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SMEs in South Africa's Food Processing Complex: Development Prospects, Constraints and Opportunities



Charles Mather
School of Geography, Archaeology and Environmental Studies
University of Witwatersrand

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SMEs in South Africa's Food Processing Complex: Development Prospects, Constraints and Opportunities
by Charles Mather

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Charles Mather

School of Geography, Archaeology and Environmental Studies

University of Witwatersrand

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1. Introduction

South Africa's food processing sector is widely regarded as having the potential to generate economic growth, entrepreneurial opportunities and employment (FAO, 1997; CIAT, 2002; Lambert, 2001; McCormick and Atieno, 2002). In developing countries, the interest in agro-processing is associated with its potential for generating demand amongst smallholder farmers, upgrading primary production through small-scale food processing, and improving food price stability and food security (Cardoso, 2000; Saasa, 2000).¹ Indeed, in 1997, the Food and Agriculture Organisation's (FAO's) annual *State of Food and Agriculture* report argued that "because of its high degree of interdependence with forward and backward activities, agro-industry can play a very important role in accelerating economic activity" (FAO, 1997: 8). The FAO also pointed out that agro-processing was suited to developing country contexts due to the fact that processing plants are not always scale dependent. Small operations, they argued, may be as economically efficient as larger plants which can take advantage of economies of scale (FAO, 1997).

The development potential of agro-processing in South Africa has been recognised for some time. In the period immediately before the country's first democratic election, the Macro Economic Research Group (MERG, 1993) suggested that new policy perspectives be developed for the manufacturing-agricultural complex, a group of industries that reflect the complex and dynamic linkages between agriculture and the manufacturing sector. Their evidence, based on data from the late 1980s, suggested that the manufacturing-agricultural complex accounted for 28% of manufacturing employment, 31% of manufacturing production and almost 25% of the manufacturing sector's contribution to gross domestic product (GDP). Based on this analysis, they recommended a policy for targeting investment in agro-industry (MERG, 1993). More recently the Department of Trade and Industry (**the dti**) – through its Integrated Manufacturing Strategy (IMS) – identified agro-processing as one of five key sectors of the economy capable of stimulating growth and generating employment (Machaka and Roberts, 2003). Interestingly, **the dti** also stressed the importance of the food sector in value addition, food price stability and food security (**the dti**, 2001).

The ongoing interest in agro-industry internationally and within South Africa has coincided with significant changes in the structure of the food system in developing countries. The key driver of change in agri-food markets is the concentration and expansion of retailing, combined with foreign direct investment (FDI) in the food processing sector. There is now a growing body of research that explores the implications of concentration in retailing and processing for farmers and food processors (Dries *et al*, 2004; Weatherspoon and Reardon, 2003; Reardon and Berdegue, 2002). This research suggests that while urban-based consumers are likely to benefit from modern retail structures, the same cannot be said for small-scale farmers and food processors. With a few exceptions (Dries and Sinnen, 2004) small farmers and small and medium-sized processors are excluded from these chains because they are unable to meet the volume and process requirements involved in supplying retailer-driven chains. Instead, retailers increasingly rely on larger food processors who can meet the volume demands and the food safety and quality specifications required by large retail chains. These changes in the agri-food system pose considerable challenges to both governments and donors interested in supporting small-scale food processors.

This paper explores the development prospects of small, medium and micro enterprises (SMEs) in South Africa's food processing complex. For several reasons, this is an important time to be

¹ The Intermediate Technology Development Group has established the journal *Food Chain: The International Journal of Small Scale Food Processing* to publicise best practice in supporting SME food processing in the developing world.

considering the development prospects of SMEs in this sector. First, the deregulation of agricultural markets from the late 1980s and early 1990s has opened up many new opportunities for small and medium-sized processors, but we have little insight into how these businesses operate in a competitive environment dominated by large, integrated processing companies and powerful retail chains. Second, the Department of Agriculture and Land Affairs has recently released its black economic empowerment (BEE) proposals for agriculture (NDA, 2004a). While much attention has focused on the land ownership implications of the proposed AgriBEE, there has been very little discussion about its proposals for agri-enterprises, which include food processors. The AgriBEE suggests that 50% of preferred suppliers be companies owned by black South Africans and local SMEs by 2010. This is a significant intervention, given that most preferred suppliers for retailers are large, integrated food processing companies.

This report is based on secondary sources on South Africa's food sector and a non-random sample of 30 small-scale food processors.² The findings stress the growth opportunities and challenges of SMEs in this sector, given the concentrated structure of retailing and food processing.

The first section of the paper reviews the international literature on agri-food restructuring in the developing world. This section emphasises the shift to *buyer-driven* food chains and the implications of this change for small and medium-sized food processors. The second and third sections of the paper provide a profile of the South African food processing sector and an analysis of its recent economic performance. In the fourth section of the paper, the characteristics of food processing SMEs are discussed, followed by a detailed exploration of the growth challenges they face. The concluding section suggests support mechanisms for these enterprises in the light of their growth challenges.

For the purposes of this report, food processing is defined using the Standard Industrial Classification (SIC) codes 301 to 304. These include manufacturing, processing and preservation of meat, fish, fruit, vegetables, oils and fats (301); manufacture of dairy products (302); manufacture of grain mill products, starches and starch products and prepared animal feeds (303); and manufacture of other food products (for example, bread, sugar, chocolate, pasta, coffee, nuts and spices) (304).

2. Agri-food restructuring in the developing world

The restructuring of agri-food markets – sometimes described as agro-industrialisation (Cook and Chaddad, 2000; Reardon and Barrett, 2000) – has been most intense in middle-income or 'emerging market' countries. Population growth, political transformation, higher incomes and urbanisation in these countries have stimulated demand for processed food products (Farina, 2002; Farina and dos Santos Viega, 2003). This demand is increasingly met through large supermarket chains, which now dominate food sales in Latin America, Asia and Eastern Europe. Although these changes have been slower in Southern Africa, South Africa's retail structure is highly concentrated and has been expanding rapidly into the region (Weatherspoon and Reardon, 2003). The growing power of supermarket chains has led to a situation where most food value chains may be described as *buyer-driven*, which has important implications for food processors and primary producers.

Buyer-driven food chains have three central characteristics. First, the relationship between agents in the chain is increasingly through contractual agreements and rarely involves open market transactions. Supermarkets now source larger volumes of processed food products from a limited number of preferred suppliers. These preferred suppliers are normally 'listed' as regular

² Interviews were conducted with food processors in the dairy, poultry, grain-milling and specialty sectors (for example, honey, chilli etc). Where possible, the interviews were conducted through face-to-face meetings or telephonically.

suppliers to retailers; listing often involves an audit of the processor's facilities to determine the company's capacity to supply large volumes of processed food of a high quality. The use of fewer preferred suppliers has the effect of reducing the retailer chain's transactions costs. These new contractual agreements also allow retailers to move towards a system of traceability, which allows them to trace quality and food safety problems back to individual suppliers. Given recent health scares associated with food contamination, guaranteeing traceability is becoming an important goal for retailers. It may also be used to gain a competitive edge over other retail chains. Preferred suppliers are under enormous pressure to supply a product consistently and of a high quality. Failure to meet these standards may lead to the food processor being 'delisted', with disastrous implications for the viability of the company.

A second change associated with buyer-driven food chains is related to competition in the food processing sector. The growing concentration of power in the retailing node of the food value chain has placed significant pressure on food processors. These companies now compete for valuable shelf space in the major retail chains. Intense competition between processors has led to restructuring in this sector often associated with mergers and acquisitions. FDI in the food processing sector has intensified the competitive pressures in this node of the food value chain. The food processing sector in many emerging markets is, as a consequence of these changes, increasingly concentrated and dominated by a small number of large domestic and international companies.

The third outcome of 'buyer-drivenness' has been the emergence of private grades and standards (Dunn, 2003). Market liberalisation and structural adjustment programmes in emerging market countries have frequently resulted in the weakening of health and quality regulations for food products, where they existed (Reardon and Farina, 2002). Concerned to ensure that food products on their shelves are safe and meet high quality standards, some supermarket chains have established private grades and standards for commodities produced by food processors and primary producers. They may also require processors to meet internationally accepted standards such as Hazard Analysis and Critical Control Point (HACCP). Meeting these standards requires significant investments in terms of upgrading facilities, purchasing new monitoring systems and ongoing expenses associated with new technical staff.

The overall impact of these three changes has been to exclude small-scale processors from retail chains, and by implication from the most important outlet for food sales in emerging markets. Small and medium-sized processors are usually unable to meet the volumes needed to become a listed supplier. These companies also find it difficult to upgrade to private or international grades and standards that may involve permanent in-house laboratories to test food samples. In the ultra-competitive environment of food processing, small and medium-sized processors are frequently taken over by larger processors in an effort to limit competition and increase their own capacity. Based on a number of case studies, Reardon and Barrett (2000, 2003) argue that "too often the process of agro-industrialisation leads to industrial concentration, [and] exclusionary practices that crowd out undercapitalised indigenous firms and small farmers".

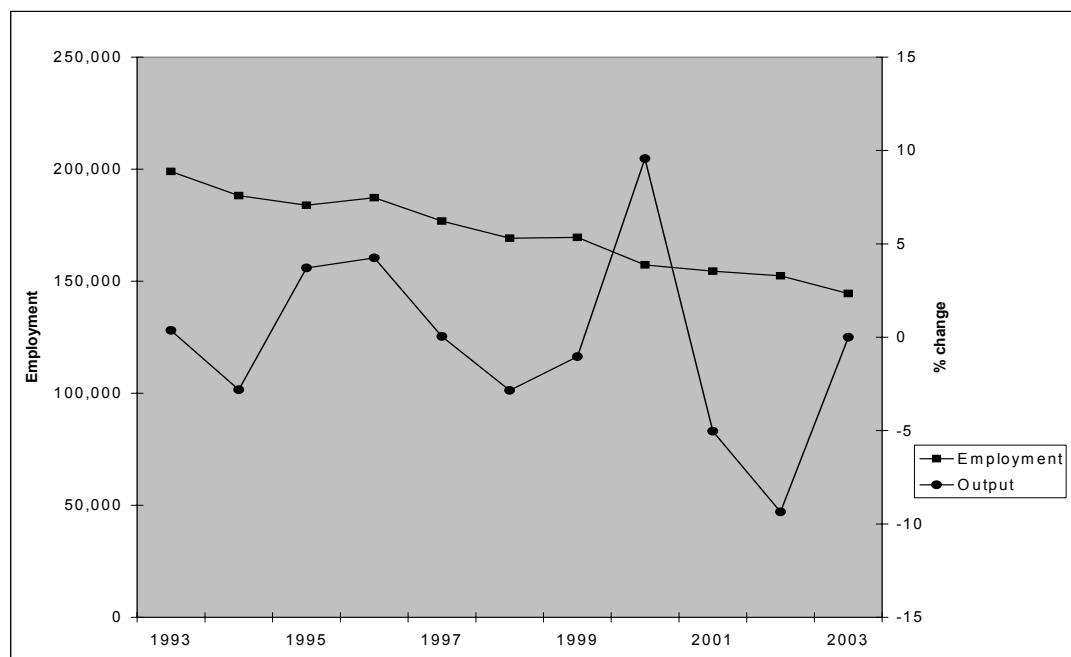
There are important exceptions to the *general* finding that buyer-driven food chains lead to the marginalisation of small and medium-sized food processing firms. In several transition economies in Europe and Latin America, there is evidence that large retailers are playing an active role in assisting SME processors and primary producers. Based on research in Central and Eastern Europe, Dries *et al* (2004: 552) found that "modern retailers assist their suppliers with credits, inputs, extension services and even bank loan guarantees to upgrade their capacities to produce and deliver products of high quality and, increasingly, [adhere to] food safety standards" (also see McCormick and Atieno, 2002; Dries and Swinnen, 2004). This positive relationship is similar to the one observed between large agri-businesses and contract farmers (Kirsten and Sartorius, 2002). Dries *et al* (2004) warn, however, that retailers are more likely to play this role where there is a dearth of high-quality suppliers.

3. Economic performance of the food processing sector

The food processing sector is recognised as an important component of South Africa's manufacturing economy. Food processors contribute about 2.4% to total GDP, 3.2% to exports and 2% of total employment. The sector is a significant part of South Africa's manufacturing economy, and in 1998 contributed 13% of production volume in rand terms, about 12% of employment and 4% of manufactured exports. Besides these direct contributions to employment and output, there are also significant forward and backward linkages between food processing and other sectors of the economy (**the dti**, 1998). In 2003, the food sector spent R32-billion in primary industries, R14bn in secondary industries, including manufacturing, and R17bn in the tertiary sector (Fig, 2002).

Despite the contribution of the food processing economy to growth and employment, the sector's economic performance in the last decade has been disappointing. Employment levels have declined from around 200,000 in 1993 to just over 140,000 in 2003. Output growth has also been very uneven and mostly disappointing in the period since 1993 (see Figure 1).

Figure 1: Employment and changes in output in the food processing sector (SIC 301-304)



[Source: Statistics SA, 2003]

The performance of the food processing sector has been significantly worse than for manufacturing as a whole. Since the third quarter of 1999, the manufacturing sector has grown at an average of almost 4% per year (Machaka and Roberts, 2003). This increase has been driven by good performance in the motor vehicles and vehicle parts, chemicals and televisions, and communication equipment sectors, which has in turn created demand in a range of allied industries. However, the food processing sector has declined in importance in relation to other manufacturing sectors over the same period. The latest figures show that the food processors have sale figures of less than 10% and contribute to 8.2% of salaries in manufacturing. These figures are considerably lower than they were six years ago (see Table 1).

Table 1: Employment, output and salaries in food processing relative to manufacturing as a whole

	Employees	Output	Gross salaries
1997	14.1%	12.7%	9.9%
2003	12.4%	9.9%	8.2%

(Source: Statistics South Africa, 2003)

The cause of declining employment and uneven output growth is related to the restructuring of the food processing sector in response to greater competitive pressures associated with lower tariffs and a freer trade regime, and the impact of mergers and acquisitions (**the dti**, 1998). In the last 10 years, South Africa's tariff structure has changed dramatically (Vink and Kirsten, 2001). From a complex system of quotas and tariffs, the trade regime has been simplified and liberalised (Chabane *et al*, 2003). The result has been a rapid increase in cheap processed food imports that have had a significant impact on several sectors of the food processing economy.

The disappointing sales figures in the recent past and the sector's poor performance relative to manufacturing as a whole are also related to low levels of domestic demand. Food processors are dependent on the domestic market through private household consumption; indeed, up to 90% of sales in some categories is for domestic consumption (**the dti**, 1988). In 2002, high interest rates and high food inflation, combined with huge job losses in the formal sector, had dampened consumption levels for food products, which have created a difficult environment for food processors.

Although the food processing sector has not fared well in the recent past, there are encouraging signs associated with improved domestic performance and increased exports, especially to the Southern African region. The most recent manufacturing statistics show that food processing contributed 0.8% to the 3% increase in manufacturing output between May 2003 and May 2004 (Statistics South Africa, 2004a). Manufacturing statistics released in mid-October 2004 suggest that the performance of the food processing sector is being sustained: manufacturing production for the three months ending in August 2004 increased by 2%; the contribution of food and beverages to this increase was 0,7%, second only to motor vehicles and parts. The recent rise in retail sales – 5.7% in the last year – was also dominated by processed food products. Figures on the sale of perishable and processed food show an increase of 36.7% between December 2002 and December 2003 (Standard Bank, 2003). Increased demand for processed food products and the rapid growth in the food processing sector is almost certainly a consequence of lower levels of food inflation and a significant drop in interest rates.

There are also promising figures for processed food exports, especially to countries within Southern Africa. Recent research has shown that during the 1990s, exports of processed food products to Southern African Development Community (SADC) countries – mainly in the form of cereals, milling products, dairy and sugar – have increased dramatically (Vink *et al*, 2002). This regional market is becoming increasingly important for exporters of South Africa's processed food products.

The evidence on the economic performance of food processing suggests that while it has been disappointing in the recent past, there are promising signs for the future. Of importance is whether this growth leads to both employment creation and opportunities for small and medium-sized food processors.

4. A profile of the food processing sector

South Africa's food processing sector is highly concentrated, with several large listed companies controlling both production capacity and sales in most food categories (Hill, 2000; Fig, 2002). These conglomerates tend to be vertically integrated into both primary production and retailing. Tiger Brands, for instance, has a controlling interest in the Spar retail group as well as interests in grain milling. Companies with backward linkages into primary production include Anglo Vaal Industries and Tongaat-Hulett, both of which are involved in primary production of raw material for processing into food commodities. The most integrated food processing sector is without question poultry production, where the largest companies have interests in 'parent material', day-old-chick and broiler rearing, feed manufacturing and final processing of mature chickens. A further characteristic of the large food processors is the interests they have outside of food production – usually in the pharmaceutical sector – and their recent investments in overseas food and non-food companies.

Concentration in the food sector is a consequence of both *apartheid* agricultural marketing legislation and the technological barriers to food processing. The 1937 Marketing Act permitted agricultural control boards to implement restrictive licensing on food processors. The logic of restricting the number of processors was based on the argument that there was excess capacity of raw material, which could have a detrimental impact on the income of white farmers. By controlling the number of processors, the state and its various control boards hoped to achieve the broader goal of the Marketing Act, which was to stabilise the income of white farmers. Restrictions on the establishment of dairy processors, for instance, led to a situation where five very large processors were able to create regional monopolies on both the sourcing and supply of milk products. In sectors that were not controlled through marketing boards – most notably chicken production and some vegetable and fruit processing – technical barriers to entry appear to have played an important role in leading to a concentrated structure of ownership.

The result of marketing legislation and technical barriers to entry is a sector characterised by extreme levels of concentration. There are, however, several qualifications that need to be made about the concentration of South Africa's food sector.

First, there are variations in the level of concentration *within* the food sector. The number of firms and the level of concentration in the dairy sector are very high, whereas in grain and other food products the level of concentration is lower. Similarly, concentration within the major food groups varies considerably – compare for instance bakery products with sugar and sugar products (see Table 2).

Secondly, the level of concentration by food sector masks the extent to which individual firms are involved in a number of food groups. Tiger Oats, for instance, is involved in the production of milled products (wheat and maize), processed fruit and vegetables, confectionary items, and dairy and meat products. Similarly, Pioneer Foods – formed when Bokomo Foods merged with Sasko – is involved in the production or processing of dried fruit, fruit juice, vegetables, bread and other baked products, grain, animal feed, eggs and broilers, and containers to transport fresh and processed food products. In other words, the use of food **groups** may underestimate the extent of concentration in the food sector.

In the third place, there is evidence for both increasing concentration and market fragmentation in the period since 1996. The liberalisation of agricultural markets from the late 1980s opened up many new opportunities for small and medium processors, notably in baking, dairy, milling and meat production. In several of the food groups the number of new processors has grown at an explosive rate. At the same time, however, restructuring in the food sector has led to mergers and takeovers, which is likely to have played a role in increasing concentration. These seemingly contradictory processes have led to a situation where the market share of the largest companies

remains high, but these large companies now face considerable competition from many small and medium-sized processors. Despite their limited market share, these new firms have played an important role in changing the competitive environment of food processing in South Africa.

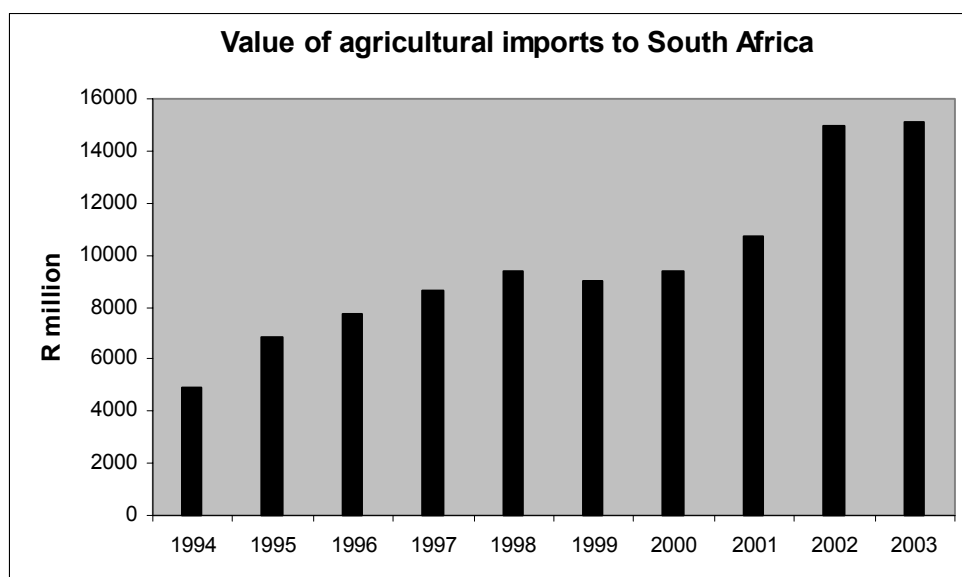
Table 2: Concentration in the food sector, 1996

Food sector and sector	No of companies	Industry sales in percentage terms for largest	
		4 companies	10 companies
Meat, fish, fruit, vegetables, oils and fats	480	19.6	36.8
Vegetables and animal oils and fats	16	65.2	97.8
Canned and processed fruit and vegetables	157	35.0	55.0
Canned and processed fish	46	57.8	79.2
Dairy products	113	68.4	80.0
Fresh milk	46	70.8	83.5
Butter and cheese	17	82.0	97.4
Milk powder and other edible milk products	13	87.0	99.9
Grain mill products	283	36.0	56.4
Flour	209	42.6	64.8
Breakfast foods, starches and starch products	8	95.4	-
Prepared animal feeds	72	37.3	60.1
Other food products	821	26.1	53.3
Coffee, coffee substitutes and tea	15	80.4	95.8
Bakery products	522	45.3	62.6
Cocoa, chocolates and sugar confectionary	72	72.9	82.4

[Source: adapted from Vink and Kirsten (2001)]

The liberalisation of agricultural markets from the late 1980s has played an important role in shaping the competitive environment for both small and large food processors in South Africa. There are, however, two other important factors affecting the operation of the food processing sector in South Africa. The first is associated with the broader liberalisation of the South African economy. Prior to the 1990s South Africa's trade regime was regulated through a wide range of tariffs, quantitative restrictions, duties and a range of other protective measures. In the food sector tariffs and trade restrictions virtually eliminated foreign competition in the domestic market (Vink and Kirsten, 2003). When South Africa became signatory of the World Trade Organisation after 1994 quantitative controls on imports were removed and tariffs were reduced and simplified. In general, the tariff rates for imports to South Africa have been set at levels below those stipulated by the WTO (Hill, 2000). The result has been a rapid rise in food imports from countries with large subsidies for agricultural production (see Figure 2).

Figure 2: South Africa's agricultural imports



[Source: NDA, 2004b]

The liberalisation of South Africa's trade regime has had an impact on the processed food sector. In 2003 imports were more than R15bn, three times as much as in 1994 (in 2000 prices). These increases in the value of food imports have had a severe impact on several specific processed food sectors, most notably dairy and meat. Imported dairy and meat products frequently originate from countries where the agricultural sector is highly subsidised; the local landed price of these commodities is often a fraction of local production costs. Our survey of small and medium food processors suggests that subsidised imports of processed food products affects large as well as small firms in South Africa.

The second broad factor affecting food processors is the structure of retailing. South Africa has a complex retailing structure with around 70,000 shops that can be broken down into three broad categories: large retail outlets (hypermarkets and supermarkets), medium retail stores (medium-sized retail stores), and small convenience stores (including spaza shops and 'cafes'). The structure of retailing is similar to that of food processing: a small number of very large, formal retail chains control around 70% of turnover, while a large number of smaller stores control the remaining 30% of turnover. The concentration is most apparent in the supermarket sector where only 2% of supermarkets are responsible for between 50% and 60% of all food sales in South Africa. The large formal chains include the listed companies Pick 'n Pay, Shoprite-Checkers and Woolworths, and the soon-to-be-listed Spar group. South Africa's retail sector is characterised by intense competition for market share (Weatherspoon and Reardon, 2003).

Food processors are dependent on formal retail chains for the sale of the products they manufacture. Given the structure of retailing in South Africa the terms of trade are decidedly against processors who must supply large volumes and must meet the increasingly strict specifications of retail buyers. They are also subject to a range of difficult 'buying practices' including long payment terms, rebates, discounts, returns and promotional discounts. Although the large food processors can use popular and heavily promoted brands to improve their terms of trade, retailers have responded with no-name or house brands, which they use to put pressure large processors to reduce prices. Recent data on food consumption patters suggests that no-

name and house brands are the fastest growing 'branded' processed food products. This growth in demand is driven by consumers who feel that house brands are equal in quality to the same branded item.

5. Food processing SMEs

Agricultural marketing legislation represented an important obstacle to the development and growth of SME food processors. Since the deregulation of most agricultural commodities from the mid-1990s – which had been one of the government's key priorities – many new SME food processors have emerged. In the dairy, milling and baking sectors, registration requirements and restrictions on supply effectively restricted small and medium processors from operating. In all three sectors the number of new processors has expanded very rapidly. The number of dairy processors prior to market liberalisation was 40; six years later the figure had increased to over 500 (Coetzee, 2003). In sectors that were not affected by marketing legislation – notably poultry production – changes in the structure of the industry have opened opportunities for small and medium-sized processors. Small food processors manufacturing niche products, like honey, chilli sauces and other condiments, were established due to perceived market opportunities rather than any changes in the regulation or structure of particular food sectors.

The size of food processors, as in other sectors of manufacturing, depends on the product and the technical requirements of the product. In general terms, however, manufacturers of primary agricultural products tend to be larger as this process often requires investment in relatively expensive machinery, equipment and vehicles for transport. Micro processors tend to be involved in the production of final food products such as bread, peanut butter, and honey.

It is possible to identify several common characteristics of food processing SMEs. One consistent finding is that food processing SMEs tend to sell and market their products outside of the formal retail structures that exist in South Africa. In other words, SME food processors tend not to supply Pick 'n Pay, Shoprite, Woolworths, or Spar. Rather than supplying supermarkets, SMEs supply smaller independent retail stores or other enterprises involved in a further stage of processing. Small scale wheat millers, for instance, often supply smaller independent bakeries or the 'in store' bakeries of independent retailers. Similarly, medium-sized poultry producers sell their product at the factory gate or through wholesalers. SMEs also supply institutions and large businesses – mines, prisons, hospitals, schools, and feeding schemes. The link between SME food processors and other SME businesses suggests that there are supply chains which are relatively independent of large processors and retail chains. A consequence of the market focus of SME food processors away from formal retailers is that they tend to be more involved in supplying black South Africans in townships through spaza shops, through networks of hawkers, or at commuter stations.

A second finding across all of the food processing sectors is that SME food processors usually supply local or regional markets. This finding applies to all food processing sectors and to both small and medium food processors. Supplying local or regional markets effectively excludes these processors from retail chains, which require national supply capacity before they are willing to consider small or medium suppliers.

A third finding across the sector is the competitive position of SME food processors. SMEs in this sector are competitive on the basis of price or quality, but rarely volume. Wheat millers who supply small bakeries with flour guarantee that their product is suitable for specialty baking. Similarly, medium-sized broiler producers claim to produce a better quality chicken than larger integrated producers. In the dairy sector the competitive position depends on the product: fresh milk processors tend to compete on price whereas SME cheese and yoghurt producers compete on the basis of quality. Fresh milk producers are able to supply their product at much lower costs

due to lower overhead costs. Small cheese producers, by contrast, produce a product of high quality to customers who are prepared to pay a premium for a better quality cheese.

The final set of findings is also found in other manufacturing SMEs. Food processing SMEs are rarely involved in promotional efforts and much of their marketing is done through word-of-mouth or through the active efforts of company owners. Similar to other SMEs in the rest of the economy, the owners of small and medium food processing companies are usually involved in all aspects of the business including production, repair, financing, and marketing.

6. Growth challenges

SME food processors face a set of growth challenges that are unique to this sector. This section focuses on two of these challenges, namely problems linked to raw material supply and the concentrated structure of retailing in South Africa.

Securing sufficient and good quality raw material is one of the important challenges facing small and medium food processors. Given the concentrated structure of the food processing sector, SMEs often find it difficult to secure volumes that match their production capacity; farmers and secondary processors are geared to producing large volumes of raw material for processors with enormous capacity to both process and store raw material or the final product. Unfortunately for SME food processors, smaller volumes of both raw material and animal feed costs more per unit value than it costs the larger processors. In the dairy sector, for instance, smaller processors frequently pay between 10% and 20% more for raw milk than the average market price.

A second problem associated with raw material supply is changes in the volume of supply. The dairy sector provides a dramatic illustration of this problem. Farmers must milk their cows every day; for processors to secure a regular supply of raw milk, they must be able to collect and process milk daily from their farmer-suppliers. The supply of milk from farmers is affected by the weather, feeding rates and also diseases like mastitis. Matching the supply of raw material from farmers with the demand for fresh milk is an extremely challenging task and processors frequently find themselves having to sell excess product to other processors at a considerable discount. Some dairy processors handle the problem of excess raw material by transforming raw milk into yoghurt or cheese, which have a longer shelf life. However, producing cheese and yoghurt requires additional skills and capital investment.

Two food processing SMEs – one producing broilers and a second producing dairy products – illustrate the impact that problems in supply can have for emerging food processors. In 2001, the emerging poultry producer was faced with huge increases in feed costs, primarily due to the rising cost of maize. Feed costs represent a very high proportion of overall production costs in the broiler industry. In an attempt to manage the cost increases, the amount of feed given to the chickens was decreased. However, this increased the vulnerability of the chickens to diseases and the majority died shortly afterwards of a chicken-borne infection. Unable to secure bridging finance from the banks for an additional consignment of day-old-chicks, the processor was forced to buy live chickens from a local white farmer and then process them in the factory. Buying chickens in is not as economically efficient, but without access to bridging finance this processor was unable to order another lot of day-old-chicks and the feed they require to be raised to healthy chickens.

A dairy processing co-operative faced a similar problem with supply and cash flow. The farmer members of the co-operative were unable to supply sufficient milk to the processing plant and there were also concerns about the quality – the manager of the processing plant suspected that water was being added to the raw milk to increase the volume of milk delivered. Currently the processing plant purchases raw milk from a white farmer, also at a much higher cost. Production volumes are down and the co-operative currently faces a cash flow problem. The manager of the

facility has proposed that the co-operative purchase its own cows for milking, but he is finding it very difficult to secure finance for this expanded venture. In the meantime the processing plant – which is a state of the art facility – is now running at only 20% of its capacity.

Variation in the quality of the raw material is a third problem facing SME food processors. Small and medium wheat millers, who supply smaller bakeries, rely on high quality wheat; better quality flour improves the baking process and the quality of the final product. If the wheat is of a poor quality, it may have to be 'improved' using additives at the expense of the miller. Dairy processors who have secured poor quality raw milk have a more serious problem as quality problems in this product cannot be remedied. The problem with raw milk quality explains why small, specialised cheese manufacturers usually milk their own cows rather than source milk from other dairy farmers. By milking their own herd these processors can control the quality of the raw material that goes into producing high quality cheeses.

Food processors are also vulnerable to fluctuations in the costs of animal feed, which in the recent past have been extreme. Since the major component of animal feed is maize, changes in the maize price have a direct impact on the running costs for small and medium food processors. There is an additional problem with animal feeds: most of the larger meat processors – especially those producing beef and chicken – are vertically integrated into the feed industry. For example, Rainbow Chickens owns Epol, one of the country's largest animal feed manufacturers. Smaller and medium processors, who may be in direct competition with Rainbow chickens, must purchase feed from a company that is a competitor in another market. Small and medium processors voiced the concern that they may not be paying 'true market prices' for their animal feed requirements.

The problems associated with uneven supply, quality and the variable costs of inputs can have a devastating impact on the cash flow of small and medium-sized processors. Emerging SMEs, who continue to find it difficult to secure funds from the formal banking sector, are especially vulnerable. One setback in terms of supply, quality or input prices has a potentially disastrous impact on the company's viability.

The problems associated with the supply of raw material were identified by SME food processors factors that contributed to the difficult operating environment they faced in South Africa. Yet they did not see the supply of raw material as their most important *growth challenge*. Instead, the 30 companies interviewed identified retailer supply demands and the system of listing with a supermarket chain as their key growth obstacle. The difficulties in overcoming this obstacle are such that most of the food processors interviewed for this research were not considering 'upgrading' to the level of supermarket supplier. Three of the companies interviewed, however, had a range of relationships with supermarkets: one had recently been de-listed as a supplier due to quality problems; a second was in the process of meeting the requirements for listing; and a third had been supplying supermarkets for over a year. Interviews with the owners of all 30 food processors reveals the challenges and risks facing SMEs interested in overcoming this particular growth obstacle.

Supplying a supermarket chain begins with an approach to the supermarket's 'category manager' of a particular food 'category'. Category managers will evaluate the company's capacity and suitability as a supplier of processed food products; this process varies considerably between retail chains and is also changing rapidly in South Africa. One of South Africa's large retail chains requires a 'facility audit' that can cost up to R15,000 – without any guarantees of becoming a listed supplier. Once listed as a supplier, regular six-monthly or annual audits are usually required to ensure that the supplier maintains a facility of the highest standards.

While the system of retailer-led auditing is relatively new, interviews with both category managers and SME food processors revealed that other retail chains are also demanding a facility audit. Where a formal audit is not required, category managers are more likely to consider processing

companies that have undergone an internationally accepted audit, such as HACCP. All category managers will want to be certain that the company can supply sufficient and consistent volumes of high quality processed food to the retailer's distribution depot. Interruptions in supply and problems in quality are not tolerated and may be disastrous for food processors supplying formal retailers. While most of the most of the SME processors in the 30-company sample recognised the need for a system of quality control, most felt that the conditions were too difficult or costly; the companies growing to become retailer suppliers felt that the auditing process was becoming increasingly onerous.

The experience of one of the companies that had very recently become a listed supplier illustrates the significant changes required to 'step up', in the words of the owner, to this new level. This food processor was typical of the profile discussed in the previous section: the company sold dairy and ice cream products to independent stores, restaurants and, most importantly, to township residents through a network of hawkers. While the company had grown quickly in the recent past, its growth path had reached a limit; further growth was only possible by breaking into the retail market.

As the owner explained:

Making the step up from being a small to a large supplier means moving into the formal retail trade. The implications have been enormous: volumes are much larger than we were used to and there is also more price squeezing and rebates. The requirements in terms of infrastructure and quality are huge (I-6).

The experience of this food processor in making the 'step up' is highly revealing of the requirements for upgrading in this particular sector of South Africa's economy. While the increased volume requirements involved in shifting to the formal retail sector may seem obvious, the owner expressed surprise at the scale of the increase, which required new investments in processing machinery and storage facilities. Additional investments were also required to meet food safety standards: although this company had not received a formal request from the retailer for a 'facility audit', the owner was nonetheless in the process of improving the infrastructure and monitoring systems for HACCP accreditation.³ According to this food processor, achieving HACCP accreditation would smooth the way for preferred supplier status.

Adjusting to new volume and process requirements is not the only change food processors need to make when becoming a listed supplier to a retail chain. These companies must also adapt to a range of purchasing practices that are specific to retailers. SME food processors not involved in retail chains usually have a small operating budget and rarely need to carry the costs of either storing raw materials or the final product. Payment is normally based on cash-on-delivery terms. When SME companies upgrade to retail supplier, they are often required to bear additional costs associated with longer payment terms and also various 'rebates' and 'discounts'. For instance, the terms of payment for retail suppliers vary between 60 and 90 days. For SME food processors this delay is very difficult to manage given that their raw material suppliers usually expect cash on delivery.

The food processor with some experience as a retail supplier felt that although volumes had increased dramatically, he had 'less money' than before:

When you're small and tight, it is much easier. You seem to have more money and there is generally less hassle. Once you become medium sized, things become more complicated (I-18).

³ The costs of upgrading will, of course, vary between the various food sectors. This company's investment of between R500,000 and R600,000 in new infrastructure for storage, processing and to meet the requirements of HACCP accreditation is, nonetheless, an indication of the large investment required to upgrade to retail supplier.

An extended payment term is not the only retailer buying practice processors must endure. Retail buyers often require standard rebates and discounts, they will charge processors for promotional costs and they will bargain very hard over price increases. In some cases supermarket chains will ask processors to supply a consignment 'for free' to celebrate the opening of a new retail outlet.

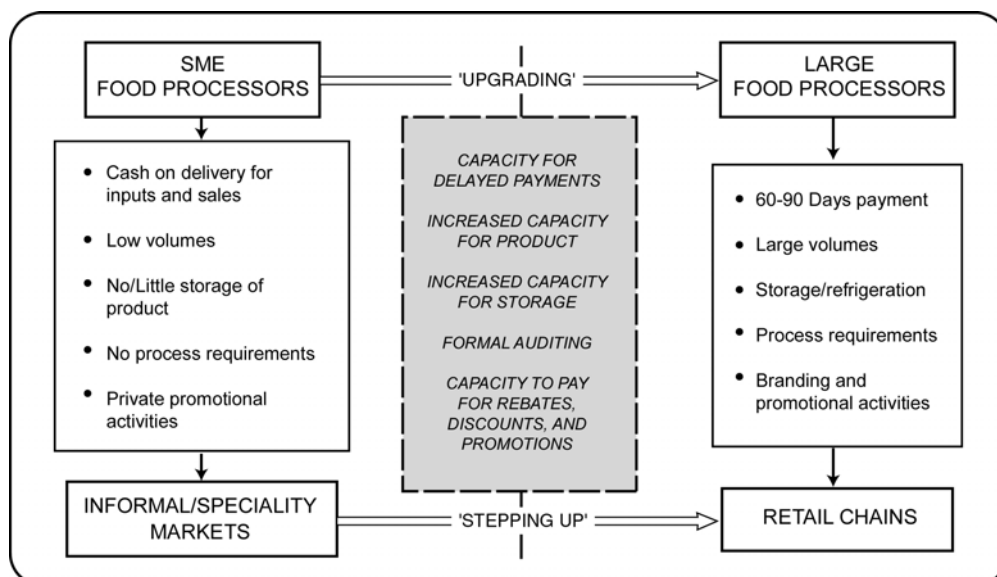
According to the processor with several years' experience as a supermarket supplier,

Every year you need to negotiate a price increase. If you get the increase, you are lucky – lots of times they will refuse to increase prices. If they do agree on an increase, they will cut you in half. So you end up going high. Buyers – they are nasty people; hard people; I don't think that even their families love them (I-18).

Becoming a listed supplier rarely involves a contractual obligation from a retailer and failure to meet the retailer's supply standards can be disastrous. One of the dairy producers surveyed had become a supplier of 'no-name' branded milk to a major retail chain. When the retailer received numerous complaints about the milk going sour before the 'sell-by-date', the quality of the milk was tested. The results showed that the milk had high levels of bacteria, which was a result of poor quality raw material rather than any problem in the pasteurisation process. The relatively high levels of bacteria explained why the milk was going sour before its sell- by-date. Based on the results of the tests, the dairy processor was immediately 'delisted' with disastrous results for its production volumes. In an effort to re-establish its status as a listed supplier, this dairy processor is now undergoing a retailer-audit. The retailer audit will require additional investments in laboratory facilities and new technical staff to monitor the quality of both the raw material and the final product.

The survey of SME food processors suggests that enterprises intending to grow beyond local markets and institutions, such as banks, restaurants and other merchants of processed food, must meet the increasingly stringent requirements of supermarket chains. Significantly, this shift requires both resources and new business strategies (see Figure 3).

Figure 3: SME food processor markets



There is an important exception to this distinction, and this may provide scope for turning the growth *constraint* of retailing into a potential growth *opportunity*. Although large retail chains require their food processors to be listed and to meet their demands for volume and quality, franchise stores have some flexibility in selecting their food suppliers. All branded retail outlets are encouraged to use listed suppliers and there are important benefits to this in terms of pricing and promotion. Smaller franchise stores do have the flexibility of sourcing processed food products from small and medium-sized suppliers.

The reasons they do this is based on either price or quality, as may be illustrated through the supply of processed dairy products. Small and medium-sized fresh milk producers have overhead costs that are significantly lower than the larger dairy processors who supply and source fresh milk nationally. As a result, they are able to supply fresh milk to retailers at a significantly lower price, which retailers use to create price competition in this particular dairy commodity. For other dairy commodities, notably cheese and yoghurt, retailers are willing to stock small volumes of processed dairy that meet certain quality criteria. An example within the yoghurt category would be organically produced yoghurt and other specialty yoghurt products. Individual retailers are also willing to consider stocking a range of cheeses as long as they can be convinced of their 'specialty appeal'. These speciality products are, without exception, priced higher than those supplied by the large processors and are therefore targeted at customers willing to pay more for dairy products that claim a higher quality.

The experience of one small dairy enterprise illustrates the opportunities that are available through independent retailers. This small, specialised cheese and yoghurt processor approached a single franchise store and requested shelf space for his cheese product, which he claimed was of a superior quality. The owner agreed to make 'shelf space' for his product in both the cheese and the yoghurt areas of the store. In return, the retailer required that he supply at least 8 categories of yoghurt and several varieties of cheese. Since the dairy processor's brand was unknown, and his prices were higher than those of other large cheese and yoghurt suppliers, he decided to set up a 'tasting table' so that customers could sample his cheese.

As he explained:

My problem with the consumer is that I need them to taste the cheese. The market is very price driven and they need to taste the difference. It also makes a difference that I am there – they want to be able to ask the cheese maker all sorts of questions.

This dairy processor now supplies several individual franchise stores and also sells cheese and yoghurt directly from the farm. He is not, however, considering becoming a listed supplier as he cannot "carry the four months payment or the rebates".

Supplying franchise stores thus offers an important outlet for small and medium-sized food processors. It may provide the opportunity for enterprises to develop a 'brand following' and perhaps eventually upgrading to becoming listed suppliers. This is precisely the route followed by a successful processor of chilli sauce and other condiments. The company's history begins in a home kitchen where chilli sauce was manufactured and then bottled with hand drawn labels. The sauce was initially sold at flea markets and through independent restaurant outlets. With demand for the product growing, the owner approached several individual franchise stores, which agreed to stock the sauce on cash-on-delivery payment terms. The success of the product at this scale led eventually to the company being listed as a preferred and national supplier in all of South Africa's retail chains.

This opportunity to 'break into' the retail environment is different from what has been reported in other emerging markets. As noted earlier, Dries *et al* (2004) report that in Eastern Europe retailer chains are actively involved in supporting smaller suppliers, but in an environment where there are significant supply constraints. In South Africa – where these supply constraints do not appear

to exist – the opportunities for upgrading may be found in the complexities of the country's retail structure.

7. Concluding remarks: supporting the growth of food processing SMEs

This survey of food processing SMEs suggests that there is a need to acknowledge the specific problems facing these enterprises in terms of raw material supply, changes in input costs, and problems in quality, which, in the context of limited access to formal financial institutions, can threaten the long term viability of the enterprise. The two case studies discussed earlier in the report illustrate in dramatic fashion how vulnerable emerging SMEs are to supply variations and problems in quality, which are a consequence of the biological nature of the product. Unable to secure bridging finance from private or public institutions, these enterprises find themselves in the difficult situation of not being able to make full use of their production capacity.

A more significant growth challenge is related to South Africa's agri-food system linked to the expansion and concentration of supermarket chains. The sourcing practices of these large retail chains has led to a situation favouring large and well-resourced food processors that can meet a set of increasingly strict demands around volume, quality and food safety. These developments have important implications for the growth prospects of SME food processors.

A key finding of the research is that the 'step up' from SME to supermarket supplier cannot normally be achieved through *incremental* growth and requires instead significant investment in infrastructure to meet the volume and process requirements of supermarket buyers. In addition, it also requires adaptation to a set of new business practices including longer payment terms, rebates and discounts. Given the scale of the investment required, very few of the SMEs interviewed for the research were considering becoming supermarket suppliers; most cited their inability to meet the volume requirements and the problems they would face in dealing with longer payment terms and difficult buying practices. The three companies that had recently made the 'step up' remarked on how this had transformed their operating environment in ways that were surprising and difficult to manage. The 'step up' is also clearly not without risk, as the experience of the fresh milk supplier that was 'delisted' illustrates.

Paradoxically, the growth prospects for SME food processors with ambitions to make the 'step up' may also be found in the structure of retailing. The existence of franchise stores, which have some flexibility in sourcing practices, means that there are opportunities for smaller food processors in South Africa's concentrated food retail environment.

Several of the food processors interviewed were supplying specialty products to one or more individual franchise stores. The route to growth through this strategy could be incremental and is likely to be most successful through the development of brand following and customer recognition. Once a sufficient following has been established, supermarket buyers could then play a role in assisting these processors in making the step up to listed suppliers. This growth route is unlike what has been reported in Central and Eastern Europe (Dries *et al*, 2004). In this particular emerging market a shortage of high quality suppliers has encouraged supermarket chains to actively assisting smaller and medium-sized enterprises in becoming listed suppliers.

The different growth opportunities for SME food processors in South Africa and emerging market countries in Eastern and Central Europe is significant: while both might be classified as emerging markets, with broadly similar processes of agri-food restructuring, this research suggests that the route to growth for SME food processors cannot be generalised across all emerging market economies.

A second growth strategy that has proved very successful in South Africa links retailing and food processing. The Butterfield franchise system has proved enormously successful in establishing small and medium-sized bakers run and owned by black South Africans.

Starting in 2000, the company has focused on encouraging previously disadvantaged people to establish bakeries to supply black consumers. The bakeries have been established in the centre of cities like Johannesburg and Pretoria or close to commuter facilities like train stations. Butterfield provides assistance in terms of training, equipment purchases, shop fittings, and an initial stock of flour, yeast and other baking ingredients. The success of Butterfield's franchise system has been striking: at least 40% of the company's 110 franchises are owned by black owned small food processor-retailers.

According to Butterfield's managing director, not one of the black franchisee owners has failed. Butterfield's efforts to establish black owned bakeries have been supported through grants from the Industrial Development Corporation and through a Danish fund partner. Franchising appears to be a particularly effective vehicle for establishing emerging food processing SMEs. The Butterfield experience – where new owners are assisted in terms of training, equipment and business plans – appears to be a model that could be applied to other food processing SMEs. From the point of view of this research, the significance of the Butterfield success story is that food processing and retailing are combined into one enterprise.

This research also has implications for government support mechanisms for SME food processors. Support mechanisms need to be adapted to the specific needs of food processing SMEs. The Department of Trade and Industry has a wide range of programmes supporting SME development (Rogerson, 2004). In one of the programmes – the Sector Partnership Fund – almost 30% of the successful applicants are in the agro-processing sector (Suzaki, 2003). This survey of SME food processors suggests that support mechanisms need to confront the key growth challenge facing small enterprises in this sector.

Support structures should be geared to assisting these enterprises in overcoming the financial and technical obstacles involved in becoming listed suppliers to supermarkets. This means assisting businesses that are growing and attempting to break into the formal retail environment, which could be achieved by providing funds for technical assistance to improve the quality of the product and to ensure that the facilities meet the standards of retailers. This form of assistance – which would facilitate 'upgrading' in the value-chain sense of the word (Schmitz, 2004; Humphrey and Schmitz, 2004) – would build on the important intervention provided by the AgriBEE. While this empowerment proposal correctly identifies preferred suppliers as a way of transforming South Africa's food processing sector, retailers are more likely to meet these goals when emerging SMEs have already broken into the retail environment, if only at the franchise level. An important question is whether the existing support structures can be adapted to the needs of existing and new food processors.

South Africa's agri-food system has undergone significant transformation in the last decade. A positive outcome of the state's policies since 1994 has been the liberalisation of agricultural markets, which has opened up many new opportunities for small and medium-sized food processors. Yet these enterprises face an extremely competitive environment due to the concentrated structure of both retailing and food processing. There is an urgent need for appropriate policies and structures to support these enterprises, which have the potential to generate employment and growth in South Africa.

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I-18: Medium-sized chilli producer; interview 30 September 2004