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SUPERMARKETS AND FARMING IN LATIN AMERICA: POINTING DIRECTIONS FOR ELSEWHERE? Thomas Reardon, Julio A. Berdegué and John Farrington

Supermarkets' share in retailing has quadrupled in Latin America since 1990. They have penetrated all parts of the food economy, including those which are scale-neutral and previously were the domain of small farmers and traders, such as fresh fruit and vegetables and dairy products. This paper identifies why supermarkets have grown so rapidly there, what the impacts on producers have been, and whether the pattern might be repeated in other regions.

Policy conclusions

- Supermarkets occupy roughly 60% of the national retail sectors in Latin America, and around half this level of fresh fruit and vegetable products.
- Factors underpinning their growth include increases in incomes in 'two-earner' households, and in access to refrigerators and private cars. But the main precondition has been the liberalisation of foreign direct investment.
- · Supermarkets have the potential to broaden and deepen retail markets and so enhance overall demand.
- The larger ones are parts of regional and global chains which can switch procurement rapidly, generating instability in the markets facing producers.
- Supermarkets' and large processors' buying practices quality and safety standards, packaging, volumes, scheduling and payment
 practices pose serious challenges to small producers, and have, for instance, driven over 100,000 producers in the region out of
 formal milk markets.
- In southern Africa and SE Asia, similar patterns of supermarket growth are evident, but consumer incomes will have to rise to permit large-scale penetration in S Asia or elsewhere in sub-Saharan Africa. Unfavourable climates for foreign direct investment are a barrier in many potential markets, including one of the largest, i.e. India.
- In Latin America, the types of policy response which have allowed small/medium producers and processors to engage with rapidly
 concentrating procurement and processing systems include:
 - public support (for investment, retraining, certification and licensing, etc) to producers and their organisations to allow them direct access to supermarkets;
 - the promotion of good business practice such as payments within 30 days;
 - the promotion of competition among supermarkets and within the retail sector more generally, including the modernisation of specialist shops and street fairs, which provide alternative outlets for producers.

Introduction

Why are we writing about 'supermarkets' in the Latin America region where 39% of the people are in poverty and 13% in absolute poverty? Are not supermarkets merely niche players for rich consumers in the capital cities of the region?

There are two answers to this question: first, at a rough estimate, supermarkets have moved from a population-weighted average of 10–20% in 1990 to 50–60% of the retail sector in 2000. In one globalising decade, Latin American retailing made the change which took the US retail sector 50 years.

Second, supermarkets, and the large-scale food manufacturers who have grown with them, have deeply transformed agrifood markets in the region, with potentially negative consequences for small farms and processing and distribution firms.

The focus here is on the influence of supermarkets in Argentina, Brazil, Chile, Costa Rica and Mexico, and especially on dairy products and fresh fruit and vegetables (FFV). These products are conventionally seen as good prospects for small farms and firms in the region because of their income-generation potential and their relative lack of economies of scale, by contrast with, for instance, basic grains and livestock.

This paper first classifies retailer types; it then examines how and why supermarkets have grown, and what their impact on agrifood systems has been, especially for dairy and FFV. It then asssesses briefly the prospects for supermarket growth in S Asia and sub-Saharan Africa. A final section draws out conclusions for development policy.

Definitions: types of food retailers in Latin America

Food retailers in Latin America comprise four groups. First, there is a variety of independent *small full-service stores* selling a variety of groceries or specialising in fish, meat, fruit, vegetables or baked goods. Second, there are *traditional markets*, including street fairs. Third, there are *small self-service stores* that tend to be in chains, and vary from 'hard discounts' (almost equivalent to small supermarkets), to 'convenience stores', such as those located in railway and bus stations. Fourth, there are the *large self-service stores*, in chains or independent. Generally these stores are classed as either 'supermarkets' (roughly 350–4000m² and/or with 3–4 or more cash registers), or the larger 'hypermarkets'. Other large-scale stores include warehouse formats and membership clubs.

Two other sets of terms related to product chains and procurement are used here. First, there is a variety of distribution systems used by retailers to procure the products they sell. They buy direct from farms or processors, or the product is bought by a chain's 'distribution centre' from wholesalers or direct from producers, and then distributed to individual stores.

Second, the 'supply chain' (a product-specific subset of the 'agrifood system') is the system in which a product moves from (i) the farmer and first-stage processor, who sorts, grades, packs, and does the initial processing ('upstream' in the chain), to (ii) the distributor, including assemblers and wholesalers, to the 'downstream' segments, (iii) the second-stage processor or 'food manufacturer' (unless the product



is a fresh product), to (iv) the retailer (such as supermarket or restaurant), and thence to (v) the consumer.

Patterns in the rapid rise of supermarkets

Patterns across countries

Table 1 shows the market shares of different types of food retailers in various Latin American countries. By 2000, supermarkets had roughly 60% of all retail and 50% of food retail in the largest and/or highest-income countries in the region: Argentina, Brazil, Chile, Colombia, Costa Rica and Mexico which for simplicity we shall call the 'leading-6', constituting 86% of the income and 74% of the population of Latin America. It should also be noted that the bulk of the rural poor are also in Brazil, Mexico, Central America and the Andean region. For the remaining countries, the supermarket share is around 20–30%.

Those losing most ground have been the small traditional stores and plaza markets. Those which have lost less are the street fairs (in most countries) and the FFV speciality shops, especially in Argentina, where the consumer-purchase of FFV has moved more slowly towards supermarkets than other products.

These generalisations hide some important facts about the overall spread of supermarkets even in poorer and/or smaller countries. For example, there are around 60 supermarkets in Nicaragua, the poorest country in Latin America, and 180 in Costa Rica. Guatemala, the fifth poorest country in Latin America, now has 128 supermarkets against 66 in 1994, accounting for 35% of food retailing, against 25% five years ago.

The static picture also masks an interesting 'domino' effect: rapid penetration in the mid-late 1980–90s saw supermarket chains spilling over from the richer/larger countries into the small/poorer countries. Hence, CSU of Costa Rica moved into Honduras, Nicaragu, and El Salvador in the first half of the 1990s, and Chile's Santa Isabel moved into Peru, Ecuador and Paraguay. But multinationals, including Wal-Mart, Carrefour and Ahold, were by far the dominant retail investors in Latin America especially from the mid-1990s. The exception is Chile where domestic capital has remained dominant. There are also clear patterns of 'big fish eats smaller fish, then bigger fish eats big fish...' in the inter-country dynamics.

Diffusion over space and socio-economic groups

National averages also mask the spatial and socio-economic patterns of supermarket spread within a given country. In the 1980s, they spread quickly from their 'niche' in capital cities to intermediate cities, and then to medium-sized and small towns in the 1990s. They spilled out into middle-class neighbourhoods in the mid-1990s, and began to reach into working-class areas from the late 1990s, especially through hypermarkets emphasising low prices and austere presentation.

What were the determinants of this rapid overall growth of supermarkets?

On the *demand* side, the main factors were similar to those observed in Europe and the United States in the mid- to late twentieth century. Chilean data are typical of elsewhere and suggest the importance of: (i) urbanisation, the urban population increasing from 75% in 1970 to 86% in 2001; (ii) the entry of women into the workforce (2.8% annual increase between 1989 and 2000 in Chile), so that the increased opportunity cost of their time encourages the purchase of convenience and processed foods; (iii) rapid growth in real mean per capita income during the 1990s.

In turn, income growth led to: (i) greater demand for non-staples, especially perishables, and processed foods; (ii) greater availability of refrigerators, displacing the day-to-day shopping habits of the past (in Chile, 82% of all households had refrigerators by 2000); and (iii) growing access to cars by the middle and middle-low classes (in Chile, the number of households owning a car increased by one-third from 1996 to 2000).

On the *supply* side, trade liberalisation since the early 1980s made it easier and cheaper to import food and nonfood products, and a growing portion of supermarket goods are being sourced internationally in response to rapidly-changing supply price conditions. Liberalisation also stimulated the import of cars and refrigerators.

At the same time, there was a drastic reduction in the regulations for foreign direct investment (FDI) in the first half of the 1990s, as free trade areas developed and structural adjustment programmes took hold. This led to a surge of FDI in retailing into most of the leading-6 countries in the 1990s, and then into the others starting in the late 1990s.

Table 1 Supermarket shares in food retail and numbers of stores: selected Latin American countries circa 2000, arranged by per capita income

	Population in millions	Per capita income in thousands	Supermarkets' % of country's food retail	Number of supermarkets (per million population) ^a	Number of supermarkets OR share of food retail a decade earlier (year)
Argentina	37	7.5	57 ^b	1306 (35)	35% (in 1990)
Mexico	98	5.1	45°	1026 (10) ^d	544
Chile	15	4.6	50 ^e	654 (44)	n.a.
Costa Rica	4	3.8	50 ^e	221 (55)	113 (in 1990); 85 (in 1984)
Brazil	170	3.6	75	3536 (21) ^f	14000 (in 1990)
Panama	3	3.3	54	110 (37)	n.a.
El Salvador	6	2.0	37	138 (23)	n.a.
Colombia	42	2.0	$38^{\rm g}$	1200 (29)	n.a.
Guatemala	11	1.7	35	128 (12)	66 (in 1994); 15% (in 1994)
Ecuador	13	1.2	n.a.	120	n.a.
Honduras	6	0.9	42	37 (6)	n.a.
Nicaragua	5	0.4	n.a.	40 (8)	5 (in 1993)

Notes: a) This allows only a very rough comparison because raw numbers of supermarkets masks variation in size; b) note that the share was 35% in 1990 and 27% in 1984; c) this is urban only; d) this is an underestimate because it does not include independent supermarkets and the government ISSSTE; e) share in total retail (food and non-food) is 62%; f) There are 24,000 supermarkets in Brazil by the definition used there of stores having 2 or more cash registers. The only other data (presented here) are for supermarkets in chains, which are the larger ones, but many having 3 cash registers or more – our definition for other countries – would be excluded, so this figure is an underestimate; g) share in total retail (food and non-food) is 53%.

Sources: see Development Policy Review, 2002

This was the most important force for the changes in retailing described here.

Supermarket consolidation and multinationalisation

Two crucial changes occurred in the region's supermarket sector as it grew in the 1990s. First, there was rapid consolidation. For Mexico, Brazil, Argentina and Costa Rica, the top four firms now have between 50% and 80% of supermarket sales. Second, there was rapid multinationalisation. In most countries – Chile being an exception – some 60–80% of the top five supermarket chains are global multinationals, mainly the top three food retailers in the world, Royal Ahold, Carrefour (both 9,000 stores worldwide), and Wal-Mart, but also others such as Casino and Auchan (France).

Mergers and acquisitions by the multinationals started in the early to mid-1990s, with the global multinationals buying many of the large domestic chains, already 'fattened' by their acquisitions of smaller chains (see Box 1).

Effects on agrifood chains and on development

Supermarkets compete by cutting costs, assuring consistency from day to day, and raising product quality and diversity. This is done through improvements in co-ordination and logistics systems, contracts with wholesalers and producers, and private standards specifying quality, safety, volume and packaging of products.

An increase in the scale and volume of procurement is driven by supermarket expansion, and centres are set up to procure products from large areas, handle large volumes, serve a large number of stores and work with suppliers whose scale, capital, managerial and organisational capacity are sufficient to meet the requirements of the procurement system. In general, this prompts new investment by suppliers, which is expensive but generally perceived as 'worth it' if a supplier can get on a supermarket's procurement list.

Fresh fruit and vegetables

Specifically in relation to FFV retailing, supermarkets' share has lagged behind that of other product categories. In general, their share of FFV retailing is only 50–75% of their share of overall food retail. For example, supermarkets have 50% of food retailing in Argentina and Mexico, but only 30% of FFV retailing; in Brazil, the share is 80% of overall retailing, 60% of overall food retailing, but only 50% of FFV retailing nationally; in Chile, the figures are even more striking with supermarkets having 62% of overall retail and 50% of food retailing, but only 3–8% of FFV retailing nationally.

There are a number of reasons for this lag:

- there is a tradition of daily FFV purchase for freshness and quality in most countries;
- small FFV shops and street fairs fit easily into dense urban areas where supermarkets cannot physically locate, and so shoppers can reach them on foot every day;
- there is evidence that street fairs and small shops are able to charge prices below those of the supermarkets, especially where they are family businesses paying less

Box 1 The pace of mergers and acquisitions

The case of CARHCO is informative, and points to the formation of regional (inter-country) chains. La Fragua (the dominant chain of Guatemala) established a joint venture with Ahold in 1999. Then CSU (the dominant retailer in Costa Rica and already a regional multinational in Nicaragua, Honduras and El Salvador) merged with La Fragua and Ahold in January 2002 into the three-way Central American Retail Holding Company (CARHCO), with 253 stores and \$1.3 billion of sales in Central America, a huge move in the retail sector in less than four years.

- than formal-sector wages, having lower overheads, and paying no tax;
- the conventional wisdom holds that small shops widely offer consumer credit, but evidence on this is inconclusive, and supermarkets have promoted consumer credit cards with much success;
- where they have modernised to compete with supermarkets, small shops and plaza markets have been particularly successful in retaining customers;
- the upper and middle classes are still the main customers for FFV from supermarkets according to consumer surveys in Mexico, Argentina, Brazil, and Chile.

Despite this lag, the reality is that the importance of supermarkets in FFV has grown very fast – with supermarkets now having shares of 50%, 30% and 30% of FFV retailing in Brazil, Argentina, and Mexico respectively, amounting to a population-weighted average of 42% of FFV retailing for two-thirds of the Latin American economy, against approximately 5% 20 years ago. This growth has had important effects on FFV procurement and production systems. First, they tend to find that traditional wholesalers lack standards, and mix items of different grades, and so have switched away from them towards direct procurement arrangements or towards new types of wholesalers.

New types of specialised FFV wholesalers serving supermarkets are typically agroexporters and agroindustrial firms accustomed to dealing in large volumes and meeting safety and quality standards. An example is Hortifrut of Chile which employs stringent quality and food safety standards (the latter audited by a third-party auditor, in this case, Davis Fresh Technologies based in California).

Some chains are even using their distribution centres, sourcing networks, and/or joint-venture operations both to supply their local stores and to export produce within Latin America and from Latin America to the global market. For instance, Carrefour uses its global sourcing network to contract melon producers in northeast Brazil to supply its 67 stores in Brazil as well as Carrefour distribution centres in 21 countries. Ahold's regional sourcing network (based in Argentina at Ahold-Disco and linked to Ahold-Santa Isabel, in Chile, Peru, Ecuador, and Paraguay) sources apples from Chile to supply its distribution centre in Peru.

Individual stores and distribution centres contract with wholesalers as well as direct with farmers. Evidence from Mexico suggests that it tends to be medium-sized farmers who can meet the quality and logistical requirements, including volume and consistency, demanded by supermarkets. In some cases, dedicated wholesalers contract farmers on behalf of supermarkets, as Hortifruti does with 500 FFV farmers in Costa Rica and 200 in Nicaragua, 80% of them small growers. Sometimes the links are directly with small farmer co-operatives, Carrefour's quality certification for tomato growers in Mexico providing a positive spinoff. In Purranque, Chile, small provincial supermarket chains source from local farmers and can project an image of 'your local store benefiting your local community'.

These new procurement practices – consolidating purchases in distribution centres and sourcing networks, increasing chain co-ordination through contracts with wholesalers and growers, requiring high standards and demanding certification, in addition to delayed payments (typically 45 to 60 days after product delivery) – spell tough but often profitable conditions for growers. They imply new investments in production technology and equipment (trucks, cooling sheds and cold chains, packing), in management and co-ordination to ensure quality as defined by the supermarket, in consistency and timing, and in larger volumes supplied to consolidated buying points, all intended to keep down costs.

These requirements are most easily met by the medium to large FFV producers, and there is a growing number of cases, such as the failure of the small farmers' lime association in Mexico, in which small farmers have had to drop out because they cannot make the grade.

A recent study of small farmers' economic organisations in Chile (Berdegué, 2001) found that many of them are having difficulty meeting the new demands which supermarkets impose in relation to product homogeneity, co-ordination of harvest, centralised grading, sorting, packaging and delivery. The scale of operations of even 50 or 75 associated small growers, each with 1 or 2 ha under FFV, is often not sufficient to offset the cost of such supermarket practices as delayed payments, high rates of rejected produce, and the occasional charging of shelf fees. Finally, by contrast with traditional markets, working with supermarkets means having to adopt formal accounting and invoicing practices, and thus being unable to avoid paying taxes. As an example, 'We Tekucan', for several years the leading supermarket supplier of fresh vegetables in the city of Temuco, became bankrupt even after its initial success in selling to supermarkets, financed through soft loans and subsidies from public development programmes. In those cases where smallholders survived, such as the Purranque (Chile) co-operative, they relied on public and/or private assistance to help with technical assistance and suppliers' input credit.

Dairy products

The impact of supermarkets on dairy product chains is, if anything, more dramatic than for FFV. It is closely related to the rapid concentration of large-scale processing firms and to changes in public and private standards and regulations.

Brazil, Argentina and Chile have had general public regulations in place for basic milk safety for many years, focused on upper-grade milk and pasteurisation. But starting in the 1980s, the strengthening of public standards and the introduction by some processors of higher, private, standards required investments in mechanical milking, cooling tanks, new feeds and genetic improvement. Many small dairy farmers were unable to afford these investments and went out of business or were pushed to the less profitable and less regulated informal market.

The introduction in the late 1980s of UHT-Tetrapak milk revolutionised dairy product consumption and production within a decade. In Brazil, for instance, the UHT share went from zero in 1988 to 92% of the fluid milk formal market (60% of all milk) in 2000. Public standards did not adapt adequately or quickly enough to the large processors' needs, and the latter imposed private standards for milk to be treated under ultra-high temperature, as well as for high-quality products such as yoghurts. The further technical investment to meet new demanding standards brought a second wave of de-listing of small suppliers in the second half of the 1990s. For instance, 60,000 small dairy farmers were removed by the 12 largest processors in Brazil in that period, with a similar pattern in Argentina and Chile. Moreover, the longstorage aspect allowed easy transport and shifted milk production from zones near the main cities to low-cost production zones.

Supermarkets played a key role in this dairy sector change. The main market for milk, yoghurts and desserts shifted from small shops to the supermarkets within a decade in both Argentina and Brazil. The scale of their procurement allowed them to hold down the costs of UHT for consumers, and Tetrapak solved the transport and storage problems for milk. Supermarkets thus became a vehicle for the rapid increase in dairy product consumption, and worked closely in product innovation and logistics systems with the large processors. The stiff competition among supermarket chains

in the 1990s pushed milk product margins down, and drove up procurement volumes, delivery requirements and inventory management efficiency. All this increased the intensity of competition among milk processors, fuelling consolidation, and placing cost and quality pressures on the farmers.

The bargaining power and managerial and technological prowess of the large processors helped the supermarket chains cut costs, differentiate products and improve quality, while the supermarket chains' ability to create large, homogeneous markets helped the processors grow and increase the consumer loyalty to lead brands. The largest suppliers, such as Nestlé and Parmalat, have strong relationships with the global multinational supermarket chains dominating Argentine and Brazilian retailing (Carrefour, Ahold, Wal-Mart). But there have also been tensions, reflected for instance in 'own labels' by supermarkets as alternatives to national or global brands, and encouragement by large processors to independent supermarkets as alternative buyers.

In dairy products, consumers gained from these changes in terms of price, quality, availability, convenience, safety and diversity, but small dairy processors and farmers suffered heavily, and there is likely to be further concentration among producers and processors as high private quality control levels drive up new public standards and require their extension into the informal sector, thus gradually reducing the existing secondary market for milk.

Prospects for S Asia and sub-Saharan Africa

South-East Asia and South Africa have witnessed an expansion of supermarkets broadly comparable with that described here for Latin America, as might be expected given that many of the same economic and regulatory conditions are in place. Although comprehensive data are unavailable, it seems that supermarket penetration in the main areas of concern for international development assistance, namely S Asia and sub-Saharan Africa, is low other than in certain high-potential areas. For instance, the S Africa-based Shoprite chain - the largest food retailer in Africa, with a total of 981 stores and franchises - has a turnover which recently exceeded 20 billion Rand (slightly under US\$2bn). Of the 294 supermarkets which it operates, 250 are within S Africa itself, and the remaining 44 scattered thinly through the southern and eastern Africa regions (www.shoprite.co.za). It has a policy of careful expansion outside S Africa, according to local conditions, including political stability. For instance, it recently purchased 7 supermarkets under Zambia's privatisation programme.

In S Asia, comprehensive data again is not easily available, and the penetration of supermarkets, as in Africa (excepting S Africa) appears low. In India, for example, not including street vendors and markets, there are an estimated 1,575,000 grocery stores (almost all family-run with no employees), 531,000 general stores, 276,000 convenience stores/ tobacconists, and only 30 supermarkets (www.mhhe.com). Definitional problems abound: other sources suggest that India's largest food store chain, FoodWorld, has 80 supermarkets at present, aiming to expand to 100 shortly, with a gross turnover of Rs3bn (approx US\$670m). Its operations are mainly in the southern States. The Subhiksha chain in Chennai (Madras) (covering a much wider range of products than food alone) is expected to have a turnover approaching US\$3bn by 2003. In an effort to keep efficiency high and (specifically) to reduce pilferage, it operates on a 'catalogue' basis, in which customers do not browse around the store at will, but place orders at a counter which are delivered to them by staff within minutes. A further chain, Trinethra, has a turnover of US\$1.5m and operates exclusively

in Andhra Pradesh on a franchising model, to permit rapid expansion and keep capital costs down (sources: www.themanagementor.com and Business Line 17.10.02).

Among the reasons for the slow growth of supermarkets in India are:

- the hostile environment for FDI in India many officials remain obstructive, even where regulations have been liberalised;
- the (until recently) ban on ownership of real estate by foreign nationals other than non-resident Indians and similar categories;
- high value attached by middle and higher income groups to the purchase of fresh produce in local street markets, and an unwillingness to pay premia for, e.g. airconditioned food stores;
- complex and widely flouted planning regulations, which make it difficult to secure car parking, reliable utilities,

Table 2 attempts to compare across regions the conditions which appear to favour the expansion of supermarkets. This suggests that whilst most conditions are similar across S Asia and sub-Saharan Africa, the openness to foreign direct investment in S Asia is particularly low. In India alone, for instance, FDI amounts to well under 1% of GDP annually.

Whilst the strong penetration of supermarkets appears unlikely in these two regions - and perhaps more unlikely in S Asia than in sub-Saharan Africa - it is already clear that the conditions that smallholders (and small traders and processors) will have to meet if they are to remain viable are likely to be identical to those found in Latin America, and closely reflect the conditions for successfully engaging in an increasingly globalising world. These include the capacity to respond to increasingly stringent conditions for classifying produce, and for meeting health, freshness and other quality criteria. Even if the kinds of supply chains and conditions favoured by supermarkets are unlikely to be introduced in the short term, it would certainly not be premature for government and donor policy to begin supporting local capacity to meet these types of conditions.

Development policy options

Supermarkets and large processors are, or are fast becoming, the main retail buyers in the supply chains of processed foods in Latin America. Their share is growing in fresh fruit and vegetables (FFV), which is still mostly sold by small shops and open-air markets. Supermarkets and large processors' procurement practices - quality and health standards, packaging, cost, volumes, consistency, payment practices – are an important challenge for farmers and supply chains in the region. Changes in these 'downstream' segments of the chain, in contracts, private standards, sourcing networks, and distribution centres, are quickly reformulating the 'rules of the game' for farmers and first-stage processors.

But supermarkets are also a big opportunity: they are both a motor for broadening and deepening consumer markets, and are a 'toll booth' on the way to selling to the growing markets, the urban areas and the middle classes. They have national, regional and global chains and procurement systems that facilitate the growth of key food

Development agencies must recognise that small farmers and entrepreneurs have to gear up quickly to compete in the new markets that are spreading over most of the food economy. The local market niches with low standards are disappearing under the pressure of this wave, and the distinction between the global/export market and, in some countries, the local/domestic market is disappearing.

Second, they need to promote good business practices that optimise retailer-supplier relations, protecting both sides. These can be mustered by establishing and/or improving contract regulations and business rules of practice. For instance, a law adopted in March 2002 in Argentina requires payment to FFV growers within 30 days. These can also be fostered by private sector codes of practice (negotiated among retailers and suppliers), such as the new codes adopted in Argentina in 2001, and currently under negotiation in Costa Rica and Brazil.

Third, it is important to promote competition in the supermarket sector and in the retail sector in general. Good examples to follow appear to be the careful reviews of supermarket mergers and acquisitions by the Competitiveness Commissions in Brazil and Argentina, or the Federal Trade Commission in the US. Moreover, it is valuable to promote the modernisation and development of speciality shops and street fairs both for their cultural and employment value to the local communities, and as alternatives to supermarkets. Supporting the development of these retailers, for example by helping them to adjust to consumer preferences in terms not so much of product quality as of quality of services (cleanliness, safety, parking space, honesty and transparency of weights and measures), could be invaluable.

However, regulations do not in the end alter the economic forces under which supermarket buyers operate, and the changes in procurement system are driven by those forces.

Table 2 South Asia and sub-Saharan Africa in relation to the conditions favouring the expansion of supermarkets							
Conditions favouring the expansion of supermarkets	Latin America ¹	South Asia	Sub-Saharan Africa ²	South Africa			
Per Capita National Income (US\$) ³	3,670	440	470	3,020			
Ratio of women to men in formal workforce ⁴	0.5	0.5	0.6	0.6			
Percentage of population living in urban areas4	75	28	50	50			
Degree of trade liberalisation (approx. average industrial tariff – percent) ⁵	12	25 32 India 20 Pakistan 22 Bangladesh	20	9			
Level of Foreign Direct Investment (as % of GDP) ³ Notes:	4.5%	0.6%	1.8%	1.2%			

- ¹ Including the Carribean
- ² Including South Africa
- ³ Source: World Development Indicators, 2002
- ⁴ Source: World Development Indicators, 2001
- ⁵ Source: Discussions with Sheila Page of ODI. We recognise that the average industrial tariff is, at best, a highly imperfect indicator of the degree of 'openness' of an economy

Growers will have to respond to these changes if they are to tap powerful new markets. As Box 2 indicates, there is scope for public sector support to small farmers and entrepreneurs in making the investments in equipment, management, technology, commercial practices and organisational development. But there will also be a need to support many in exiting from agriculture altogether.

Box 2 Public sector support for small producers and processors in the face of changing market conditions

Two useful examples of such help stand out. The first is the Fabrica do Agricultor programme in Parana, Brazil (Del Grossi and da Silva, 2001). The state government and the World Bank help local small-scale food processors to sell to supermarkets in the intermediate cities, providing them with technical assistance in processing and packaging, and marketing, training and contacts. They also help by creating a licensing/certification programme for businesses at the state level, to enable them to engage in commercial relations with the supermarkets. The second is AGEXPRONT in Guatemala, which, along with the Ministry of Agriculture, has developed PIPAA (a food safety certification originally developed in the 1990s for exporting) that is now being extended to help producers sell to the supermarket chains in Guatemala (Estrada, 2002). This system helps to bring small producers of FFV up to the standard to supply supermarkets and the export market. There is a need for many more of these successful programmes.

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