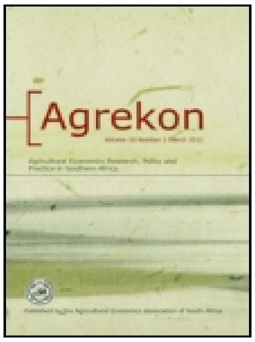

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Good for whom? Supermarkets and small farmers in south africa – a critical review of current approaches to increasing access to modern markets

T. van der Heijden & N. Vink

GOOD FOR WHOM? SUPERMARKETS AND SMALL FARMERS IN SOUTH AFRICA – A CRITICAL REVIEW OF CURRENT APPROACHES TO INCREASING ACCESS TO MODERN MARKETS

T. van der Heijden*and N. Vink**

ABSTRACT

Small-scale agriculture is one of the few tools available to support improved rural livelihoods on a significant scale in South Africa. Access to output markets is a key factor in generating higher incomes. The rise of modern markets (supermarkets in particular) is generally viewed as positive for the rural poor, although most commentators accede that there are challenges to be overcome in obtaining access to such markets. These challenges are generally perceived as supply-side issues: That is, the "fault" for market exclusion lies largely with small producers – their production methods, their business organisation and their location – rather than with these markets themselves. This study asserts that much of the research that has been undertaken in this area is in fact incomplete, because it has excluded two key issues: The likely impact of the dominant supermarket business model on small farmers; and the actual position of small farmers in those countries with high levels of supermarket concentration. A closer examination of the supermarket model suggests it is inherently hostile towards smaller producers. The South African food retail market structure resembles that of industrialised countries rather than developing countries. Therefore, we should expect that the position of South African small farmers vis-à-vis supermarkets is similar to that of small farmers in industrialised countries, who are increasingly excluded from these value chains.

Keywords: market access, small farmers, supply chains, South Africa

JEL Classification: D11; Q13

1. INTRODUCTION

Encouraging the growth of small farmers is important in addressing high levels of rural poverty in many developing countries, including South Africa.

There are many factors that determine the livelihoods of small farmers,

* PhD Research Fellow, Public Affairs Research Institute, University of the Witwatersrand. tracy@pari.org.za This paper is drawn from a thesis submitted in 2010 for the degree of Master of Commerce (Agricultural Economics) at the University of Stellenbosch

* Chair, Department of Agricultural Economics, University of Stellenbosch. nv@sun.ac.za

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but reliable and sustainable access to output markets where they can sell their production for a reasonable price is near the top of that list. Access to markets is key for small farmers to earn more (Senyolo *et al.*, 2009), and cash income from produce sales is important for poor households pursuing a diversified livelihood strategy. Access to attractive markets is also often the spur for increased production and the adoption of new technologies.

Conversely, lack of access to markets is thought to increase household vulnerability: "Rural households that, for one reason or another, are unable to interact with these markets are prevented from adopting these diverse livelihood strategies; and indeed, in many parts of the world, rural poor people often say that one reason they cannot improve their living standards is that they face difficulties in accessing markets" (IFAD, 2003:5).

The participation of small farmers in markets is, therefore, important for pro-poor rural development.

2. BARRIERS TO MARKET ACCESS: THE MAINSTREAM VIEW

Until fairly recently, many small farmers in developing countries had a limited choice of output markets, depending generally on thin local markets. The rise of "modern" markets, associated with both growing supermarket penetration in developing countries and a rise in global sourcing by supermarkets in the industrialised world, potentially offers access to much bigger and more lucrative markets for small farmers. The majority view is that these new markets can provide big opportunities for all farmers, including small farmers (World Bank, 2008). However, there is also a general understanding that small farmers may face barriers to accessing these markets, and that policy should focus on interventions that will assist producers to overcome these.

The assessment of what these barriers are is clearly an important factor in determining the most appropriate policy response to support small farmers. Although numerous barriers to market access have been identified, and the prioritization of their role in contributing to exclusion varies from study to study, a survey of the international and local development literature does indicate an "orthodox" point of view. According to this orthodoxy, there are five main factors that create barriers to modern market access for small farmers in developing countries:

(1) Poor, limited or non-existent access to market information (IFAD, 2003; Matoti *et al.*, 2007; Vermeulen *et al.*, 2008);
(2) Low levels of bargaining power vis-à-vis buyers, corresponding with low volumes of production (Magingxa and Kamara, 2003; Jacobs, 2009);
(3) Poor infrastructure in rural areas (IFAD, 2003; World Bank, 2008; Jacobs, 2009);

(4) A lack of the necessary financial, physical and human capital (Sartorius and Kirsten, 2007; Williams and van Zyl, 2008); and
(5) Low levels of trust between producers and buyers (Louw *et al.*, 2006; Vermeulen *et al.*, 2008).

The key point to note is that this assessment of the problem is characterized by an underlying, implied acceptance that exclusion results largely from the characteristics of producers, rather than from the structure of these modern markets. That is, the “fault” for market exclusion lies mainly with the producers – their production methods and quality, their small levels of production, and their limited market knowledge. The logical extension of this argument is that if small farmers improve the quality and consistency of their production (through better market knowledge, skills development, access to inputs) then they will almost certainly be included in modern markets, subject to overcoming physical access constraints. The belief is that supermarkets will purchase from any farmer (large or small) who can meet mandatory specifications and quality requirements (Bienabe and Vermeulen, 2008). That is, there is nothing in the structure of the modern agricultural market itself, or the behaviour of the actors on the demand side of the equation that presents a barrier to entry so serious that it cannot be overcome by better and more appropriate production by small farmers, and investment in rural infrastructure. Only a small group of researchers (see for example Vorley (2003) and Du Toit (2009)) caution that in reality we do not know nearly enough about how modern markets really impact on farmers to be in a position to accurately assess the reasons why farmers cannot access modern markets.

In this “producer-centric” picture, the role of governments in increasing market access for small farmers is to make available the support and the infrastructure that will facilitate this positive production outcome. This view is shared in the South African literature (Louw *et al.*, 2006; Matoti *et al.*, 2007; Williams and Van Zyl, 2008), and most local researchers propose policies to increase the capacity of small farmers to produce better quality output; the dissemination of more market information; the formation of producers’ organisations to increase bargaining power and sales volumes; the promotion of trust between buyers and sellers; a focus on niche markets (such as organics); and government investment in infrastructure and extension services, on the implicit assumption that these activities will facilitate acceptance into a modern supply chain. The national Department of Agriculture, Forestry and Fisheries (DAFF) is firmly on the side of this approach (DAFF, 2008), adopting the underlying view that small farmers can and will be incorporated into markets if they have access to land and a range of support and extension services to produce better quality output.

Strategies recommended by DAFF include farmers improving their market knowledge; subsidized inputs; a focus on niche markets such as organics; partnerships between small farmers and commercial farmers; and producer associations (Jacobs, 2009). Thus, DAFF has tacitly endorsed a largely supply-side solution to the observed market exclusion of small farmers.

However, if this diagnosis of the problem is incomplete, then it follows that policy initiatives based on these assessments will be inappropriate. Although it is true that there is limited knowledge about how modern markets impact on small farmers in developing countries, there is a considerable body of work documenting the the impact of modern markets on small farmers in the industrialised world. An examination of the interaction between small farmers and supermarkets in the industrialised world could provide an indication of what to expect as the supermarket share of the food retail sector increases in the developing world (Lang, 2004).

Given that globalization is creating a convergence in corporate business models and practices, and that South African companies tend to embrace international best practice standards, these findings may be relevant to the local debate about how best to increase market access for smaller farmers. Two areas are key to broadening the debate around modern markets and small farmers in South Africa:

i) *The structure and rationale of the optimum (profit-maximising) supermarket supply chain management and corresponding procurement models; and*

ii) *The relationship between small farmers and supermarkets in those countries with high levels of supermarket penetration (large parts of the industrialised world).*

If these two areas are examined in detail they provide many reasons to be sceptical about anticipating a long-term positive impact on substantial numbers of small farmers to materialize from the expansion of supermarket procurement in South Africa.

3. MODERN MARKETS AND SMALL FARMERS IN THE INDUSTRIALISED WORLD

A review of various investigative reports commissioned by the EU Parliament, the UK Competition Commission, the US Department of Agriculture and various international aid agencies suggests that the procurement models of supermarkets in mature retail food markets can have a negative impact on small farmers in at least three ways:

i) *Directly, through a procurement model that both prefers to deal with big farmers, and fosters an environment too risky and costly for most small producers;*

ii) Indirectly, through declining supermarket purchases from wholesalers and fresh produce markets (which are important access points for small farmers); and

iii) Indirectly, by encroaching on the markets of those retail outlets that tend to purchase from small farmers.

3.1. The optimum supermarket procurement model

Supermarkets generally operate in a low profit margin environment. Their business model is based on keeping prices relatively low for consumers while increasing the quality of goods on offer, and pushing down costs (Brown, 2005). Following the example of companies in other retail sectors and manufacturing, supermarkets are increasingly embracing the principles of supply chain management (SCM) – the coordination, integration and management of their supply chains – as a critical business success factor (Van der Vorst *et al.*, 2007). More and more, supermarkets derive their profits and their competitive advantage from how well they can "manage" (extract value from) their supply chains (Brown and Sander, 2007).

Supermarkets are able to impose their supply chain requirements onto suppliers because they are increasingly the most important gatekeepers of consumer retail markets: the reality in countries with high levels of supermarket concentration is that if a food producer does not sell into a supermarket value chain he has limited alternative options (Murphy, 2006). Supermarkets are thus usually the "lead firms" in agricultural value chains, and as such are able to dictate terms and demands to other chain participants further upstream (Gereffi *et al.,* 2005). The bargaining power associated with lead-firm status allows supermarkets to pass costs such as those associated with labelling and transport back up the supply chain, and thus protect their margins (Qeqe and Cartwright, 2005). This increases the costs and risks of farming, and supermarkets want to deal only with those farmers who are willing and able to carry these.

The reality, therefore, of the supermarket-led supply chain is usually quite different from the benign model presented in much of the literature and by many development agencies. These chains are in fact characterised by a "struggle for the appropriation and accumulation of value" (Cox *et al*., 2002 quoted in Vorley, 2003) rather than by shared interests. The potential negative consequences of aggressive SCM policies in the food sector for the wider economy have only recently begun to be explored (Vorley, 2003).

These business practices are particularly bad news for small farmers: They are unlikely to have the resources either to comply with private standards, or to cope with having to discard produce that does not meet rigorous cosmetic standards or long payment terms. They are also unlikely to have large enough land holdings to cope with variable orders.

The argument could be made that small farmers are only excluded by this business model from dealing directly with supermarkets in these value chains – they could still deal with the processors. For example, maize farmers do not generally deal directly with supermarkets, whereas vegetable farmers do. Unfortunately, the logic of scale tends to filter all the way through the value chain, from the supermarkets: big processors and producers have the best chance of obtaining supermarket contracts, and optimizing their own costs and quality standards through supply chain management implies a preference to deal with large suppliers. Further, in an integrated SCM model, processors and supermarkets work closely together, and the former will enforce the latter's standards and cost requirements on their own suppliers (Vorley, 2003).

The supermarket procurement chain may also have a ripple effect across the entire food retail sector. Other retailers will "almost certainly" have to adapt their own procurement practices in order to compete with supermarkets, and the impact on small farmers will be similar to that detailed above (Hellin *et al.*, 2007:3).

One response to this analysis is that there are many documented examples from around the developing world (particularly Kenya) that seem to indicate that small farmers are, contrary to what has been presented above, being integrated into modern value chains. The answer to this apparent contradiction may be found in an emerging argument (see Reardon, 2005) that suggests that whether or not small farmers can supply supermarkets is determined not by what small farmers do, but rather by the options that are available to supermarkets. Most of the successful case studies are located in countries where the agricultural sector is characterized by small farms. In these circumstances, supermarkets are not choosing to deal with small farmers – they have no option.

Almost all the evidence suggests that when supermarkets are presented with an alternative they will switch from small suppliers (Reardon and Berdegue, 2006). The reality in Kenya is that the market share of small farmers has declined considerably as the market has matured, largely in response to increased demands from buyers. According to Brown and Sander (2007), in 1992 almost 75% of the fresh fruit and vegetables produced for export were grown by small farmers. By 1998, the four largest Kenyan exporters only sourced 18% of their produce from small farmers. In 2002 alone, 1 600 small Kenyan growers lost their export contracts (Brown, 2005).

3.2. Reduced use of wholesalers and fresh produce markets

For those farmers who are not supplying supermarkets, traditional wholesalers and fresh produce markets (FPMs) are important market access points. Empirical studies suggest that as supermarkets expand they will capture proportionately more and more of the fresh produce market (Reardon and Berdegue, 2006). This expansion impacts on smallholders through the preference of supermarkets for integrated procurement systems that do not use traditional wholesalers and/or FPMs. As supermarkets evolve, they tend to implement in-house centralized procurement systems, and to reduce (or even halt entirely) their purchases from traditional wholesalers and markets. Therefore, even those farmers who have no intention of selling directly to a supermarket may find that they are negatively impacted by the supermarket business model, by having to sell into a contracting market.

3.3. Crowding out of traditional small farmer-supplied retail outlets

Traditional market access points for small farmers include local (and very local) markets in smaller towns, poorer areas and rural areas. These areas are not initially attractive to supermarkets, but increased competition and market saturation will almost inevitably result in an expansion to smaller cities and towns and towns in rural areas. On the same logic, supermarkets will expand from upper-income to lower-income areas over time (Reardon and Berdegue, 2006).

This expansion creates competition for the traditional formal and informal retail outlets, and inevitably some of them will be forced out of business. As they exit the sector, so a market access point for small farmers is closed. It is unlikely that this will be matched by a new access point into the expanding supermarket: in these less financially attractive centres maintaining profit margins is even more dependent on a procurement model based on economies of scale and centralized purchasing (Reardon and Berdegue, 2006), and there is usually little or no place in this model for purchases from local small farmers.

If we consider the development of modern markets and the impact on small farmers in the industrialised world, it is clear that all three of these possible outcomes are now reality in many countries, with a sufficiently serious impact to attract the notice of legislators.

The following table indicates the market share of the top five grocers in total food retail sales of selected EU member states in 2005[1]:

Table 1: Supermarket share of food retail in the EU (2005)

Country	% share of top 5 Grocers
Sweden	81.8
Ireland	81.4
Germany	70.1
France	70.0
Spain	65.2
Netherlands	62.7
United Kingdom	59.1
Italy	35.3

Source: Stichele and Young (2009:14)

The market share of the top five supermarkets in the United States is more than 70%, and the processing market in that country is also highly concentrated (Roberts, 2008).

These numbers are significant, given that the 2000 UK Competition Commission investigation into grocery retailing in that country concluded that a supermarket only required an 8% market share in order to have enough power to impose abusive practices on suppliers (European Parliament, 2007).

The impact of these high levels of supermarket concentration on farmers in most instances has been both considerable and negative: steadily falling farm incomes (as supermarkets use their power over suppliers to demand lower prices and additional payments); the reduction of market access points through increased use of vertically integrated procurement systems; and a resulting increase in average farm size to compensate. Stichele and Young (2009) found that market power, and the abuse thereof, was widespread across 17 EU member states; was a direct result of increased market shares by the biggest supermarkets; and that the lower prices received by producers were generally accompanied by widening supermarket margins rather than lower food prices for consumers. This same study also concluded that small and medium agricultural enterprises and farmers were the most vulnerable to the effects of these market power abuses.

There is evidence that centralised supermarket procurement systems are squeezing out market access points for farmers in fresh produce markets. In most industrialised economies direct procurement by retailers is increasing, with a corresponding decline in the share of the fresh produce market that trades through traditional wholesalers, including FPMs (Reardon and Berdegue, 2006). In the UK, supermarkets' share of the fresh fruit and vegetable market rose from 33% in 1989, to 80% in 2003 (Brown, 2005). As UK supermarkets have switched to integrated and dedicated procurement models, so the use of wholesale markets for fresh produce has declined: none of the UK supermarkets' fresh produce was sourced from wholesale markets in 2003 (Brown, 2005).

Supermarket power is driving a move towards bigger farms: an investigation into the UK dairy industry by the Competition Commission found that herd size was the most important variable determining the profitability of dairy farming (UK Competition Commission, 2008), in response to the declining share of farmers in the price of milk. A similar investigation into the UK red meat industry found that the impact of supermarket pricing power was reflected in a substantial reduction in the number of farming units, and that bigger farms and herd sizes were the key to maintaining farm profitability in such market conditions (ibid).

The same trend is seen in the United States: family farms account for most of the farms (98% in 2004), but there has been a steady shift towards very large family farms and corporate farming enterprises over the past twenty years. In 2002, farms with sales of $1 million or more (at constant 2002 dollars) made up 48% of sales, compared with 23% in 1982. Very large and corporate farms made up only 5.6% of all farms in 2005, but accounted for 61% of sales (Hoppe *et al*., 2007). The main reason for this trend (and also why it is expected to continue) is the fact that larger farms are far more likely to be able to generate reasonable profits in a low-margin environment (ibid). In turn, market power in the US is put forward as a central reason behind lower per hectare farm incomes (Murphy, 2006).

There is a growing awareness that supermarket power may in fact benefit supermarkets more than consumers: UNCTAD has documented the widening global gap between producer and retail food prices, and has determined that the higher the level of market concentration, the wider the gap (Vorley, 2003).

4. AGRICULTURAL MARKETS AND SUPERMARKETS IN SOUTH AFRICA

How relevant is this evidence in the South African context? That is, how "modern" is our food sector, and what is the reality of existing market relationships between agricultural producers and buyers?

Calculating the value of total retail food sales, and the share of individual retailers within that, is not easy: There is not one commonly accepted set of data for total consumer expenditure on food; there is little reliable detail available on food sales in the informal sector; apart from Woolworths, retailers do not publicly disclose what percentage food sales make up of total sales; and the retailers themselves do not share a common method for calculating retail or food market shares (see, for example, the 2009 dispute between Pick n Pay and Shoprite – http://www.fastmoving.co.za/news/retailer-news-16/analysts-struggle-to-call-race-between-shoprite-and-pick-n-pay-32).

The most commonly quoted statistic (from Weatherspoon and Reardon, 2003) is that in 2003 supermarkets in South Africa were estimated to have a 55% share of the national food retail market, from an estimated 10% to 20% in the early 1990s. Further, the level of concentration in the supermarket sector is generally considered to be high, with only four retailers (Pick n Pay, Shoprite, Spar and Woolworths) having a combined market share of between 90% (Weatherspoon and Reardon, 2003) and 94.5% (Chikazunga *et al*., 2007). For the 2009/10 round of corporate reporting (to June 2009 for Woolworths and Shoprite, to September 2009 for Spar and to February 2010 for Pick n Pay), combined turnover in South Africa for these four supermarkets was around R155 billion. We can assume that the bulk of this was derived from food sales, based on how these retailers described the nature of their business and the importance they assign to comparative performance indicators such as food price inflation. In comparison, total food sales in restaurants, fast food outlets, and by caterers and similar organisations was estimated at just over R30 billion for the twelve months to February 2010 (StatsSA, 2010).

The trend in the supermarket share of retail food sales is clearer: over the past few years the big four have increased their number of stores and total retail space, and have recorded turnover growth above both the consumer price index and food inflation, as well as population growth. This suggests that their share of total retail food sales is probably increasing.

Based on the 55% total market share put forward by Weatherspoon and Reardon and the 90% to 94.5% presumed held by the top four, the implication is that these four supermarkets together hold at least 52% of the national food retail market. At this level of market concentration South Africa resembles countries such as the United Kingdom (see Table 1 above). This confirms the assessment (see for example Bienabe and Vermeulen, 2008) that the South African food retail sector is mature. In addition, at least two of the big four supermarket chains (Pick n Pay and Shoprite) probably each hold more than the 8% market share threshold determined by the UK Competition Commission as sufficient to facilitate abusive procurement practices.

Following from the analysis of the impact of expanding supermarkets in industrialised countries presented above, there are three possible ways in which supermarket expansion in South Africa could create effective barriers to market access for small farmers:

i) *By pushing out smaller and/or informal retailers who would tend to purchase directly or indirectly (via fresh produce markets – FPMs) from small farmers,*

ii) *By using their buyer power to impose a procurement system that is inherently hostile to small producers; and/or* *iii) By reducing their use of traditional wholesale markets, which are an important market access point for small farmers.*

Is this actually happening?

4.1. Crowding out smaller and informal retailers

It has been estimated that between 2003 and 2005 the turnover of spaza shops in some areas was reduced by more than 20% because of the encroachment of supermarkets (Chikazunga *et al*., 2007). This trend is seen in rural areas as well as urban areas: in many poor rural communities, the majority of households now buy their food supplies from supermarkets, buying in bulk to compensate for distance travelled (D'Haese and Van Huylenbroeck, 2005).

In some instances, a supermarket may even be prepared to absorb a loss for a certain period of time in order to push out these smaller competitors. Von Blottnitz (2007) reports that prices charged at Pick n Pay-owned Score supermarkets (which have been expanding in township areas) were generally lower than prices in Pick n Pay branded stores. Since Score reported operating losses for the five years to 2007, this could indicate that Pick n Pay was prepared to subsidise losses at its subsidiary in order to gain market share in lower-income areas.

If small traders go out of business because of supermarket competition, an important source of direct and indirect (via FPMs) sales for small farmers is lost.

4.2. Supermarket supply chain management practices

In line with the SCM strategies of their counterparts in industrialised countries, the big four South African supermarkets are making use of increasingly centralized and vertically integrated procurement systems, focused around their own distribution centres and a relatively small number of suppliers (Chikazunga *et al*., 2007). Woolworths buys only from a relatively small number of preferred suppliers; Pick n Pay purchases largely from a small number of preferred producers, supplemented by "outside" purchases if necessary, and Shoprite uses its own in-house category manager (Freshmark) to purchase from a relatively large number of preferred producers, supplemented where necessary (Louw *et al*., 2008). When identifying their preferred suppliers, supermarkets will look for those who can guarantee sufficient volumes and consistent quality (Louw *et al*., 2006). Many of the supermarkets' fresh produce suppliers (particularly fruit growers) are also producing for the export market (Weatherspoon and Reardon, 2003).

These supply chains are often based on long-term arrangements, with the supermarket providing suppliers with one-year growing plans and delivery schedules. This type of supply chain environment strongly favours volume producers who can guarantee deliveries well in advance, and on precise dates.

Suppliers are also usually required to make their own deliveries to supermarket distribution centres, and a significant amount of fresh produce must be delivered already packaged and labelled to specification. There are a number of other costs that suppliers are often required to cover, many of which were highlighted in a 2009 National Agricultural Marketing Council (NAMC) initiated investigation into the local dairy industry (Kirsten, 2009). This report suggested that large South African supermarkets tend to follow a similar business model to their counterparts in the industrialised world and demand that suppliers carry a range of costs and payments additional to the direct costs of production, delivery and packaging. Imposing these practices on suppliers is possible because of a supermarket's buying power.

The demands and costs of these supply chain management practices make it difficult for small farmers to participate. Case studies of successful linkages between supermarkets and small farmers in South Africa tend to highlight the exceptions, rather than the norm, illustrated in the fact that so few of them are cited (repeatedly) in the relevant literature (such as the Thohoyandou Spar example). In those limited instances where small farmers have been successful as suppliers to supermarkets, it is in the context of very specific factors around store location and management commitment (see for example the case study documented in Bienabe and Vermeulen, 2008), or very niche items.

4.3. Reduced use of traditional wholesalers and fresh produce markets

An important issue from the point of view of small farmers is the position of FPMs in the supermarket procurement model, given the central place of vegetable cultivation in the smallholder sector. Annual turnover on all fresh produce markets in South Africa is currently around R8.4 billion[2]. This can be compared with Freshmark, which distributed produce to the value of R2.4 billion for the year to 30 September 2009, 95% of which was sourced directly from farmers (Shoprite, 2009:28).

FPMs represent an important market access point for small farmers. The Johannesburg market alone services some 15 000 farmers in total (www.joburgmarket.co.za). As local supermarkets have implemented increasingly centralized and vertically integrated SCM models, their purchases from FPMs have declined. It is estimated that no more than 10% of current fresh fruit and vegetables purchases by the large supermarkets come from FPMs, a significant decline over the past decade. As an example, in 2007 Pick n Pay purchased 97% of fresh fruit and vegetables from preferred producers, and 3% from FPMs. Ten years prior, the ratio was about 50/50 (Chikazunga *et al.*, 2007).

The NAMC's 2007 Section 7 Committee investigation into FPMs indicated that, despite a substantial increase in the production of fresh produce between 1996 and 2006, FPMs had shown very little volume growth in sales over the same period (NAMC, 2007). This could indicate that more and more fresh produce sales are bypassing these markets. The NAMC also found that the downward trend in FPMs is particularly pronounced in smaller markets that serve more rural areas. Given the transport costs incurred in getting produce to urban areas, the consolidation of FPMs in these centres is bad news for many smaller producers.

5. WHAT DOES THIS MEAN FOR SMALL FARMERS IN SOUTH AFRICA?

There is evidence that the growth of supermarkets is increasing the risks and reducing the rewards for local farmers, creating an environment similar to that seen in industrialised countries with high levels of supermarket concentration. Since 1947 South African farmers have faced declining terms of trade (Qeqe and Cartwright, 2005). The 2009 investigation into the dairy industry (Kirsten, 2009) showed that dairy farmer profitability since 1994 had been squeezed to such an extent that it had resulted in a sharp decline in the number of producers. At the same time, retail margins on milk (which ranged between 1% and 5% under the Dairy Board) increased to between 15% and 30%. The same report also concluded that the relatively low prices paid to dairy farmers constituted a significant barrier to entry for small and emerging farmers.

In this hostile market environment, South African farmers have responded in much the same way as their counterparts in other countries. Firstly, the total number of farms has declined: between 1950 and 1990 there was a decline in farming units from 116 848 to 62 084 (Tilley, 2002). From 1990 to 2007 the number of commercial farming units fell by a further 36%, to 39 982 (StatsSA, 2009). The average farm size in 2002 was 1 881 hectares, up 33% from1993.

The trend towards bigger dairy producers is indicated in the table below, which shows how the percentage share of large producers is increasing, while that of small producers is declining.

Table 2: Relative market share of large and small dairy producers in South Africa

Daily production (litres/day)	% of Producers	
	1995	2004
500 or less	58	23
More than 3 000	0	21

Source: Terblanche (2009:4)

Despite the increase in average farm size across the agricultural sector, the national gross farming margin[3] fell from 27.1% in 1993, to 25.3% in 2007. Since 1995, there has also been an increase in the number of farm bankruptcies (Jacobs *et al*., 2008).

6. CONCLUSIONS

The role of supermarkets in creating barriers to market access is particularly important in South Africa, given that the expansion of supermarkets is taking place at exactly the same time that policy is aiming to integrate a large number of new smaller producers into modern markets (Matoti *et al*., 2007).

The current structure of the South African food retail sector and the procurement practices of local supermarkets can create and have created effective barriers to entry for smaller producers. Even niche markets such as organics, often presumed to offer opportunities for smallholders, are being taken over by big producers (Vermeulen and Bienabe, 2007).

In contrast with what much of the reviewed literature suggests, there is in fact little incentive for local supermarkets to make much effort to include small farmers. The structure of the South African commercial farming sector facilitates and encourages the use of large preferred producers: in contrast with many developing countries, the local commercial farming sector is characterised by large farm units. According to the 2006 Survey of Large Scale Agriculture, there were almost 5 700 farming units that had an annual turnover of at least R3 million, and that generated a total gross income of almost R50 billion, or more than 40% of the gross value of production (StatsSA, 2007). Therefore, South African retailers have a relatively large pool of big producers to choose from and little to no incentive to increase transaction costs and risks by dealing with small farmers.

It is not the specific intention of local supermarkets to exclude small producers – it is simply a by-product of the generally accepted "best" business practices adopted around the world (Reardon, 2005). It is important to bear in mind that supermarkets are not development agencies – they are profit-oriented businesses. Most of the world's biggest supermarket chains are public companies and all the SCM practices described above make perfect business sense, allowing them to use their market power to keep consumer costs down and shareholder profits up. The stock market tends to reward companies that have market power and use it to generate higher profits and shareholder value. In many respects the "gap" between the reality of the supermarket business model and the picture presented in much of the development literature represents much more the latter's failure to understand the full implications of this business model than direct malignancy towards small producers on the part of the former.

7. POLICY AND RESEARCH IMPLICATIONS

In light of the analysis presented above, most of the current policy initiatives to address market exclusion seem woefully inadequate. Improving the quality of production, and small farmers' access to skills and assets is important and necessary, but these actions on their own are not sufficient to guarantee access into modern supply chains.

Many development agencies and researchers in South Africa continue to espouse solutions that do not take sufficient cognisance of modern market reality. It is difficult to understand how foreign donors can recommend market access strategies to small South African farmers that would be scoffed at by farmers (and legislators) in their home countries. If interventions such as better market information, better physical infrastructure, better access to inputs such as seeds and capital equipment, and the formation of producer organisations really are the magic cure for modern market exclusion it does not make sense that they have not been embraced by any of the industrialised countries where small farmers are being excluded.

Insufficient research attention has been given to understanding how markets themselves become barriers to entry. This is a vital gap in local rural development policy: a market system that favours large over small farmers has the potential to exacerbate rural inequality and to neutralize policy aimed at supporting small farmers.

Government needs to take the development of marketing opportunities specifically for small farmers more seriously, understanding that they face a very different set of market access challenges than do large farmers. As large institutional food purchasers, all three spheres of government could make a far greater contribution to supporting small farmers. Farmers need the opportunity to choose marketing channels that take account of their production and logistics constraints, but still provide them with an attractive income (Chikazunga *et al.*, 2007). Research is required that focuses on alternative food networks – the type of food networks and marketing structures that will have the greatest positive benefit on small farmers and the communities that they live in. This requires a different view of the workings of market networks, and a more critical assessment of how these impact on rural livelihoods.

NOTES

1 This largely represents only food purchased for consumption in the home, and does not include "out of home" food sales (i.e. restaurants, fast food outlets, etc), which are significant in both the US and EU, as a percentage of total consumer food consumption.

2 Based on the Johannesburg market's turnover and market share data – see www.joburgmarket.co.za

3 Gross profit as a percentage of gross farming income, gross profit calculated as gross farming income less current expenditure and the purchase of animals, data source StatsSA (2009).

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