CHAPTER FIVE

PARTNERSHIPS TO COMPETE: THE SOUTH AFRICAN AGRICULTURAL INPUT INDUSTRY AND AGRIBUISNESS SECTOR

5.1 INTRODUCTION

In analysing the competitiveness of the agribusiness sector in South Africa it is imperative that the agricultural input industry is not analysed in mere isolation, but as a part of the total agribusiness system i.e. an agricultural supply chain approach is required. Commentary regarding competitiveness often mistakenly considers only the output side of the agribusiness system ('from farm to table') and thereby ignores the possible impact that the input sector may have on the competitiveness of the agribusiness sector.

In this Chapter the importance of a competitive input industry in a supply chain relationship will first be discussed. The competitiveness measurement of various agricultural input industries will then be determined by using the Relative Trade Advantage method. This status will then be related to the competitive performance of the agribusiness sector in South Africa

5.2 THE IMPORTANCE OF A COMPETITIVE INPUT INDUSTRY IN A SUPPLY CHAIN RELATIONSHIP

A "supply chain perspective" gives a particular definition to agribusiness. The integrated nature of the supply chain requires the consideration of business transactions between all production processes – from the farm, past the farm-gate right up to serving the final consumer.

Consumer behaviour will, together with technology, become the most important driving forces in the agricultural and agribusiness industry in the near future (Zuurbier, 1999). The rapid transmission of consumer demands through the supply chain to primary producers and input suppliers will thus be of great importance if agribusinesses want to compete effectively and add value to their product. The need to comply with consumer demands will also force the producers to put certain demands to input suppliers in terms of environmental, cultural and social requirements. Information flows, research and development and new innovations will become important components to allow supply chains to function effectively and efficiently.

With the advent of biotechnological inventions, together with an increase in the amount of food scares in Europe, consumers will increasingly demand safe food. As a result of this, "traceability" will become an important issue for consumers, as they will demand to know the origin of the product as well as the production process used. These factors clearly require a higher degree of interdependence and integration between the different levels of the food system, including the input system (Boehlje, Akridge & Downey, 1995).

The primary motivation for these integrated systems is to provide more accurate signals to producers and input suppliers as to what the ultimate end user, the consumer, wants in his or her food products. Spot markets will not provide such information effectively and there will inevitably be a decline in spot markets, coupled with an emergence of production contracts to ensure that products comply with the requirements of the consumer (Zuurbier, 1999).

Through this process, one could observe a trend towards integration (or partnerships) between input suppliers, producers and processors in order to ensure that the "supply chain" complies with the requirements of the consumer and experiences a reduction in transaction costs between different functions in the chain. This suggests that, in order to be able to compete in domestic as well as international markets improved co-ordination between all the elements of the agro-food chain will be required of a business system to

serve the needs of the end-consumer. If one of the partners in the chain is not competitive, the rest of the chain will struggle to meet the requirements set by the end-consumer.

This view of factors driving competitiveness is based on the "Porter-diamond" model, where inputs are categorised as one of the elements in the production factor category. The other categories include markets, support industries, firm strategies, government support and chance factors (Porter, 1990).

5.3 AN OVERVIEW OF SELECTED SOUTH AFRICAN AGRICULTURAL INPUT INDUSTRIES

The South African agricultural input industry is well developed and represented and it consists of the following sectors: equipment, including machinery and implements, fertiliser, seeds and chemicals. Activities such as financial services, advice, training etc. can also be viewed as inputs. This Chapter, however, will only focus on farm requisites i.e. equipment, fertiliser and chemicals.

In 2002/03 expenditure by South African farmers on farming requisites amounted to R36 173 million – an increase of 17% from the previous year. In Table 5.1 the individual expenditure in 2002/03 on the major intermediate inputs is illustrated.

Table 5.1: Individual expenditure in 2002/03 on the major intermediate inputs

	Value in 2002/03 (R million)	% of total
Packaging material	2 152,9	5.95%
Fuel	3 893,8	10.76%
Fertilisers	3 719,9	10.28%
Stock and poultry feed	9 058,3	25.04%
Dips and sprays	2 975, 3	8.22%

Source: National Department of Agriculture, 2004

***The equipment industry*:** South Africa has only a small agricultural machinery and implements manufacturing industry, with the majority of equipment and machinery being imported. The tractors that are manufactured in South Africa annually represent only about 5% of the total.

In Figure 5.1 the annual sales of tractors in South Africa is indicated. The high level of tractor sales in the early 1980's represents a period of relatively low interest rates. The agricultural machinery industry in South Africa has experienced an unprecedented change in its business environment during the past two years. Economic factors, such as the dramatic decline and strengthening of the rand, the raise and fall of maize and wheat prices and the decline in lending rates all have had a direct influence on the agricultural machinery business in South Africa (South Africa Agricultural Machinery Association (SAAMA), 2003).

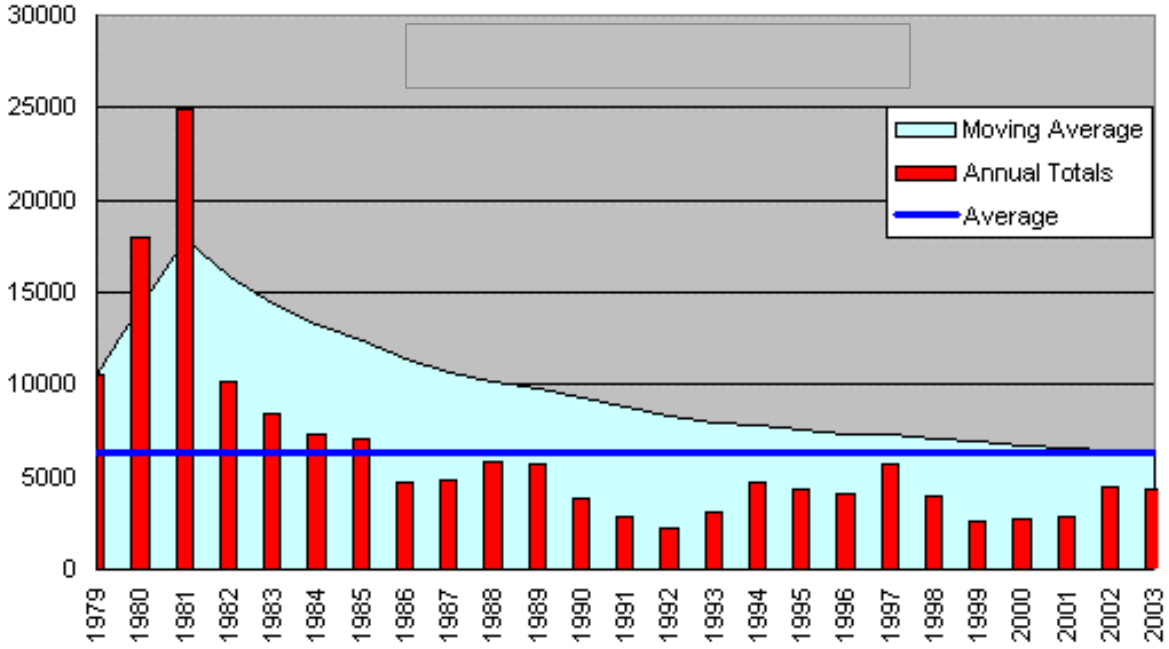

Figure 5.1: Annual sales of tractors in South Africa

Source: South African Agricultural Machinery Association, 2003

The years 2002 and 2003 have experienced a positive trend in tractor and combine sales, with the exception of balers. The sales of the year 2000 closed off at 2 668 tractors, 124 combines and 229 balers and, respectively for the year 2002 (2001 in brackets) at 4 428 (2847) tractors, 174 (103) combines and 204 balers (184). The better unit figures from 2002 can mainly be attributed to the exceptionally high prices of maize, wheat and sunflower that offered the farmer the opportunity to replace old machines. With the strengthening of the Rand, a drop in producer prices and relatively high crop estimates, machinery sales for 2004 were lower than the previous year. Looking forward to the next few years, the situation may not be as rosy, taking into the account the intention of farmers to plant less, the large carry over of stocks, prices of produce and a lower than expected wheat crop. On the positive side, if the Rand remains stable at current levels, lower input costs may encourage farmers to invest (SAAMSA, 2004).

The seed industry: On July 1, 1989 the South African National Seed Organization (SANSOR) was officially designated by government as the authority to manage the Seed Certification Scheme. The organisation has 112 members, including co-operatives and many of the leading international and local seed companies such as Syngenta, Monsanto, Pannar, Mayford, Pioneer Hi-bred and Hygrotech. The organisation has active campaigns to remove levies paid on seed. It was also responsible for the negotiation of a zero tariff for all imported seed (Kirsten, 1999).

The South African Seed Industry maintained a turnover of more than R1.3 billion in 2004 (SANSOR, 2004). This was created primarily by winter and summer grain crops (69%), vegetables (20%), pasture and forage species (9%), with flowers accounting for less than 2%. The local seed industry is currently in a phase of growth, as was also reflected in an increase of 4% in SANSOR membership during the 2003/04 financial year (SANSOR, 2004).

The further strengthening of the local currency had a negative impact on export markets, in particular the horticultural seed industry. However, the open market system continued

to favour the seed trade and most seed companies have now become true global players on the international markets.

The fertiliser industry: The South African fertiliser industry is largely dominated by three primary manufacturers of fertilisers, namely Kynoch (a subsidiary of AECI), Sasol and Omnia (Kirsten, 1999). There is, however, one additional manufacturer namely Indian Ocean Fertilisers located at Richards Bay, which manufactures mainly for the export market. The nitrogenous components required for fertiliser production are derived from ammonia, which is produced by Sasol and AECI. Phosphate rock is locally mined and used in the manufacturing of phosphates by Foskor. Products sold by the fertiliser manufacturers in South Africa include materials prepared from local phosphates, imported components and locally compounded materials. Kynoch, Omnia and Sasol also sell raw materials to a relativly large number of secondary manufacturers of specific fertiliser combinations or products whom often also serve a specific geographical region. Some fertiliser manufacturers, however, import most of their raw materials (Venter, 2003).

The annual consumption of fertilizer in South Africa, on average for the past ten years, is around 788 637 metric tons (FAOSTATS, 2004), which represents a monetary value of over R3.7 billion (National Department of Agricultural, 2004). Of this total, approximately 381 814 metric tons have been imported on average during the past ten years. Fertilisers imports are free - local manufacturers are therefore not protected from foreign competition. In Figure 7.2 the consumption, production, imports and exports of fertiliser in South Africa for a ten years period (1992 – 2002) is illustrated. A large increase in the imports of fertiliser during the past four years can be seen from Figure 5.2.

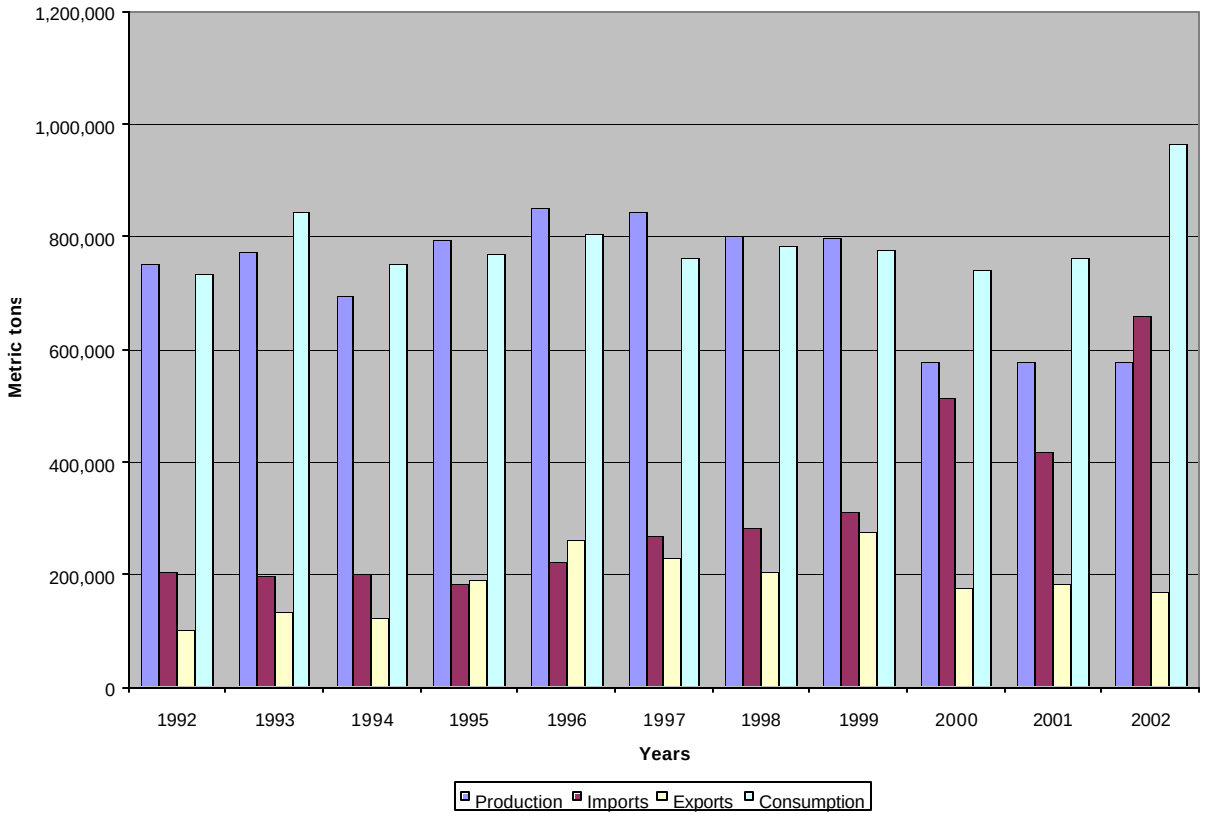

Figure 5.2: The consumption, imports, exports and production of fertiliser in South Africa

Source: FAOSTAT, 2004

The agricultural chemical industry: Agricultural chemicals include crop protection chemicals and animal health products. There is an active market for agricultural and crop protection chemicals including herbicides, insecticides, fungicides and various other associated products in South Africa. A large number of international companies, including Bayer, Novartis, Dow Agro Sciences (who recently acquired Sanachem) Zeneca and Rôhne-Poulenc manufacture and distribute agricultural chemicals in South Africa. Companies active in the animal health sector are ICI, Bayer, Pfizer and Hoechst (Kirsten, 1999).

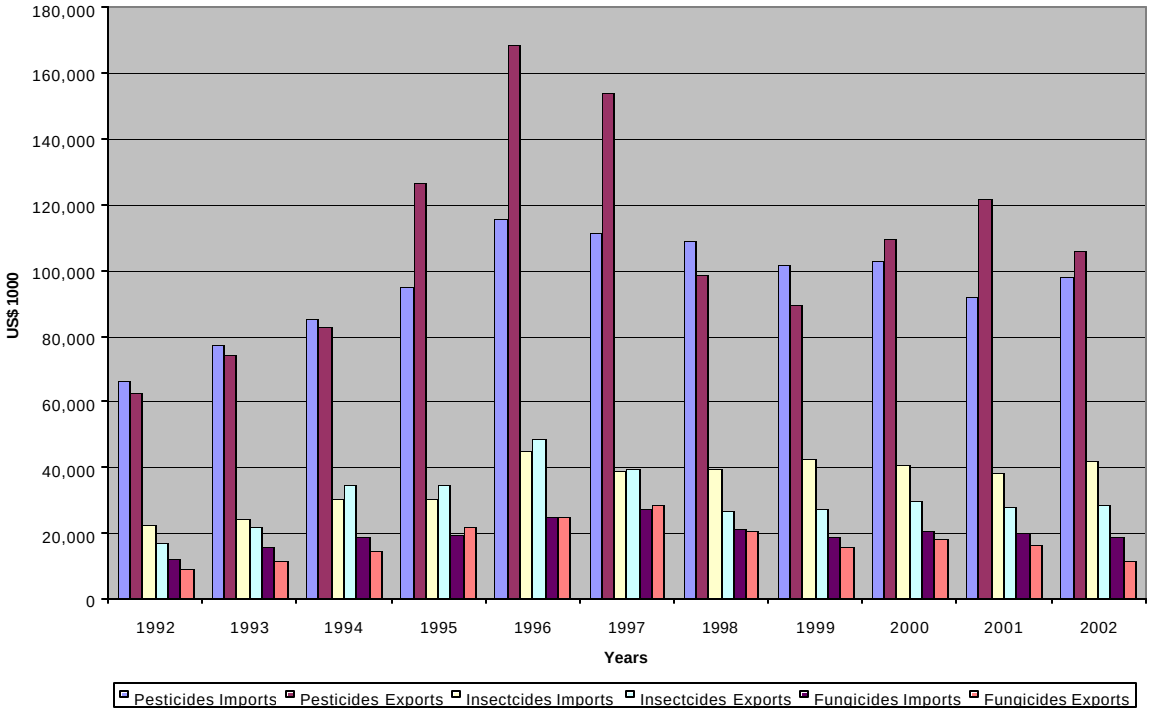

Figure 5.3: The imports and exports of pesticides, fungicides and insecticides for the years 1992 to 2002 by South Africa.

Source: FAOSTAT, 2004

In Figure 5.3 the imports and exports of pesticides, fungicides and insecticides by South Africa are shown for the years 1992 to 2002. Raw materials are largely imported from these companies and manufactured and formulated under license here in South Africa. Some companies have their own manufacturing, formulation and/or packaging plants in South Africa. The products are distributed by large distribution networks and local agents. In total, the agricultural chemical industry in South Africa is worth around R3 billion (National Department of Agriculture, 2004). All agricultural chemicals are imported free of duty into South Africa.

5.4 MEASURING THE COMPETITIVENESS STATUS OF THE SOUTH AFRICAN AGRICULTURAL INPUT INDUSTRY

The RTA analysis (Balassa, 1977, 1989; Volrath, 1991) as described in Chapter two was applied to the following sectors:

Total farming requisites – marginal, but positive trends: According to Table 5.2 it is clear that South African manufacturers of farming requisites as a whole are relatively marginally competitive in the international arena, with an RTA value of –0.38 in 2000, 0.02 in 2001 and a RTA value of –0.68 in 2002. However, total farm requisites showed a positive trend in competitiveness from 1961 to 2002, from 1980 to 2002 and from 1993 to 2002.

Total agricultural machinery – not competitive, but improving: Total agricultural machinery includes tractors, harvesters, and milking machines. South African manufacturers of these products are not very competitive internationally. However, agricultural machinery manifested positive trends in competitiveness from 1961 to 2002, from 1980 to 2002 and from 1993 to 2002.

Tractors – not competitive, but improving: The manufacturing of tractors in South Africa, as one of the most important agricultural machines used by crop farmers, is not very competitive in the international arena. However, there has been a definite positive trend in competitiveness over the long-run and short-run.

Fertiliser – increasingly competitive: South African manufacturers of fertiliser are marginally competitive in the international arena, with RTA values of 0.88 in 2002, 1.19 in 2001 and 0.96 in 2000. Fertiliser manufacturers have a positive trend in international competitiveness in the long-run and have also had one for the past ten years.

Table 5.2: The competitiveness status of the South African primary farming requisites input manufacturers

	RTA 2002	RTA 2001	RTA 2000	Trends 1961-02	Trends 1980 - 02	Trends 1993 - 02
Total farming requisites	-0.68	0.02	-0.38	+	+	+
Total agricultural machinery	-1.94	-0.98	-1.31	+	+	+
Tractors	-3.09	-1.12	-1.76	+	+	+
Fertiliser	0.88	1.19	0.96	+	+	+
Pesticides	0.21	0.61	0.02	+	+	+

Source: Own calculation based on data from FAOSTAT 2003.

Notes: '+' Positive trend; '-' negative trend; Competitive (RTA > 1), marginally competitive (1 > RTA > -1), not competitive (RTA < -1).

Pesticides – marginal with positive trends: Pesticide manufacturers in South Africa are relatively marginally competitive internationally. Pesticide manufacturers, however, have a positive trend in competitiveness in the long-term and the short-term.

Table 5.3 summarises the trends in the competitiveness of farming requisites in South Africa. In Table 5.3, as explained before in Chapter four, the long-term trends (1961 to 2002) are indicated in the columns and the short-term (1993 to 2002) trends in the rows. If a product has both a positive short-term and long-term trend, the product is classified as a "star". Stars are products that can adapt over time and that possess an obvious sustainable competitive advantage that is updated by innovation, research and development.

If the product has a positive long-term trend combined with a negative short-term trend, it is classified as "struggling". These products are slow to adapt to the new more open economy and they need to update their competitive advantage. If the product has a negative long-term trend combined with a positive short-term trend, the product is classified as "recovering". These products have changed their destination and have adapted to the new global environment. They have developed new competitive futures.

If a product has a negative long-term as well as short-term trend, it is classified as a "crisis". Serious new development and research need to be done to save these products. From Table 5.3 it is clear that all the sectors analysed in the agricultural input industry can be classified as "stars". This means that the input industry in South Africa shows positive long-term and short-term trends in competitiveness. The input industry is able to adapt over time and it possesses a sustainable competitive advantage that is updated by innovation and research and development.

Table: 5.3: Trends in the competitiveness of farming requisites in South Africa

		Long term trend (1961 – 2002) in competitiveness	
		Positive (+)	**Negative (-)**
Short term trend (1993 – 2002) in competitiveness	**Positive (+)**	**Stars:** Total agricultural requisites; Agricultural machinery; Tractors; Fertiliser; Pesticides.	**Recovering:**
	Negative (-)	**Struggling:**	**Crisis:**

Source: Own calculations based on RTA indexes

In Table 5.4 the competitiveness status and trends in competitiveness are indicated for the input industry in South Africa. Total agricultural requisites as a whole are classified as a "rising moderate performer". Fertiliser and pesticides are also classified as "rising moderate performers". Agricultural machinery and tractors have turned their competitiveness status around. No "winners" or "losers" are identified.

Table 5.4: "Winners" and "losers" in the input industry of South Africa

Trends in competitiveness 1993 -2002			
		Increase	**Decrease**
Competitiveness in 1993	**Competitive**	Winners:	Declining high performers:
	Marginal	Rising moderate Performers (catch-up): Total agricultural requisites; Fertilizer; Pesticides.	Declining moderate Performers:
	Not Competitive	Turnaround: Agricultural machinery; Tractors;	Chronic underperformers (losers):

Source: Own calculations based on RTA indexes

5.5 THE LINK BETWEEN THE COMPETITIVENESS OF THE AGRICULTURAL INPUT INDUSTRY AND THE COMPETITIVENESS OF THE REST OF THE AGRIBUSINESS VALUE CHAIN

An increase in supply chain interactions is expected between the input industry and the rest of the agribusiness value chain in South Africa. Conventional input: output analysis theory indicates a direct relationship or a cause effect relationship between the level of inputs and resulting outputs. To what extent does this theoretical relationship apply to the South African situation? Is there any correlation between the competitiveness of the input industry and the competitiveness of the rest of the agribusiness value chain in South Africa?

Table 5.5 illustrates the correlation between the competitiveness of the input industry and the competitiveness of the rest of the agribusiness value chain in South Africa from 1961 to 2001, for different time periods.

Table 5.5: Correlation between the competitiveness of the input industry and the competitiveness of the rest of the agribusiness value chain in South Africa

Time period	Correlation
1961 – 2002	-45.98%
1980 – 2002	-23.49%
1980 – 1990	-66.49%
1990 – 2001	53.07%
1993 – 2001	74.34%

Source: Own calculations based on RTA indexes

In the long run there is a negative, but not a very high, correlation between the competitiveness performance of the input industry and that of the rest of the agribusiness value chain in South Africa. The same situation is observed in the eighties. In the early nineties this relationship was positive, with 53% significance. However, since 1993 there has been a relatively high and positive correlation between the competitiveness of the input industry and the competitiveness of the rest of the agribusiness value chain in South Africa. This relationship substantiates the claim that the South African agricultural economy is fundamentally more competitive today then a decade ago, with business entities responding increasingly to market signals and the need to be competitive in a deregulated globalise environment.

5.6 CONCLUSION

Supply chain management and co-ordination is the process by which the various functions of a value added system - production, processing, and marketing – are brought into a state of harmony. A closer coordination of these supply chain operations has become increasingly more important to allow agribusinesses to be competitive, as it enables firms to adjust in order to be more responsive to changing conditions, while retaining stable relationships with firms in the chain.

South African manufacturing of farming requisites as a whole is still only relatively marginally competitive in the international arena. However, positive trends in competitiveness are observed. The agricultural machinery industry is not competitive, but it is improving. The fertiliser and pesticides industries are becoming increasingly more competitive. From the analysis in this chapter it is clear that the positive trends in the competitiveness of the agribusiness sector in South Africa during the past ten years can also be explained by the improvement in the competitiveness of the agricultural input industry in South Africa.

CHAPTER SIX

THE DETERMINANTS OF COMPETITIVENESS OF THE SOUTH AFRICAN AGRIBUSINESS SECTOR

6.1 INTRODUCTION

In Chapter four the competitiveness status and trends in competitiveness of the South African agribusiness sector were measured. In the following two Chapters, the third step of the framework developed in Chapter three – that is to analyse the competitiveness of the agribusiness sector in South Africa, will be applied. Hence, the aim of these two Chapters is to determine a) how competitive performance is achieved; and b) how it has changed over time. From this the key success factors responsible for establishing competitive advantage in the agribusiness sector of South Africa will be identified and analysed; and, in the same manner the constraints that impact negatively on the competitiveness status of agribusinesses in South Africa will be examined.

The competitiveness of the South African agribusiness sector depends on a number of factors: technological, socio-political and economic. One of the most pervasive influences is the external environment, and, in particular, the set of policies which operate in the market for agricultural goods. In Chapter four it was found that the South African agribusiness sector's competitiveness rating is generally marginal internationally. Appropriate adjustments could therefore contribute to the changing of negative situations into positive statuses. It will, however, be important to identify the particular set of factors that need adjustment.

In this chapter, the approach to competitiveness analysis developed by Porter (1990, 1998), as described in Chapter three, will be used to determine and analyse the current (2004) factors influencing the competitiveness of the agribusiness sector in South Africa. In Chapter eight, the trends in the determinants of competitiveness of the South African

agribusiness sector will be analysed. To analyse how the determinants of competitiveness in the agribusiness sector of South Africa have changed over time, the data from three research studies will be used. All three studies employ the Porter-methodology and were done over a period of five years.

6.2 IDENTIFYING THE DETERMINANTS OF COMPETITIVENESS OF THE SOUTH AFRICAN AGRIBUSINESS SECTOR

6.2.1 Methodology

The methodology described by Porter (1990, 1998) will be use as bases to determine the constraining and enhancing factors influencing the competitiveness success of agribusinesses in South Africa. This methodology has been described in some detail in Chapter two and in Chapter three.

This method is based on the perceptions of industry leaders regarding issues influencing competitiveness. It points out strengths and weaknesses, as well as identifies critical strategic factors that firms need to pay special attention to in order to develop and sustain a competitive advantage in the years to come.

6.2.2 Data used – Executive Survey 2004

Primary data obtained through a postal survey on an institutional level was used to determine the factors that influence the competitiveness of the agribusiness sector in South African. A questionnaire was developed using Porter's determinants of competitive advantage as a basis. The agribusiness sector in South Africa, as defined in Chapter one, is represented by the following organisations: the Agricultural Business Chamber (ABC); the South African National Seed Organisation (SANSOR); the Crop Protection and Animal Health Association (AVCASA); the Fertiliser Society of South Africa (FSSA); the National Chamber of Milling (NCM); South African Grain Information Services (Sagis). The members of these organisations give a good indication

of the population size (402) of the agribusiness sector in South Africa. The business operations of the population are indicated in Table 6.1. It is important to keep in mind that most agribusinesses are involved in more than one business operation. That is the reason why the percentages in Table 6.1 do not sum up to a hundred.

Table 6.1: Business operations of the population

Business operations	Percentage
The manufacturing and/or supply of primary agricultural requirements	51.99%
The production of agricultural products	19.90%
The storage/handling/packaging of primary agricultural products	46.02%
The processing (value adding) of primary agricultural products	57.96%
The marketing of primary and processed agricultural products	61.94%
The distribution of primary and processed agricultural products	39.80%
The supply of insurance services to producers of agricultural products	19.90%
The supply of financing to producers of agricultural products	14.93%
Other	2.99%

Source: Own calculations from the 2004 Executive Survey

A total of two hundred (sample sizes) questionnaires were posted. The sample was scientifically chosen so that each agribusiness in the population had a measurable chance of selection according to their business operations. This way, the results can be reliably projected from the sample to the larger population. It is also important that information is collected by means of standardised procedures so that every agribusiness is asked the same questions in more or less the same way (Scheuren, 2004).

Eighty-five questionnaires were used in the analysis, representing a response rate of 42.5%. Non-response is nearly inevitable for most surveys because some members of the sample will refuse to participate – despite every reasonable effort made. Non-response lead to either of two effects on survey results (Scheuren, 2004). Firstly, the results can be biased - the tendency for findings to be off the mark in projecting from the sample to what is happening in the population as a whole. Secondly, the variance of the results may cause projections to be higher one time but lower the next.

However, given the fact that all of the units in the population had a known, positive chance of been selected, the standardised procedures of collection and the survey's intent to describe the population and not the particular individuals who, by chance, are part of the sample, it can be stated with confidence that the survey results obtained represent a composite profile of the population.

The questionnaires were developed to determine the constraining and enhancing factors that influence the competitive success of the agribusiness sector in South Africa. The intensity and importance of these factors were also determined. The questionnaire requires the respondents (executives of agribusinesses) to give their opinion on factors influencing the competitiveness of their agribusiness operating in the agro-food and fibre complex of South Africa. This executive opinion is essential in order to bring light to competitiveness issues that are important for the country and the sector in which these companies operate.

Seventy factors were investigated. The factors investigated, based on the determinants of competitive advantage as describe by Porter (1990, 1998), can be classified as follows:

Factor conditions

? The cost, availability and quality of skilled labour;
? The cost, availability and quality of unskilled labour;
? The overall cost of doing business in South Africa;
? The quality and cost of the infrastructure in South Africa;
? The cost, availability and quality of technology in South Africa;
? Water for industrial purposes; and
? The cost and availability of finance.

Demand conditions

? Sophistication of local buyers;
  - Knowledgeable, demanding and willing to buy innovative products;
  - Actively seek out the latest products, technologies and processes;
? Internationalisation of local buyers;
? Importance of ethics and production methods for local buyers;
? Importance of environmentally friendly products for local consumers;
? The local market size in terms of obtaining economy of scale; and
? Growth in the local market.

Supporting industries

? The availability, quality and sustainability of local suppliers of primary inputs;
? Financial institutions;
? Scientific research institutions;
? Collaboration with scientific research institutions in their R&D activities;
? Electricity suppliers;
? Telecommunication firms;
? Internet service providers; and
? Specialised information technology services.

Rivalry

? Intensity of competition in the local market;
? Source of competition in the local market;
? Difficulty for new competitors to enter into the local market;
? Substitutes for agribusinesses products and service ranges; and
? The difficulty of starting a new business in the industry.

Structure

? The involvement of local suppliers, local customers and local research institutions in product and process development;
? Information flow from primary suppliers;
? The flow of information from the customers to the company;
? The existence of regulatory standards in the sector; and
? Bargaining power of customers.

Strategy

? Sources of competitive advantage:
    - Low cost, based on low wages or availability of natural resources, or uniqueness of products, services and processes;
    - Relatively cheap products of inferior quality or affordable high quality products;
? The importance to produce and sell environmentally friendly products;
? Utilisation of the best and most efficient technology in production processes;
? Investment in human resources;
? Incentives as part of the compensation of management;
? The importance of continuous innovation in generating revenue;
? Spending on R&D by agribusinesses; and
? Uniqueness of products and services.

Government attitude and policy

? Administrative regulations in South Africa;
? The competence of personnel in the public sector;
? The impact of the tax system on promoting business investments and risk-taking;

- The impact of legal and political changes over the past five years on agribusinesses capacity for planning;
- The ability of government to enforce environmental regulations;
- The impact of complying with environmental standards on the competitiveness of agribusinesses in South Africa;
- The impact of South Africa's trade policy, land reform policy, macro economic policy, competition law and black economic empowerment (BEE) policy on the competitive success of agribusinesses; and
- The level of trust in the political system.

Chance

- The cost of crime to agribusinesses in South Africa;
- The cost of aids to agribusinesses in South Africa;
- The impact of developments in Zimbabwe on the competitive success of agribusinesses in South Africa;
- The impact of biotechnology on the competitive success of agribusinesses in South Africa; and
- The impact of the exchange rate (which was approximately R6/US$ when this survey was conducted) on the competitive success of agribusinesses in South Africa.

6.2.3 Data analysis

The data obtained from the institutional survey was analysed in SPSS for Windows and in this chapter only the major findings will be highlighted and discussed.

6.2.3.1 Business focus

In Table 6.2 the business operations of the respondents are shown. 55.00% of the respondents operate in the marketing of primary and processed agricultural products arena, 43.33% of the respondents add value to primary agricultural products and 38.33%

of the companies are distributors of primary and processed agricultural products. 38.33% of the respondents' store, handle or pack primary agricultural products and 38.33% manufacture and/or supply primary agricultural requirements. 18.33% of the respondents are involved in insurance services and 20.00% in the financing services in the agribusiness sector. 13.33% of the respondents are involved in the production of agricultural products. From Table 6.2 it is clear that the respondents represent a wide spectrum of business operations within the agribusiness sector, ranging from the production of agricultural product, to financing, insurance and value adding. The respondents are also a appropriate sample of the business operations done by the population as indicated in Table 6.1.

Table 6.2: Business operations of the respondents

Business operations	Percentage
The manufacturing and/or supply of primary agricultural requirements	38.33%
The production of agricultural products	13.33%
The storage/handling/packaging of primary agricultural products	38.33%
The processing (value adding) of primary agricultural products	43.33%
The marketing of primary and processed agricultural products	55.00%
The distribution of primary and processed agricultural products	38.33%
The supply of insurance services to producers of agricultural products	18.33%
The supply of financing to producers of agricultural products	20.00%
Other	1.67%

Source: Own calculations from the 2004 Executive Survey

6.2.3.2 Descriptive statistics

Most of the questions in the survey asked the respondents to check a box according to their executive opinion. The questions were in the following format, for example:

Competition in the local market is:

Very limited	1	2	3	4	5	6	7	Very intense

Crossing 1 ***means you agree wholeheartedly with the left-hand side***

Crossing 7 ***means you agree wholeheartedly with the right-hand side***

Crossing 2 ***means you largely agree with the left-hand side***

Crossing 3 ***means you agree somewhat with the left-hand side***

Crossing 4 ***means you opinion is indifferent between the two answers***

Crossing 5 ***means you agree somewhat with the right-hand side***

Crossing 6 ***means you largely agree with the right-hand side***

In Table 6.3 the mean, median, standard deviation, minimum value and maximum value of each factor are indicated. In Figure 6.1 the factors are sorted according to their means to indicate the enhancing and constraining factors. In the next section these factors will be discuss in more detail.

Table 6.3: Descriptive statistics of the 2004 Executive Survey in the agribusiness sector of South Africa

Factors	Mean	Median	Standard Deviation	Modus
Skilled labour				
- Availability	3.00	3.00	1.21	3.00
- Quality	3.83	4.00	1.54	3.00
-Cost	3.85	4.00	1.48	3.00
Unskilled labour				
-Availability	6.50	7.00	0.97	7.00
- Quality	3.42	3.00	1.82	2.00
- Cost	3.80	4.00	1.90	2.00
Overall cost of doing business in SA	3.92	4.00	1.34	3.00
Infrastructure				
- Quality	4.80	5.00	1.20	5.00
- Cost	3.83	3.00	1.34	3.00
Technology				
- Quality	5.10	5.00	1.37	5.00
- Availability	4.63	5.00	1.50	5.00
- Cost	3.39	3.00	1.50	3.00
Availability of water	4.98	5.00	1.61	6.00
Finance				
- Availability	5.08	5.00	1.45	6.00
- Cost	3.68	3.00	1.66	3.00
Financial institutions	4.28	5.00	1.45	5.00
Scientific research institutions				
- Availability	3.80	4.00	1.60	5.00
-Collaboration	3.95	4.00	1.66	5.00
Electricity suppliers	4.50	5.00	1.46	4.00
Telecommunication firms	4.37	5.00	1.72	6.00
Internet service providers	5.12	6.00	1.52	6.00
Specialised information technology services	4.82	5.00	1.47	6.00
Sophistication of local buyers	4.65	5.00	1.66	6.00
Adaptations of local buyers	4.40	5.00	1.51	5.00
Internationalisation of local buyers	4.49	5.00	1.55	6.00
Importance of ethics and production methods for local buyers	4.67	5.00	1.34	5.00
Importance of environmental friendly products for local buyers	4.23	4.50	1.64	5.00
Local market size	3.62	4.00	1.58	5.00
Growth in the local market	3.55	3.00	1.51	3.00
Bargaining power of customers	5.30	5.50	1.20	6.00
Regulatory standards in industry	5.02	5.00	1.28	5.00
Flow of information from customer to company	4.92	5.00	1.34	5.00
Intensity of competition in the local	5.61	6.00	1.61	6.00

Factors	Mean	Median	Standard Deviation	Modus
market				
Source of competition in the local market	5.25	6.00	1.77	6.00
Difficulty for new competitors to enter in the local market	4.75	5.00	1.84	6.00
Substitutes for products and services range	4.54	5.00	1.60	5.00
Difficulty to start a new business	2.93	2.00	1.76	2.00
Local suppliers of primary inputs				
- Availability	5.03	5.00	1.56	6.00
- Quality	4.83	5.00	1.28	6.00
- Sustainability	4.77	5.00	1.33	5.00
Collaboration in product and process development	3.95	4.50	1.77	5.00
Information flow from primary suppliers	4.76	5.00	1.24	5.00
Administrative regulations	2.72	3.00	1.50	3.00
Competence of personnel in the public sector	1.80	1.00	1.18	1.00
Impact of tax system on investment and risk taking	3.05	3.00	1.48	2.00
Impact of legal or political changes over the past five years	3.95	4.00	1.78	2.00
Enforcement ability of government towards environmental regulations	4.07	4.00	1.51	4.00
The impact of complying with environmental standards	5.02	5.00	1.08	5.00
SA trade policy	4.02	4.00	1.38	4.00
SA land reform policy	2.97	3.00	1.62	1.00
SA labour policy	2.60	2.00	1.55	1.00
Macro economic policy	4.55	5.00	1.32	5.00
SA competition law	4.32	4.00	1.30	4.00
SA BEE policy	3.45	3.50	1.97	1.00
Trust in the political systems	1.87	1.50	1.10	1.00
Cost of crime	1.80	2.00	0.95	1.00
Aids	2.85	3.00	1.59	3.00
Developments of Zimbabwe	3.33	4.00	1.45	4.00
Biotechnology	5.03	5.00	1.13	4.00
Current exchange rate (R6/US$)	2.55	2.00	1.58	1.00
Unique products, services and processes	5.35	6.00	1.54	6.00
Production of affordable high quality products	5.85	6.00	1.05	6.00
Production of environmental friendly products	5.05	5.00	1.33	6.00
Strategy to employ quality technology	5.12	5.00	1.28	5.00
Investment in human resources	5.38	6.00	1.14	6.00
Incentives in the compensation of	4.02	5.00	2.00	5.00

Factors	Mean	Median	Standard Deviation	Modus
management				
Continuous innovation	5.55	6.00	1.36	6.00
R&D Spending	4.14	4.00	1.73	3.00
Uniqueness of products	4.27	5.00	1.77	5.00

Source: Own calculations from the 2004 Executive Survey

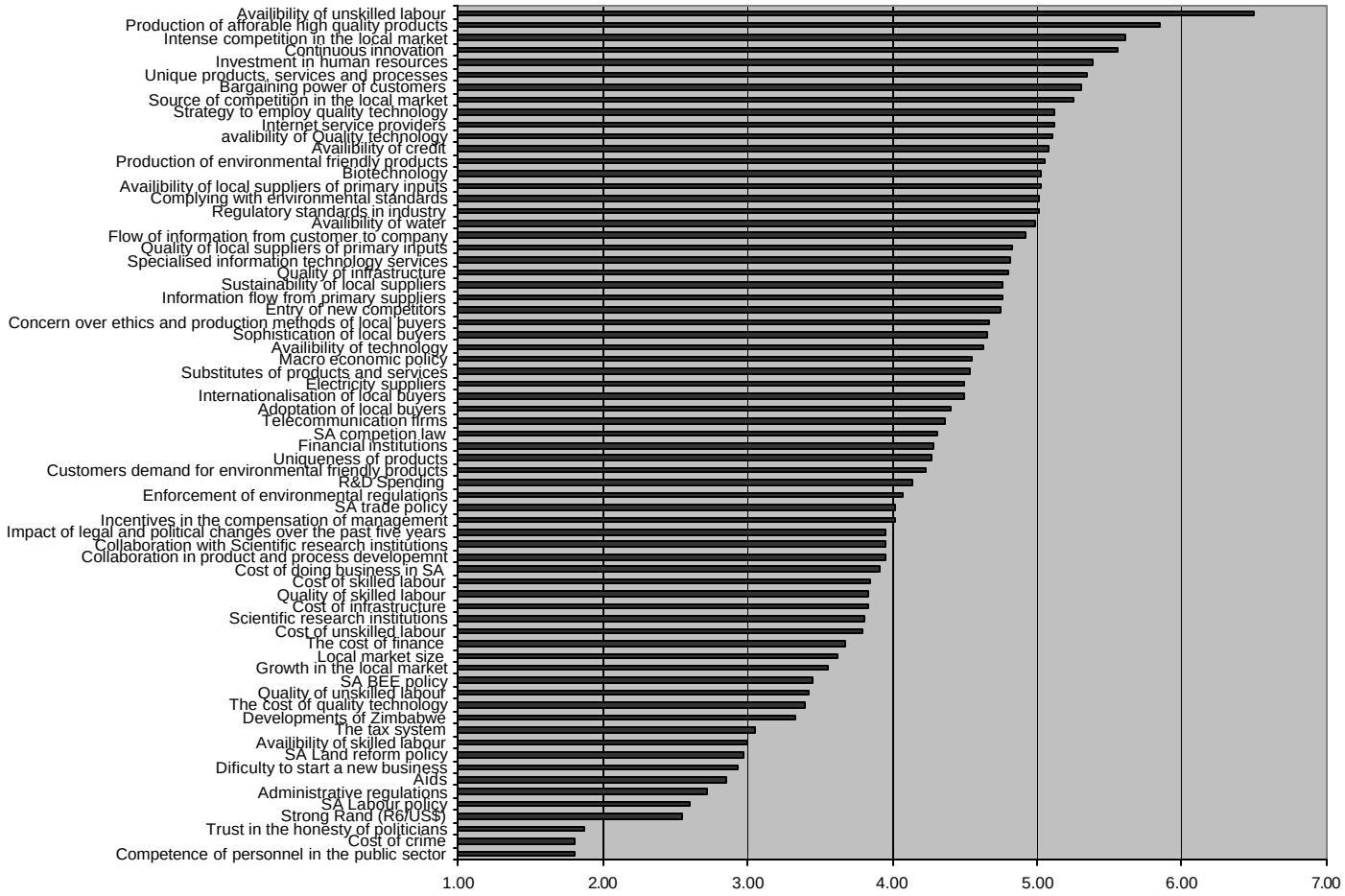

Figure 6.1: Factors used in the 2004 Executive Survey sorted according to their mean

Source: Own calculations from the 2004 Executive Survey

6.2.3.3 General analysis of constraints

In Table 6.4 the major constraints impacting on the competitiveness success of agribusinesses in South Africa in 2004 are indicated. These factors are sorted according to their averages. The cost of crime, the competence of personnel in the public sector and trust in the political systems in South Africa are the three major constraints to the competitiveness success of agribusinesses in South Africa.

These are followed by the strong Rand, South African labour policy, burdensome administrative regulations and Aids. South Africa's land reform and BEE policies as well as the impact of the tax system also fall under the top fifteen constraints currently causing a negative influence on the competitiveness success of agribusinesses. The developments in Zimbabwe are also impacting negatively on the South African agribusiness sector, as do the availability of skilled labour and the quality of unskilled labour.

These findings are in line with the 2004 Global Competitiveness Report published annually by the World Economic Forum (WEF) and the Harvard Institute for International Development (WEF, 2004). According to the report, South Africa increased its position on the world competitiveness ranking order by one position from 42nd to 41st out of 104 countries, in 2004. The World Economic Forum, however, expressed its concern that the stronger Rand was tarnishing what would have been an even better performance by South Africa. Last year the Rand gained 23% against the Dollar and the WEF report appears to provide proof that the Rand's gains had knocked South Africa's competitiveness.

According to the 2004 Global Competitiveness Report (WEF, 2004), South Africa's labour policy and labour laws (96th out of 104 countries), the cost of crime (92nd), Aids and the lack of available skilled labour were the major constraints to South Africa's competitiveness success. South Africa's macro-economic stability has worsened from

41st to 87th position. South Africa was also almost last when it came to obstacles put in place by the country to prevent its companies from hiring foreign labour.

Table 6.4: Major constraints to the competitiveness success of agribusinesses in South Africa

Factors	Average	Median	Standard deviation
1) Cost of crime	1.80	2.00	0.95
2) Competence of personnel in the public sector	1.80	1.00	1.18
3) Trust in the political systems	1.87	1.50	1.10
4) Strong Rand (R6/US$)	2.55	2.00	1.58
5) South Africa's labour policy	2.60	2.00	1.55
6) Administrative regulations	2.72	3.00	1.50
7) Aids	2.85	3.00	1.59
8) Difficulty to start a new business	2.93	2.00	1.76
9) South Africa's Land reform policy	2.97	3.00	1.62
10) Availability of skilled labour	3.00	3.00	1.21
11) The impact of the tax system on investment and risk taking	3.05	3.00	1.48
12) Developments in Zimbabwe	3.33	4.00	1.45
13) The cost of quality technology	3.39	3.00	1.50
14) Quality of unskilled labour	3.42	3.00	1.82
15) South Africa's BEE policy	3.45	3.50	1.97
1 = major constraint	7 = major enhancement		

Source: Own calculations from the 2004 Executive Survey

6.2.3.4 General analysis of enhancements

In Table 6.5 the major enhancements to the competitiveness success of the agribusiness sector in South Africa are indicated. Availability of unskilled labour, the production of affordable high quality products, intense competition in the local market, continuous innovation and investment in human resources are the five major factors enhancing the competitive success of agribusinesses in South Africa. The availability of unskilled labour, however, must be read in conjunction with the cost and the quality of the

unskilled labourers. The cost and the quality of unskilled labour is rated by agribusinesses in South Africa as having a negative impact on their competitiveness.

Other factors rated by agribusinesses in South Africa as having a positive impact on their competitiveness are micro economic factors such as unique products, services and processes, the bargaining power of customers, strategies by agribusinesses to employ quality technology, internet service providers, the quality of technology in South Africa, the availability of credit, the production of environmentally friendly products, biotechnology, the availability of local suppliers of primary inputs and the regulatory standards in the industry.

From the top ten major enhancements to the competitiveness of agribusinesses in South Africa, five (production of affordable high quality products, continuous innovation, investment in human resources, unique products, services and processes as well as the strategy to employ quality technology) are divided into company strategies. Three of these factors (production of affordable high quality products, continuous innovation, and investment in human resources) are also under the top five major enhancements to the competitiveness of agribusinesses in South Africa.

Once again, this is in line with the 2004 Global Competitiveness Report (WEF, 2004). According to the report, South Africa was rated 25th best when it came to a micro economic environment that allows for companies to flourish. The efficiency of the board of directors of companies in South Africa was ranked 8th in the world, while South African companies were rated 24th in terms of sophisticated strategies. South Africa's soundness of banks was 21st in the world.

By analysing the factors enhancing the competitiveness of agribusinesses in South Africa, it seems that the micro economic environment and the strategies followed to achieve sustainable competitiveness by agribusinesses are in line with the new competitiveness theory as described in Chapter two. In order to achieve competitive success, agribusinesses in South Africa must possess a competitive advantage in the form of either

lower costs or differentiated products that command premium prices. In order to sustain this advantage, agribusinesses must achieve a more sophisticated competitive advantage over time, through either the provision of higher-quality products and services or more efficient production (Porter, 1998).

Wealth is generated at the microeconomic level – through the ability of firms to create valuable goods and services productively that will support high wages and high returns to capital. Therefore it can be stated that prosperity depends on improving a country's capabilities at the microeconomic level.

The microeconomic foundations of productivity rest upon two interrelated aspects: the sophistication of company operations and strategy as well as the quality of the microeconomic business environment. The sophistication with which a country's companies compete (for example, their technology and marketing approaches) ultimately determines its productivity. Unless a country's companies become more productive, its economy as a whole cannot become more productive.

The achievement of company sophistication consists of two aspects. The first is *operational effectiveness*, or the extent to which a country's companies approach the best practices in the world in areas such as production processes, technologies, marketing methods and management techniques. The other aspect of company sophistication, that is more fundamental to success in an advanced economy, is the degree to which companies have *distinctive strategies*.

If the aim is to increase prosperity, agribusinesses must transform their ways of competing. The basis for competition must shift from comparative advantage (low-cost labour or natural resources) to competitive advantages by creating unique products and processes that are guided by distinctive strategies. Agribusiness operations and strategies will be directly linked to an industry's competitiveness, because that is what determines productivity.

However, the sophistication with which companies compete is not solely of their own making. It is strongly influenced by the quality of the national business environment in which the companies operate. The business environment has much to do with the levels of operational effectiveness that companies can obtain, as well as the types of strategies that they can select. Operational effectiveness would be unobtainable, for example, if regulatory red tape is onerous, logistics are unreliable, or firms cannot get timely supplies of components or high-quality service for their production machinery. Similarly, firms have a hard time competing with differentiation strategies when they cannot find well-educated staff, if marketing channels are poorly developed, or if local customers are unsophisticated (Porter, 1998).

Table 6.5: Major enhancements to the competitiveness success of agribusinesses in South Africa

Factors	Average	Median	Standard deviation
1) Availability of unskilled labour	6.50	7	0.97
2) Production of affordable high quality products	5.85	6	1.05
3) Intense competition in the local market	5.61	6	1.61
4) Continuous innovation	5.55	6	1.36
5) Investment in human resources	5.38	6	1.14
6) Unique products, services and processes	5.35	6	1.54
7) Bargaining power of customers	5.30	5.50	1.20
8) Strategy to employ quality technology	5.12	5.00	1.28
9) Internet service providers	5.12	6.00	1.52
10) Quality of technology in South Africa	5.10	5.00	1.37
11) Availability of credit	5.08	5.00	1.45
12) Production of environmental friendly products	5.05	5.00	1.33
13) Biotechnology	5.03	5.00	1.13
14) Availability of local suppliers of primary inputs	5.03	5.00	1.56
15) Regulatory standards in the industry	5.02	5.00	1.28
1 = major constraint		7 = major enhancement	

Source: Own calculations from the 2004 Executive Survey

6.2.3.5 Importance of factors

In Table 6.6 the most important factors currently influencing the competitiveness of the agribusiness sector in South Africa, as indicated by the respondents, are shown. These factors were identified through an open question in the questionnaire. Also indicated in Table 6.6 is the impact of these factors on the competitiveness of agribusinesses.

The respondents identified the strong Rand as the most important factor currently influences their competitiveness. This influence impacts negatively on the competitiveness of the agribusinesses sector in South Africa. It would, however, be fatal if the competitiveness of the South African agribusiness sector were to be solely at the mercy of the exchange rate. Higher productivity, sharper business know-how, innovative strategies, superior and differentiated products and processes, as well as a stable macroeconomic environment should rather drive the competitiveness of the complex.

Other important factors indicated by the respondents that have a constraining impact on their competitiveness are the following: the unpredictable climatic conditions in South Africa; the high cost of transport; South Africa's labour policy; subsidised imports; the availability of raw material; the South African BEE policy; the availability of skilled labour; and the cost of labour.

The most important factors that enhance the competitiveness of agribusinesses in South Africa are the following: the quality of products, skilled and motivated staff; a well established brand name; good service; technical knowledge; low cost producers; effective management; unique products; market knowledge; innovation; customer loyalty and technology.

Table 6.6: The most important factors influencing the competitiveness of agribusinesses in South Africa

Factors	Impact
1) Strong rand	Constraint
2) Good quality for money products	Enhancement
3) Unpredictable climatic conditions	Constraint
4) Skilled staff	Enhancement
5) The cost of transport	Constraint
6) Established brand name	Enhancement
7) Good service	Enhancement
8) South Africa's labour policy	Constraint
9) Subsidised imports (dumping)	Constraint
10) Availability of raw material	Constraint
11) BEE policy	Constraint
12) Technical knowledge	Enhancement
13) Low cost producers	Enhancement
14) Effective management	Enhancement
15) Availability of skilled labour	Constraint
16) Unique products	Enhancement
17) Market knowledge	Enhancement
18) Innovation	Enhancement
19) Cost of labour	Constraint
20) Customer loyalty	Enhancement
21) Technology	Enhancement

Source: Own calculations from the 2004 Executive Survey

6.3 APPLICATION OF THE PORTER ANALYSIS

Production factor conditions: According to standard economic theory, factors of production – labour, land, natural resources, capital, and infrastructure – will determine the flow of trade. A nation will export those goods that make most use of the factors with which it is relatively well endowed. This doctrine, the origin of which dates back to Adam Smith (1776) and David Ricardo (1817) and that is embedded in classical economics, is at best incomplete and at worst incorrect (Cho & Moon, 2002).

Within the sophisticated industries that form the backbone of any advanced economy, a nation does not inherit, but rather creates, the most important factors of production – such as skilled human resources or a scientific base. Moreover, the stock of factors that a nation enjoys at a particular time is less important than the rate and efficiency with which it creates, upgrades and deploys them in particular industries.

In Table 6.7 production factor conditions as a determinant of the competitiveness of the agribusiness sector in South Africa are rated to have either an enhancing (3), constraining (1) or moderate (2) impact on competitiveness. The modus score for all the factor conditions is 2, which means that factor conditions in South Africa have a moderate effect on the agribusiness sector's competitiveness. The factor conditions that have the most constraining effect on competitiveness are the quality of unskilled labour and the unavailability of skilled labour.

The factors that have an enhancing impact on the competitiveness of agribusinesses in South Africa are the availability of unskilled labour, the quality of infrastructure in South Africa, the availability of capital, the quality and availability of technology and the availability of water for industrial purposes.

Table 6.7: Production factor conditions as determinants of competitiveness

Factor conditions	Rate
Cost of doing business in SA	2
Labour	(2)
- Cost of unskilled labour	2
- Quality of unskilled labour	1 - 2
- Availability of unskilled labour	3
- Cost of skilled labour	2
- Quality of skilled labour	2
- Availability of skilled labour	1 – 2
Infrastructure	(2)
- Cost	2
- Quality	2 – 3
Capital	(2)
- Cost	2
- Availability	2 – 3
Technology	(2)
- Cost	1 - 2
- Quality	2 – 3
- Availability	2 – 3
Availability of water for industrial purposes	2 – 3
Modus score for factor conditions	***(2)***
1 = Constraint 2 = Moderate 3 = Enhancement ( ) = Modus	

Source: Own calculations from the 2004 Executive Survey

Demand conditions: It may appear as if the globalisation of competition could diminish the importance of local demand. In practice, however, this is simply not the case. In fact, the composition and character of the local market usually has a disproportionate effect on how companies perceive, interpret and respond to buyer needs (Cho & Moon, 2002).

In Table 6.8 the demand conditions as determinants of the competitiveness of the agribusiness sector in South Africa are illustrated. With a modus score of 2, demand conditions as a whole have a moderate impact on the competitiveness of agribusinesses in

South Africa. There is, however, no demand condition having a constraining impact on the competitiveness of agribusinesses in South Africa.

Demand conditions that enhance the competitiveness of the sector are the following: knowledgeable local buyers that demand and buy innovative products and local buyers that are concerned over ethics and production methods.

Table 6.8: Demand conditions as determinants of competitiveness

Demand conditions	**Rate**
Local buyers:	(2)
- Knowledgeable and demanding and buying innovative products	2 – 3
- Actively seeking out the latest products, technologies and processes	2
- In pace with rest of the world	2
- Concerned over ethics and production methods	2 – 3
- Importance of environmentally friendly products	2
Market size	2
Market growth	2
Modus score for demand conditions	***(2)***
1 = Constraint 2 = Moderate 3 = Enhancement	( ) = Modus

Source: Own calculations from the 2004 Executive Survey

Related and supporting industries: The third broad determinant of competitiveness is the presence of related and supporting industries that are internationally competitive. In Table 6.9 related and supporting industries are rated according to their impact on competitiveness. Most of the supporting industries are rated by agribusinesses in South Africa to have contributed positively and have a positive impact on the competitiveness of their businesses. It is especially the availability, quality and sustainability of local suppliers of agribusinesses' primary products, electricity suppliers, internet service providers, and specialised information technology services that contribute positively to the successful competitiveness of the agribusinesses sector in South Africa.

Table 6.9: Related and supporting industries as determinants of competitiveness

Related and supporting industries	Rate
Local suppliers of primary product:	(2 -3)
- Availability	2 – 3
- Quality	2 – 3
- Sustainability	2 – 3
Financial institutions	2
Scientific research institutions	(2)
- Availability	2
- Collaboration	2
Electricity supplies	2 – 3
Telecommunication firms	2
Internet service providers	2 – 3
Specialised information technology services	2 – 3
Modus score for related and supporting industries	***(2 - 3)***
1 = Constraint 2 = Moderate 3 = Enhancement	( ) = Modus

Source: Own calculations from the 2004 Executive Survey

Firm strategy, structure and rivalry: The fourth broad determinant of competitive advantage in an industry is the context in which firms are created, organised and managed as well as the nature of its domestic rivalry.

In Table 6.10 the impact of firm strategy, the structure of the agribusiness sector and competitive rivalry as determinants are indicated. With a modus score of 2 to 3, firm strategy, structure and rivalry as a whole, has a positive impact on the competitiveness of agribusinesses in South Africa. Some of the major enhancing factors include the intense competition in the local market, the production of affordable high quality products and continuous innovation.

Other factors that also have a positive impact on the competitiveness of the agribusiness sector in South Africa include the regulatory standards in the sector, the flow of information from the customer to the company, the information flow from the primary suppliers, the bargaining power of the customer, the source of competition in the local

market, the production of unique products, services and processes, the production of environmentally friendly products, the strategy to employ quality technology and the investment in human resources.

Table 6.10: Firm strategy, structure and rivalry as determinants of competitiveness

Firm strategy, structure and rivalry	**Rate**
Structure of the agribusiness sector	(2 – 3)
- Regulatory standards in the sector	2 – 3
- Flow of information from customer to company	2 – 3
- Supply chain collaboration in product and process development	2
- Information flow from primary suppliers	2 – 3
- Bargaining power of customers	2 – 3
Rivalry	(2 – 3)
- Intense competition in the local market	3
- Source of competition in the local market	2 – 3
- Entry of new competitors	2 – 3
- Substitutes of products and services	2 – 3
- Difficulty to start a new business	1 – 2
Firm strategy	(2 – 3)
- Unique products, services and processes	2 – 3
- Production of affordable high quality products	3
- Production of environmental friendly products	2 – 3
- Strategy to employ quality technology	2 – 3
- Investment in human resources	2 – 3
- Incentives in the compensation of management	2
- Continuous innovation	3
- R&D spending	2
Modus score for firm strategy, structure and rivalry	***(2 – 3)***
1 = Constraint 2 = Moderate 3 = Enhancement ( ) = Modus	

Source: Own calculations from the 2004 Executive Survey

Government support: Government can influence each of the previous four determinants either positively or negatively. In Table 6.11 the impact of government through government policy and attitude as determinants of the competitiveness of agribusinesses in South Africa are indicated. With a modus score of between 1 – 2, government and government policies are constraining the competitive success of agribusinesses in South Africa. The major constraining factors are: burdensome administrative regulations, the competence of personnel in the public sector, the impact of the South African tax system on investment and risk-taking, South Africa's land reform policy, South Africa's labour policy, South Africa's BEE policy and the trust in the political system. South Africa's macro-economic policy and environmental regulations are rated by agribusinesses in South Africa to have a positive impact on their competitiveness.

The impact of the legal and political change, which took place the past five years, on the competitiveness of agribusinesses was relatively moderate. This indicates that South Africa has a very stable legal and political environment.

Table 6.11: Government policies as determinants of the competitiveness

Government	**Rate**
Administrative regulations	1 – 2
Competence of personnel in the public sector	1
The SA tax system's impact on investment and risk-taking	1 – 2
Impact of legal and political changes over the past five years	2
Enforcement of environmental regulations	2
SA environmental regulations	2 – 3
SA trade policy	2
SA land reform policy	1 – 2
SA labour policy	1 – 2
Macro economic policy	2 – 3
SA competition law	2
SA BEE policy	1 – 2
Trust in the political system	1
Modus score for government	***(1 – 2)***
1 = Constraint 2 = Moderate 3 = Enhancement	( ) = Modus

Source: Own calculations from the 2004 Executive Survey

Chance factors: Chance events are occurrences that have little to do with circumstances in a nation and are often largely outside the power of the firms to influence. Chance events are important because they create discontinuities that allow shifts in competitive positions. Chance events can nullify the advantage of previously established competitors and create the potential for a new firm to supplant them in order to achieve competitive advantage in response to the new and different conditions (Porter, 1998).

In Table 6.12 the impact of some chance events and also factors that are difficult to be controlled by agribusiness in South Africa, are indicated. Aids, the cost of crime, developments in Zimbabwe and the strong Rand are chance factors which have a constraining impact on the competitiveness of the agribusiness sector in South Africa.

Table 6.12: Chance events as determinants of competitiveness

Chance	**Rate**
Cost of crime	1
Aids	1 – 2
Developments in Zimbabwe	1 – 2
Biotechnology	2 – 3
Strong Rand	1 – 2
Modus score for chance	***(1 - 2)***
1 = Constraint 2 = Moderate 3 = Enhancement ( ) = Modus	

Source: Own calculations from the 2004 Executive Survey

6.4 CONCLUSION

From the 2004 Executive Survey it is clear that the critical key success factors to the competitiveness of the agribusiness sector in South Africa are the availability of unskilled labour, intense competition in the local market, the production of affordable high quality products and continuous innovation. Other determinants that have a positive impact on the competitiveness of the sector are the quality of infrastructure in South Africa, the quality and availability of technology, sophisticated local buyers, the availability, quality and sustainability of local suppliers of primary products, electricity suppliers, internet

service providers, specialised information technology services, regulatory standards in the sector, the flow of information from customers and primary suppliers to agribusinesses, the production of environmentally friendly products, investment in human resources and South Africa's macro economic policy.

All the participants in the South Africa agribusiness sector have to pay special attention to these critical success factors in order to develop and sustain competitive advantage as successfully as possible in the years to come.

Factors that are threats to the competitiveness of the agribusiness sector in South Africa are the quality of unskilled labour, the availability of skilled labour, the cost of technology, trust in the political system, South African BEE, labour and land reform policies, the tax system in South Africa, the cost of crime, Aids, developments in Zimbabwe and the strong Rand.

Once again, special attention must be given to these factors. Strategies need to be developed to stop the negative impact of these factors on the competitiveness of the agribusiness sector in South Africa.