THE MANAGEMENT OF CHANGE IN AGRIBUSINESSES IN SOUTH AFRICA: THE WESTERN CAPE EXPERIENCE

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Agriculture in the Western Cape was traditionally practised in a very protected environment. Because of the process of international trade liberalisation, regional internationalisation and the deregulation of South African agriculture, the protection is dwindling rapidly. Through the rapid change in the demand structure for agricultural products, mainly because of population growth and urbanisation, new opportunities come into existence. These new opportunities can be utilised through a different managerial approach by farmers, inter alia by developing niche markets and adding value to their products. Not all products can however be marketed using this approach, and a total new strategy for marketing is needed in which the Western Cape Department of Agriculture can play an important role in conjunction with its role of facilitating the entrepreneurial development of farmers.

1 INTRODUCTION

Agriculture is a very important part of the economy of the Western Cape. Not only does it contribute 11 percent to the gross geographic product of the province and more than 20 percent to the gross value of agricultural products in South Africa, but it also provides 13 percent of the jobs in the formal sector. If forward and backward linkages are taken into account, the importance of this sector increases.

However, certain environmental factors are necessitating changes in the agricultural sector. This paper will therefore focus on some of the factors that are inducing change, the implications thereof and the resulting adaptations that are needed on micro level.

2 FACTORS NECESSITATING CHANGE IN AGRIBUSINESSES

In figure 1 a schematic representation is given of the impact of different environmental factors on the profitability of an individual farming enterprise. It is not possible, within the scope of this paper, to discuss each of the factors that influence profitability on farm-level, but it is more appropriate to analyse certain selected factors. It is however clear that the farmer has very little or no control over most of the factors (except the product that he produces and the farming system that he uses) that influence his livelihood. He should therefore take cognisance of these external factors, and analyse the impact they may have on his farming enterprise.

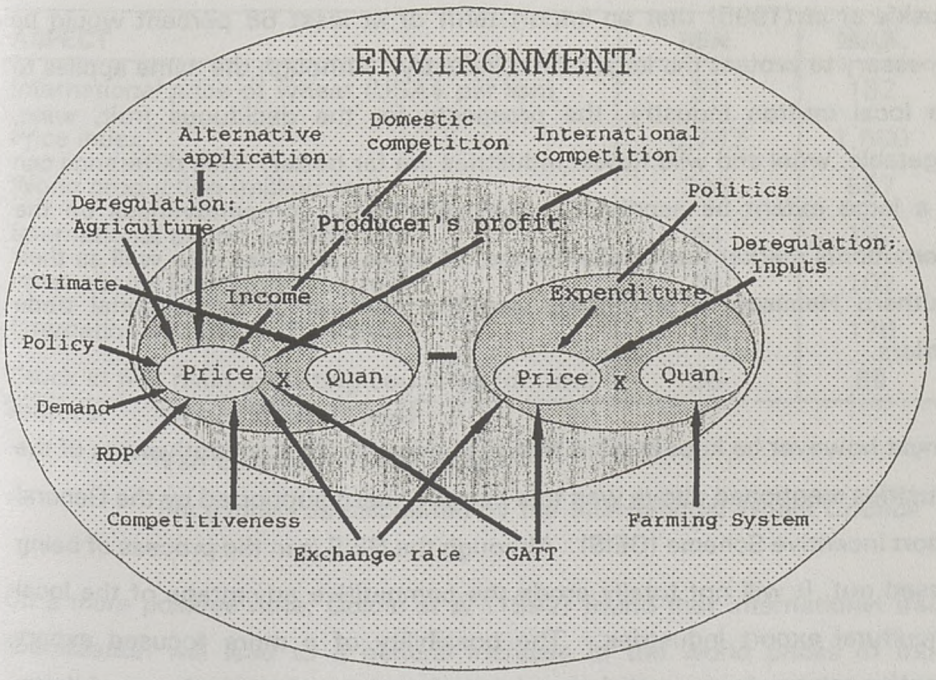

Figure 1 **Schematic representation of the factors that influence the profitability of an individual farming enterprise**

Source: Troskie *et al* (1995)

2.1 International trade liberalisation

The General Agreement on Tariffs and Trade (GATT), now known as the Marrakesh agreement, is - although not unique to South Africa - one of the most important factors inducing change in local agriculture. As the contents of the agreement are well known at this stage, it is more important rather to focus on the implications of the agreement.

One of the most basic consequences of this agreement is that products which were not competitive internationally in the past will no longer be protected by import control. In the Western Cape, with its history of protected wheat farming which dates back to 1652 (Sim, 1952), this implies according to Troskie *et al* (1995) that an import tariff of at least 68 percent would be necessary to protect the local wheat industry. Although the same applies to the local mutton industry, the prospects for the deciduous fruit, wine, vegetable, wool and wild flower industries are far better. This difference can to a large extent be ascribed to the tradition of competitiveness on the international market (especially Europe) of those industries was well as their Southern Hemisphere advantage and the removal of international trade barriers.

It must however be kept in mind that the international competitiveness of the industries mentioned above was to a certain extent supported by the General Export Incentive Scheme (GEIS). Although the GEIS is in the process of being phased out, it will not totally erode the competitive advantage of the local agricultural export industries. The possibility of a more focused export incentive scheme is currently being debated, and therefore the future of these industries is very positive, both in the short and long term.

Another implication not often mentioned is the effect of international trade liberalisation on the stability of international commodity markets. An indication of the variability in these markets is given in table 1. According to McCalla & Josling (1985) the variability can to a certain extent be ascribed to

the world-wide tendency of protection of domestic markets. Because the supply of agricultural products is mainly influenced by climatic conditions, and not by demand as assumed by the neo-classical economic theory, the result is that domestic variations in production have a greater effect on the world market under protectionis policies than in a more liberalised international trade environment. The effect of the Marrakesh agreement could well be a greater stability in the world supply and prices of agricultural commodities. One of the fears of international trade liberalisation, namely increased instability at farm level, could therefore be partially forsworn.

Table 1: Summary of some of the most important variables in the international wheat market, 1970-1994

ASPECT	MIN.	MAX.
International price of wheat (USA$ per ton)	91	182
Price index*	0,787	1,680
World production (million ton)	348	557
International export (million ton)	64	107
International import (million ton)	64	102
International stock (million ton)	80	176
Stock in five main exporting countries (m. ton)	36	85

Sources: Wheat Board (1994)

Van Schalkwyk *et al* (1993)

* Price index as calculated by the International Wheat Council

On a more positive note, Goldin *et al* (1992) found that international trade liberalisation will lead to a general increase in the world prices of most agricultural commodities. In the case of wheat a partial trade reform limited only to agriculture will lead to an increase of 5,9 percent, whereas a partial trade reform on a multi-sector level (as in fact is the case in terms of the Marrakesh agreement) will limit this increase to 3,5 percent.

2.2 Deregulation of South African agriculture

Because of various reasons South African agriculture has a history of intense regulation, especially on the output side. As this situation is not unique to South Africa, the implications of the deregulation of South African agriculture may be of wider relevance.

One of the first implications is that differentiated price, in accordance with the perceived distance from the most important markets and ports of exit, will be established. Closely linked to this is an increase in the price discounting, according to the quality of the specific product. Another factor that will influence the farm-gate price is the time of delivery. However, for a farmer to take advantage of this, he will need to develop some storage facilities on his farm. As a well-developed infrastructure for the storage of especially staple commodities on a co-operative basis exists in South Africa, this may lead to a duplication of infrastructure, a loss of income from storage to the co-operatives and possibly foreclosure.

While the different marketing boards in South Africa are loosing their statutory powers, the practice of direct agreements between buyers and sellers are becoming more common. This process will be strengthened by the establishment of a commodity market, especially for staple commodities, and forward contracting.

2.3 Regional internationalisation

Since the 1970's South Africa has become increasingly politically isolated from its neighbours in Southern Africa. Two factors led to an about-turn, namely the political transformation process in South Africa (on which this paper will not embroider) and the world-wide tendency to form economic power blocs. These factors gave lead to a serious debate on the possibilities of a free-trade area within the South African Customs Union (SACU - South Africa, Namibia, Lesotho, Swaziland, Botswana) or within the Southern

African Development Community (SADC - SACU, Angola, Malawi, Mozambique, Tanzania, Zambia, Zimbabwe).

Although only 39 percent of the population of the SADC lives within South Africa, it contributes approximately 80 percent to the gross geographic product and 81 percent of the value added through manufacturing (Nomvete, 1993). A free-trade agreement for this region may thus well lead to increased export of manufactured products by South Africa to the rest of the region, but because of balance of payments considerations, trade in the opposite direction is also needed. Trade of this nature will to a large extent be in agricultural commodities. Because of the comparatively rich natural resources of most of the other Southern African states, local farmers may loose their competitive advantage.

Fortunately the Western Cape has a mediterranean climate, which distinguishes it from the rest of the region. According to Van Rooyen (1994) the commodities that show the most likely opportunities are beef, vegetables, tea, coffee, cotton and leather, which with the exception of certain vegetables are not important crops in the Western Cape. It was however found by Troskie (1995) that the textile industry in the Western Cape may come under pressure, especially from Zimbabwe, given this scenario. With its close ties to agriculture, this may have an adverse effect on local agriculture, especially the wool industry. With the assumption that wheat production under irrigation will become an important enterprise within the region, the same will apply to the wheat industry of the Western Cape. The reason for this is that, with the comparative gross margins per ton, wheat can be delivered cheaper in Gauteng, an important market for Western Cape wheat, from Zimbabwe than from the Western Cape.

2.4 Population growth and urbanisation

South Africa's population is growing at an average rate of approximately 2,5 percent per year. The effect of this relatively high growth rate is that the

South African population is expected to increase from 37 million people in 1990 to approximately 58 million in the year 2010.

Approximately 90 percent of this annual increase of one million people will come from the relatively poor section of South Africa's population. In conjunction with this, a rapid process of urbanisation (in the order of one million people per year) is taking place. The main urban growth takes place in four areas, as illustrated in table 2.

Table 2: Expected urban population in the four main urban areas of South Africa in the year 2010

AREA	EXPECTED URBAN POPULATION: 2010 (million)
Gauteng	17
Durban/Pinetown	6
Cape	4
PE/Uitenhage	2

Source: Spies (1994)

Because consumption patterns differ between urban and rural populations, this will lead to structural changes in the need for food.

2.5 The effect of changes in the exchange rate on the profitability of farming enterprises

In the case of South Africa, the expected change in the factors that usually influence the exchange rate (i e relative inflation rate; balance of payments; international economic policy) will probably lead to a weakening of the South African currency compared with those of its main trade partners. This will not only be to the advantage of export-orientated industries, but also to those industries whose products are primarily traded domestically. Although an increase in production costs can be expected (see table 3), an even greater increase in international competitiveness can be the result of a weakening in

the exchange rate, as illustrated in table 4.

Table 3: The effect of exchange rate variations on production costs for domestic wheat producers (percentages)

LOCALITY	CHANGES IN THE EXCHANGE RATE					
	+10%	0%	−10%	−20%	−30%	−40%
Swartland (dryland)	-4,29	0	+4,29	+8,59	+12,89	+17,16
Moorreesburg (dryland - 1 yr fallow)	-4,66	0	+4,66	+9,32	+13,99	+18,65
Moorreesburg (dryland)	-4,50	0	+4,50	+9,00	+13,50	+18,00
Caledon (dryland - 1 yr fallow)	-4,39	0	+4,39	+8,78	+13,18	+17,57
Caledon (dryland)	-4,35	0	+4,35	+8,69	+13,04	+17,39
AVERAGE (SA wheat industry)	-4,27	0	+4,27	+8,53	+12,81	+17,07

Source : Van Schalkwyk *et al* (1993)

Table 4: The effect of exchange rate variations on international competitiveness of domestic wheat producers

ASPECT	CHANGES IN EXCHANGE RATE			
	0%*	−10%	−20%	−30%
Gross value of production (R/ha)**	1 069	1 175	1 283	1 390
Variable cost (R/ha)***	1 061	1 106	1 152	1 197
Gross Margin (R/ha)	8	69	131	193
Gross Margin (R/ton)	4	38	73	107

* Exchange rate: 1 USA$ = R3,60

** Yield = 1,8 ton per hectare; price = $165 per ton (the price at which wheat from the Gulf of Mexico can be landed in the Cape Town harbour).

*** Variable costs, currently at R1 061 per hectare, are weighted with the data in table 3.

3 IMPLICATIONS FOR AGRICULTURE IN THE WESTERN CAPE

As some of the implications of a changing environment have already been discussed above, this section of the paper will be limited to some additional

implications. The change in domestic demand for agricultural products in the Western Cape is influenced by a number of factors, including the following:

- the growth of the population of the RSA;
- the pattern of urbanisation of the South African population;
- the economic growth rate;
- the change in per capita disposable income;
- the change in income distribution;
- the income elasticity of the demand for agricultural products; and
- the current levels of per capita consumption of agricultural products.

Some of these factors have been discussed above, and the expected growth in domestic demand for agricultural products is indicated in table 5.

Table 5: Expected increase in the consumption of certain agricultural products, 1993 - 2010

PRODUCT	PERCENTAGE INCREASE IN CONSUMPTION			
	1% ECONOMIC GROWTH		5% ECONOMIC GROWTH	
	2000	2010	2000	2010
Grain & grain products	23,7	49,6	81,6	296,4
White bread	25,5	53,0	92,3	338,2
Brown & wholewheat bread	30,5	64,6	80,1	282,9
Baking flour	17,9	33,8	163,7	678,3
Bread flour	16,8	34,3	84,5	340,5
Rusks	9,6	16,7	84,6	333,4
Oats	25,8	55,1	41,9	109,5
Meat	22,5	44,9	154,6	616,1
Fish	17,1	33,3	115,2	442,9
Milk & dairy products	17,6	35,4	93,3	350,5
Fruit & fruit products	17,9	33,7	197,5	809,0
Vegetables & vegetable products	21,4	44,3	108,1	406,7
Eggs	22,3	45,3	125,7	481,9

Source: Kleynhans & Liebenberg (1994)

According to the data in table 5 it seems that the main areas of growth, given a reasonable growth in the economy of the Western Cape, are in meat, fruit and fruit products. This would therefore imply that local producers should change their farming systems to include above-mentioned farming systems.

On the supply side it has been calculated through time-series analysis by Kleynhans and Liebenberg (1995) that an expected increase of 50 percent in the production of wheat and 34 percent in the case of vegetables can be expected by the year 2010. Given a scenario of moderate economic growth, this would imply that demand for wheat would grow more rapidly than the production thereof. Whereas only 40 percent of the local production of wheat is currently consumed within the Western Cape, such an increased demand would lead to a larger portion of the local production being utilised within the Province. As the portion of wheat that is consumed locally need less protection from import tariffs than the portion that is utilised outside the province, an increase in the corporate international competitiveness of local producers can therefore be expected.

4 ADAPTATIONS IN THE MANAGEMENT OF AGRIBUSINESSES

Farming in South Africa, especially on the commercial side, has a history of being highly effective on the production side, but less so in the area of marketing. The changes as described above will necessitate a change in the approach to farming. This will mean that the time and energy spent by farmers on the production aspects of their farming enterprise should be scaled down, and be replaced by a more in-depth focus on the marketing aspects of their products. The current situation is not unique to South Africa, but is aptly described by McCalla & Josling (1985) in their observation that, with the exception of farmers in the USA, the volume of agricultural products produced is a derivative of climatic conditions and not of demand and supply, as is the assumption in the neo-classical school of thought on economics.

This new approach entails that farm planning should start with the marketing

of the product. In the former agricultural environment the product of the individual farmer lost its identity, usually in some sort of single channel or pool system, with conformity to the massed product being the norm for quality. In South Africa, with its wide differences in climatic conditions, this resulted in certain problems for individual farmers. A case can actually be made for individual farmers to not only utilise the deviation from the norm in their products, but also to exploit certain changes in the demand structure for agricultural products to develop niche markets. An example that comes to hand is the dairy industry of the Western Cape. Traditionally the market for fresh milk was dominated by a few large buyers who formed the interface between the producer and consumer. This milk was distributed in bulk, after it had been pasteurised, homogenised and packed. However, with the large influx of Xhosa-speaking people from the Eastern Cape (the process of urbanisation), and their demand for sour-milk, a new market is developing for fresh unpasteurised milk that is not pre-packed. This specific group is also willing to pay a premium for the milk of Jersey cattle, a breed that is extremely well adapted to the pasture systems of the southern coastal regions of the Western Cape. The possibility for some farmers to develop this niche market therefore exists.

Closely linked to the development of niche markets is the adding of value to agricultural products. This does not necessarily have to be capital intensive, but can utilise slack labour at certain times of the year. As the marketing margin for mutton is in the vicinity of 60% of what the producer pays, some farmers in the extensive Karroo region of the Western Cape currently slaughter and process their own sheep and use the principle of network marketing to receive a margin of more than one rand compared with what they would have received through the more traditional channels. Another (more capital-intensive) example, is that of a farmer that "cans" vegetables in plastic bags. By doing so he can deliver a cheaper and more environment friendly product of the same quality than is possible with the traditional infrastructure. The principle in all three examples mentioned so far is that the individual farmer can be more adaptable to the changing environment and flight-footed to utilise

new opportunities of a smaller nature than the bigger agribusinesses.

The total production of the agricultural sector can however not be marketed in this way. It may be difficult for individual farmers to differentiate particularly staple foods, and the total volume of other products cannot be marketed through niche markets. It is therefore necessary to develop a new marketing strategy for agricultural products, especially in view of the structural changes in the market as described above. The Western Cape Department of Agriculture, which has traditionally been more focused on the production aspects of farming, may play an important role in this regard, provided it changes its approach.

Farmers, in order to utilise the new market opportunities, will have to adopt a new approach to not only the agricultural systems, but also the farming systems that they use. In a recent study by Louw (1995) it was found that a drastic decrease in the farm-gate price of wheat would have a relatively limited effect on the farming systems of the Swartland region of the Western Cape. This can to a large extent be ascribed to the severe annual summer drought, and the associated limited large scale options for farmers in this region. However, the possibility of producing variants of *brassica* crops under dryland conditions during the winter months has not yet been evaluated to its fullest extent (Reid, 1994). This would imply that farmers experiment with new crops to develop new opportunities, and therefore that they invest a significant proportion of their income in research. This is contrary to the existing attitude of farmers in the area.

It is therefore necessary to influence the managerial outlook of farmers in the extensive cropping areas of the Western Cape. Unfortunately the natural process of selection of farmers that took place in these areas was to a greater or lesser extent, because of various historical reasons, negatively correlated with entrepreneurial skills. It would therefore bode well for agriculture in the Western Cape if the Western Cape Department of Agriculture embarks on a programme to develop the entrepreneurial skills of farmers in its area of

responsibility. This would be done on two fronts, namely through changes to the formal training courses in farm management presented by the Department, and through an in-job training programme that is being developed in conjunction with the Business School of the University of Stellenbosch, with some help from Europe.

5 CONCLUSION

Although certain environmental factors are inducing significant turbulence in the Western Cape agriculture, changes in managerial outlook are already taking place that will enhance the long term sustainability of farming. These changes include a new outlook on the marketing function, as well as the development of entrepreneurial skills among farmers.

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