuwenhuizen C & Kroon J (2003).** The relationship between financing criteria and the success factors of entrepreneurs in small and medium enterprises. *Development Southern Africa* 20(1):129–142.

**Parliament of the Republic of South Africa (September, 1994).** *White Paper on reconstruction and development: Government's strategy for fundamental transformation.*



Website: [http://www.polity.org.za/html/govdocs/white\\_papers/rdpwhite.html](http://www.polity.org.za/html/govdocs/white_papers/rdpwhite.html) (accessed on 3 October 2002).

**Porter ME (1979).** How competitive forces shape strategy. *Harvard Business Review* 58(2):137-145.

**Porter ME (1980).** *Competitive strategy: Techniques for analyzing industries and competitors*. Free Press, New York, USA.

**Pringle D (2003).** *Personal communication*. Agribusiness Manager, Ithala Development Finance Corporation, Durban, South Africa.

**Ramroop S (2003).** *Personal communication*. Tutor, Discipline of Statistics and Biometry, University of KwaZulu-Natal, Pietermaritzburg, South Africa.

**Rogerson CM (1998).** Rural SMME development in South Africa: The White River Area, Mpumalanga. *Africa Insight* 28(1/2):53-64.

**Rogerson CM (1999).** The support needs of rural SMMEs: The case of Puthaditjhaba, Free State Province. *Agrekon* 38(2):131-157.

**Scottish Enterprise (2000).** *How much interest is there in starting a business?* Report of Business Angel Network Activity. Website: <http://www.scottish-enterprise.com>. (accessed on 3 June 2003).

**Shane S (2004).** *A general theory of entrepreneurship: The individual-opportunity nexus*. Edward Elgar, Cheltenham, United Kingdom.

**World Bank (2000).** *South African poverty indicators*. Website: <http://www.worldbank.org/poverty> (accessed on 4 June 2004).

**World Bank Task Team (2000).** *South Africa: Constraints to growth and employment. Evidence of the Small, Medium and Micro Enterprise Firm Survey*. Macroeconomics Technical Group Africa Region. Report No 24330-ZA. Washington DC, USA.

**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

## Characteristics of agribusiness SMME survey respondents, KwaZulu-Natal, 2003-2004

Table A.1: Loan type by stratum (n=44)

Loan type	Number of Respondents				Percentage
	Harvester contractors	Processors	Retailers	Speculators	
Land and fixed improvements	7	3	4	1	34.09
Equipment	15	3	1	2	47.73
Working capital or production loan	1	2	3	2	18.18
Total	23	8	8	5	100.00

Table A.2: Loan size, and number of employees by stratum (n=44)

Loan size	Number of Respondents				Sample mean
	Harvester Contractors (n = 23)	Processors	Retailers	Speculators	
Average ALA	R623 261	R259 243	R731 515	R134 518	R421 600
Average LC	R728 988	R329 316	R768 405	R399 475	R943 475
Ave ALA/ Ave LC	1.17	1.27	1.05	2.97	1.615
Average Total Employees	47	13	16	7	30

Table A.3: Age and gender of respondents by stratum (n=44)

Age and gender	Number of Respondents				Percentage
	Harvester contractors	Processors	Retailers	Speculators	
Age					
21 – 30	0	0	0	1	2.27
31 - 40	3	2	1	3	20.45
	3	2	1	3	20.45
41 - 50	13	3	4	0	45.45
51 - 60	7	3	3	1	31.82
Total	23	8	8	5	100.00
Gender					
Female	2	2	3	0	15.91
Male	21	6	5	5	84.09
Total	23	8	8	5	100.00

**Table A.4: Highest educational level of respondents by stratum (n=44)**

Level	Number of Respondents				Percentage
	Harvester contractors	Processors	Retailers	Speculators	
Standard 6	3	1	0	0	9.09
Some High school	4	1	1	0	13.64
Matric	8	2	3	3	36.36
Tertiary Qualification	8	4	4	2	40.91
Total	23	8	8	5	100.00

**Table A.5: Years of experience in current industry by stratum (n = 44)**

Experience	Number of Respondents				Percentage
	Harvester contractors	Processors	Retailers	Speculators	
Less than one year	2	2	0	2	13.64
One to five years	2	3	1	2	18.18
More than five years	19	3	7	1	68.18
Total	23	8	8	5	100.00

**Table A.6: Commercial features by stratum (n = 44)**

Feature	Number of Respondents				Percentage
	Harvester contractors	Processors	Retailers	Speculators	
With book keepers	18	7	4	3	72.73
With Off farm income	9	3	2	0	31.81
Who consider they are making enough money	14	6	7	4	70.45