Supermarkets and Produce Quality and Safety Standards in Latin America

Fernando Balsevich, Julio A. Berdegue, Luis Flores, Denise Mainville, Thomas Reardon, Lawrence Busch, and Laurian Unnevehr

Introduction

This brief article focuses on how supermarkets in Latin America are imposing standards of quality and safety on producers of fresh fruits and vegetables (FFV) mainly for the domestic market. It is a synthesis of recent case studies from a range of Latin American countries. The range includes Brazil, Costa Rica, Guatemala, Honduras, and Nicaragua – the range being in decreasing order of household income, share of supermarkets in overall food retail, and from strongest to weakest domestic public health standards. The research is based on fieldwork in Brazil in 2002 and in Central America in March/April 2003, including rapid reconnaissance surveys of supermarket chains, wholesalers, and suppliers. The questions focused on procurement practices and application of standards, including private enforcement of public standards, and application of private standards.

The article begins with a short section analyzing the “trade bias” in the literature on FFV standards and argues for the need for agricultural development and trade economists to pay close attention to the role of supermarkets in setting quality and safety standards for domestic suppliers. This role is both a neglected area of research and an important one because we show supermarkets in Latin America buy far more from local producers than is exported from Latin America to the rest of the world. The next section focuses on changing

1 Balsevich, Flores, and Mainville are doctoral, masters, and doctoral candidates at Michigan State University. Berdegue is President of RIMISP, Santiago, Chile. Reardon (corresponding author, Reardon@msu.edu) is Professor and Busch is Distinguished Professor at Michigan State University. Unnevehr is Professor at the University of Illinois. We are grateful to Fulbright-IIE and USAID for funding.
procurement systems of supermarket chains in those countries, showing that the shift from
reliance on traditional wholesalers to centralized procurement and “specialized wholesalers”
gives supermarkets the incentive and capacity to imposes standards. The penultimate section
discusses the standards imposed by the chains. The last section discusses implications.

Plea for Research on Developing Country Supermarkets’ Impacts on FFV Standards
Standards for FFV in developing countries have recently figured prominently in the literature
in several ways, nearly exclusively focused on trade as opposed to domestic markets. (1) As
FFV exports from developing to developed countries have burgeoned over the past decade
since trade liberalization, the literature has focused on the application of safety (regarding
pesticide and microbial residues) and phytosanitary (pest and diseases) standards by
developed countries to developing country exports. Some of that literature has examined non-
tariff trade barriers, and application of Hazard Analysis Critical Control Point (HACCP)
systems and Good Agricultural Practices (GAPs) (eg., Unnevehr, 2000). (2) A subset of that
literature has focused on the application of a subset of these standards -- private standards of
supermarket chains in developed countries. Such private standards include collective
standards such as EUREPGAP, and chain-specific standards such as those of Sainsbury or
Tesco applied to their suppliers. An example of such research is that of UK supermarkets and
Kenyan produce exporters (Dolan and Humphrey, 2000). (3) The focus has in general been
on trade rules per se, although there has also been some work on how the requirements of
trade have affected technology use among exporting producers. For example, Thrupp (1995)
wrote in “Bittersweet Harvests for Global Supermarkets” that developed country
supermarkets require high quality of their suppliers, which induces heavy pesticide use
among developing country FFV producers aiming at the export market.
The focus on FFV trade standards in agricultural development economics literature appears to be due to the political/policy importance of that theme for developed countries, and to researchers’ apparently assuming that if standards of any kind are applied to FFV producers in developing countries, that would only be by export firms buying from local producers – and not by domestic buyers in and for local markets. That assumption in turn is connected to the belief that the FFV markets in developing countries are still only informal and traditional, and fall outside of public regulations including safety standards.

Those assumptions were true a decade ago, but today the situation has changed with the advent and rapid rise of supermarkets in developing countries. Reardon and Berdegue (2002) note that in Latin America, for overall food retailing, supermarkets had at most a 20% share in 1990 – but the country-population-weighted average share today is 50-60% – a transformation in one decade that took five decades in the US.

In the study countries in this article (Brazil, Costa Rica, Guatemala, Honduras, Nicaragua), those shares are 75, 50, 35, 20, and 10% respectively. Note that supermarkets’ share in FFV retail lags significantly behind their share in overall food retailing; for example, in Brazil, supermarkets have 75% of overall food retail but only about 30% in produce; in Argentina, that is 60% versus 25%, in Costa Rica, 50 versus at most 10%. But still the absolute size of the supermarket-market is astounding. Supermarkets in Latin America buy 2.5 times more produce from local farmers than Latin America exports to the rest of the world! (Reardon and Berdegue, 2002)

Hence, this paper focuses on the role that supermarkets in Latin America are playing in setting and imposing standards on local FFV producers. This is important for the following reasons. (1) Supermarkets are the main “formal sector” buyers of FFV (far larger than exporters as noted above) who have the incentive and capacity to impose standards, as they in principal have the procurement and monitoring capacity to demand standards of their
suppliers. (2) Supermarkets have the domestic consumer base and retailing approach that would allow them to make profits from imposing standards of quality and safety. To the extent they enforce standards on producers, this increases the safety of FFV consumption for Latin American consumers, thus improving public health, and this increases local producers’ competitiveness in global markets as sales to local supermarkets serve as “training wheels” for export markets. (3) FFV are important to small producers as a possible avenue of agricultural diversification (away from reliance on production of basic grains) because of relative lack of economies of scale, and thus are a focus of government and donor projects to assist small farmers in the region.

The Evolution of Supermarket FFV Procurement Systems in the Study Countries

The main trends in the evolution of procurement systems among the chains in the study countries (mirroring some similar trends in the U.S., see Cook, 2000), have been as follows. (1) There has been a substantial shift by supermarkets in the study countries, and in Latin America in general (Reardon and Berdegue, 2002) during the late 1990s away from reliance on traditional wholesale markets for procurement of FFV. (2) There has been a consolidation of procurement from per-store procurement to use of centralized distribution centers (DCs) serving the whole chain in a zone or a country. (3) There has been a concomitant shift away from traditional wholesalers toward the use of specialized wholesalers (either centralized or based in the growing regions) who classify product collected from suppliers, often have their own production, and often have semi-contractual relations with suppliers (giving credit, technical assistance, specifying requirements of final buyers for quality standards) – and who have the capacity to implement standards.

Why has the shift occurred away from traditional wholesalers towards specialized wholesalers? Supermarket chains tend to find that the traditional wholesalers provide
inadequate service since they lack standards and have significant bargaining power in the wholesale markets because wholesaling is usually quite concentrated per product rubric. Supermarkets tend to continue to procure from wholesale markets only where they cannot make adequate arrangements direct with producers through their own DCs, or where new types of wholesalers emerge to meet their needs.

In Brazil, Mainville (2002) examined the practices of the two main chains (Pão de Açúcar, a Brazilian chain in joint venture with Casino, of France, and Carrefour, of France). The study zone was the Sao Paulo region. She found a rapid shift in only the past five years, away from per-store sourcing of FFV from wholesale markets toward the use of large distribution centers (DCs). Mainville also found that both chains rely for the past several years on a system of “preferred suppliers.” The latter tend to not have written contracts. However, there is a demanding and formal entry into the “register” of preferred suppliers, wherein the latter make application, demonstrate their capabilities to meet standards and delivery requirements, and are evaluated by the chain. Some of the relationships with suppliers are in the form of strategic alliances such as that with the specialized fruit wholesaler upon which Pão de Açúcar relies, Benasse. Finally, she found that there is an incipient shift toward the use of contracts for a subset of FFV suppliers.

In Costa Rica, CSU supermarkets, the chain which now has 80% of the supermarket-sector, has since 1972 been relying on Hortifruti, its FFV procurement company. CSU sells nearly all its FFV under the Hortifruti label (Vallejos, 2003a and 2003b). Hortifruti is in the same holding company (CSA) as is CSU. Until about seven years ago, Hortifruti relied mainly on the traditional wholesale market, buying in bulk, delivering lots to its DC, then breaking down the lots and sending small lots around to the CSU stores. As CSU grew into a chain of 97 stores in Costa Rica, the need to procure large volumes and standardize quality became crucial. In the past few years, Hortifruti shifted from mainly relying on the wholesale
market until today it buys only 15% of its FFV from the wholesale market (mainly when it is short items from suppliers or there are especially good prices in the market), 10% from imports (via a specialized fruit importer), and the rest from a set of 200 preferred suppliers. Fifty of the latter are mainly fresh-processors (such as of fresh cuts) and grower/packers that aggregate product from other suppliers. The rest are individual growers or grower/packers. Each supplier must clean, crate or pack in final usable trays the product, and deliver to the Hortifruti DC. There are no formal written contracts, but there is a system of preferred suppliers. While 70% of those suppliers are small farmers, 80% of the volume purchased is from medium or large grower/packers. The small farmers mainly provide leafy greens for which there are few economies of scale. The other main chain (Megasuper) in Costa Rica (with 15% of the supermarket-sector) has followed suit in the past two years by contracting a specialized wholesaler (Interfrutd) to set up a similar “preferred suppliers” system for most of their FFV procurement.

In Nicaragua, CSU entered 1968-1979, and then restarted in the mid 1990s, and has 22 stores there today, with 85% of the supermarket-sector. Before 1998 CSU relied on direct purchases from the traditional wholesale market. Hortifruti entered in 1998 and also relied on the wholesale market until in 2000 it set up a system of about 50 preferred suppliers similar to that in Costa Rica, except that it added a system of collection centers (centros de acopio) in the rural areas as Nicaraguan farmers are far less likely to own trucks than their Costa Rican counterparts. At the “centros”, they make quality selection and wash the leafy greens in chlorinated water. CSU’s main competition in Nicaragua is the La Colonia chain, which still sources mainly from the traditional wholesale market and to a minor extent from preferred suppliers (mainly larger farmers of fruit) that deliver to the lead store. La Colonia has plans to shift toward use of a specialized wholesaler and centralized DC.
In Honduras, CSU and La Colonia (Honduran capital, not related to the Nicaraguan “La Colonia) are the two main chains with about 75% of the supermarket-sector. CSU entered in 2000 and grew quickly, acquiring chains and building stores, and then in 2002 transferred ownership/management of the stores to the Guatemala-based La Fragua chain - right after CSU, La Fragua, and Ahold entered a three-way joint venture called Central American Retail Holding Company (CARHCO), with 253 stores in five Central American countries. However, Hortifruti had already entered Honduras in 2001 to service the CSU stores, and continued in that role for the La Fragua stores. Again, Hortifruti started in 2001 only buying from the traditional wholesale market and then quickly shifted (in early 2002) to mainly relying on a preferred-supplier program with today about 40 growers. La Colonia followed suite in late 2002 with a procurement program (in-house) similar to the latter, and has started drawing on a specialized wholesaler, Frutas Internacionales, for its fruit procurement and a small subset of its vegetable procurement.

This latter is another case of diffusion of procurement technology under the impetus of retailer competition and the need to assure quality and a continuous flow of produce. Procurement officers in the domestic chains in the countries in Honduras and Nicaragua readily admit that they are adopting these new procurement systems in order to meet the competitive challenge posed by Hortifruti, which delivers higher quality but at similar prices.

In the Hortifruti (as well as the La Colonia procurement programs) in Honduras and Nicaragua, as in Costa Rica, the majority of the several hundred suppliers used by the chains are small-medium farmers (who mainly supply leafy-greens) but the majority of the volume comes from medium/large suppliers, who supply the “big ticket” staple items – potatoes, tomatoes, onions, mangoes, melons, bananas. The combination of technical assistance to growers, application of standards and controls (discussed below), and reliance on preferred suppliers is driven by the deficiencies in the traditional FFV production systems in the
countries that face the supermarkets. Javier Gallegos (2003a), the head of marketing for Hortifrutti in Central America, enumerates those deficiencies:

“The realities and problems of our growers and markets are as follows. The market is fragmented, unformatted, unstandardized. The growers produce low quality products, use bad harvest techniques, there is a lack of equipment and transportation, there is deficient post-harvest control and infrastructure, there is no market information. There are high import barriers and corruption. The informal market does not have: research, statistics, market information, standardized products, quality control, technical assistance, infrastructure.” (slides 4 and 5, 2003a).

Our interviews revealed that those problems increase sharply as one goes from Costa Rica to Honduras and Nicaragua.

In Central America, Guatemala is in an intermediate position (in the continuum of procurement change we are addressing) between the Costa Rica on one hand and Honduras and Nicaragua on the other. The main chain in Guatemala is La Fragua, which with its various formats has 65% of the supermarket-sector. La Fragua has also moved in the past three-four years to centralize its FFV procurement through its buying arm “Disfruve” which also uses a “preferred supplier” registry. Most of these suppliers are medium/large grower/packers. A typical example is La Carreta, a medium sized grower/packer that has greenhouses, drip irrigation, and its own trucks. La Carreta supplies La Fragua stores in Guatemala and now in La Fragua’s recently acquired chain in El Salvador, Despensas don Juan, and even sells a line of 6 items to La Colonia in Honduras. It is thus a small regional multinational, following the regionalization of supermarket chains themselves in the same way that Hortifrutti or Frutas Internacionales followed the chains’ expansion over the region. These medium/large suppliers pack the product ready for supermarket shelves (just as Hortifrutti requires in Costa Rica), and deliver either to the Disfruve DC or to specific La
Fragua stores. Moreover, as do Hortifruti in all countries and the procurement arm of La Colonia in Honduras, Disfruve also procures some FFV items from specialized wholesalers. Some of the latter are regional multinational specialized wholesalers, such as Frutas Internacionales that supplies mainly imported fruit to Hortifruti, to La Colonia, and to La Fragua. Other specialized wholesalers include heads of grower groups like the Distribuidora de Fresas San Francisco (strawberries). For La Fragua’s recently (January 2003) acquired chain in El Salvador, a large-scale Guatemalan grower/packer/shipper (Disvegua) will continue to supply 80% of Despensa don Juan supermarket chain’s FFV needs, with overall coordination now supplied by the Disfruve office in Guatemala. Note that the system used by Disfruve is similar to that of Hortifruti in that it is a preferred-supplier system, but Disfruve has not yet reached the degree of technical assistance and support for its grower group, and thus is reliant on the suppliers’ capacities as they are to meet La Fragua’s quality standards.

In sum, there has been a rather rapid shift over all the case study countries, with the earliest adopters in the richer countries (Brazil, Costa Rica), from reliance on the traditional wholesale market to own-organization of FFV procurement, through DCs, specialized wholesalers, and lead suppliers programs. The diffusion of this change was spurred by the leading chains and by the regional-multinationalization the supermarket chains themselves, followed with a lag by the regionalization of the procurement companies either associate-businesses of the chains (e.g., Hortifruti, Disfruve) or in close commercial relations (Interfrutd, Frutas Internacionales in Central America, Benasse for fruit to Pão de Açúcar in Brazil). This rapid centralization and gradual regionalization of procurement (with FFV trade intra-company) has rapidly altered conditions for the group of mainly medium and small-medium suppliers that focus on the upper and middle-upper income urban market which is a market for quality FFV. The regionalization is incipient – 16% of the FFV in CSU stores in Nicaragua come from Costa Rica, for example, and there are only beginning exchanges
between Hortifruti and Disfruve as the two procurement poles of the only regional chain in Central America. Note also that the imports from outside the region are similar to these internal flows, and a number of these suppliers at the same time are heavily engaged in exports of FFV, so that they are adapting to changing domestic as well as export markets, marked by increasing demand for quality and with increasing consolidation of buyers.

The Implementation of Public and Private Standards by Supermarkets

This section focuses on the systems of standards imposed by supermarket chains in the study countries. First, in general, the supermarket chains and their procurement agents are not yet challenged in major ways by phytosanitary standards at borders. This is because their intra-regional sourcing is still minor (especially for chains in Costa Rica and Guatemala, although more for Honduras and Nicaragua that tend to import more from the first two), and the FFV imported from the US and Chile are not facing major phytosanitary barriers.

However, procurement officers noted that in intra-Central American trade, there are substantial “administrative” barriers such as hold-ups (delays) wherein informal payments are required, or product shipments are blocked. An example is blockage experienced importing from Costa Rica into Honduras; Honduran regulations specify that firms cannot import FFV when there are Honduran FFV available of the type being imported, regardless of whether the Honduran product meets the supermarkets’ quality requirements.

Second, in general, the main standards imposed by chains in all study countries from Brazil to Honduras are quality standards. These regard mainly appearance and size. These are strictly enforced and monitored in every shipment from suppliers – at reception at the DCs of the chains in Sao Paulo, and at the DCs of the specialized wholesalers responsible for FFV procurement in the Central American chains. The exception is for the currently remaining very roughly 20% of FFV that supermarkets still source from traditional wholesalers, which
are charged to make the selection according to quality standards when buying at the wholesale market.

One interview after another in our studies showed clearly that after the “first hurdle” cost requirement, the quality standard is currently the central focus of the procurement officer. In the main chains in the most demanding markets (in particular Brazil but increasingly also Costa Rica), product safety is a close tie with quality for second place after cost. Supermarkets mainly compete with each other on costs, and stay within 10-30% of the prices of street fairs and central markets that still dominate informal FFV retail; in special weekend promotions the formats focusing on poorer consumer segments actually price at the same prices as the street fairs to convince weekend shoppers coming for non-FFV products to also do their FFV purchases in the store.

Quality standards then become crucial to differentiate the supermarkets’ product from that of the markets and street fairs. The supermarket’s marketing strategy is that selling higher quality produce compensates for the higher prices, although supermarkets are concerned with the relatively low penetration they have in the FFV market and recognize that they are not yet competitive in price with the street fairs and markets. They expressed the hope that with the help of centralization and mass procurement with standardization they will drive down costs over time while maintaining quality, and increase their market share. Where the specialized wholesalers give technical assistance to farmers, it focuses mainly on quality aspects as well as flow rates and volume; for example, planning the planting calendar with the farmer is a key technical assistance activity.

None of the chains pays a price premium, however, to producers for special levels of quality. Rather, they set a price and then screen for minimum levels of quality. In all the chains interviewed, the supplier bears the cost of product not meeting quality standards. The supplier is usually responsible for screening his/her own product before it is collected by the
specialized wholesaler or delivered to the DC. Once the product is received by the supermarket procurement agent, product that does not meet the standard is deducted from the payment and disposed of. The product that does not meet the standard that is held back from delivery by the supplier is typically sold in secondary markets such as to traditional wholesalers, markets, and street fairs. For growers that also export, they make a three-way selection, with the best (and that meeting export standards of safety if those are above those of the supermarkets) exported, the second tier sold to supermarkets, and the bottom tier sold to secondary local markets.

Third, there is a sharply descending pattern of FFV safety (E. coli and pesticide residuals) standards applied by supermarkets as one goes from the “advanced” case of Brazil, to the “intermediate-incipient” case of Costa Rica, through the “incipient” case of Guatemala, to the “not yet started food safety standards” cases of Honduras and Nicaragua. Note that this pattern roughly coincides with incentives and capacity variables: (1) public regulations for food safety, including country-level adoption of international standards such as Brazil and Costa Rica’s adoption of CODEX standards for safety variables; (2) existence and cost of government and private sector labs to perform pesticide and E. coli tests, (3) incomes and education and “quality consciousness” of consumers, (4) degree of penetration of supermarkets in FFV retail (and overall food retail), and (5) time elapsed of presence of global and regional retail multinationals in the country.

In Brazil and Costa Rica, the only two countries in which supermarket chains impose and enforce FFV safety standards, there are public regulations/standards with respect to FFV safety, but only dating from several years. In general, these regulations are not applied in the (majority) informal FFV retail sector and the wholesale markets. Hence enforcement of public regulations is the domain of those who have the incentive and capacity to do so – the modern large-scale food industry, in this case here the supermarket chains.
There are similarities and differences over how and how much supermarket chains apply food safety standards in Brazil and Costa Rica. In terms of similarities, the lead chains in both countries do not make specific safety claims per FFV item; for example, Pao de Acucar or Hortifruti/CSU do not put a “food safe” label on their produce. They both allow, however, suppliers that do have such labels to use them, although the chains do not verify the claims of the labels. Examples include the Syngenta joint ventures’ low-pesticide label put on its tomatoes in Costa Rica, or the La Carreta label showing Guatemala’s “PIPAA” certification affixed to its produce sold in Honduras and Guatemala, or hydroponics and organics labels placed by suppliers on their packages delivered to Pao de Acucar.

Moreover, both Pao de Acucar and CSU/Hortifruti emphasize the creation of an image of their entire FFV section as being safe through communication to consumers periodically that they test water safety and pesticide residuals, but do not directly communicate that at the points of sale or on the produce. For example, Hortifruti in Costa Rica obtained the government’s “sello azul” certification for low-pesticide use. Hortifruti-Costa Rica obtained in 1998 the "sello azul" for low pesticide use (geared to the U.S. FDA/EPA standard), a certificate given to the company by the government, but they do not use that to market to local consumers, except in a one time intensive publicity campaign. Their marketing strategy is to associate the name Hortifruti with quality and safety in the consumers mind without per-product labels. They are experimenting with a new label for low pesticide on tomatoes (from a grower that has a joint venture with Syngenta, thus following the “agriculture raisonnee” controlled pesticide use new trend in French agrifood sector, where suppliers and chemical companies work together to present an option that lies between conventional and organic).

However, CSU/Hortifruti do not put this fact in a label on the produce, but rather undertook a one-time (six month) publicity campaign to communicate that to consumers, thus
linking the “safety image” with the Hortifruti label in the shopper’s mind. That is both a competitive edge vis a vis other chains, but also in relations to the wetmarkets.

Finally, while there appears to be in Brazil a greater burden of legal responsibility and liability felt by the chains, in both countries there is an application of safety standards in particular to leafy-green standards at the time of qualification for entry into the supplier registry. In particular, water safety certification is required and tested. Pao de Acucar and Hortifruti both apply safety standards that are part of a mix of quality and safety standards applied to preferred suppliers.

A difference emerges in terms of the infrastructure available to test products. In Brazil, Pao de Acucar has its own labs for testing pesticide residues and presence of E. coli on sampled lots of FFV that come in from suppliers, and tests the water of suppliers.

By contrast, Hortifruti only has limited in-house E. coli and water testing capacity, and has to rely on expensive government labs for testing pesticide residues. Thus, of 230 products in the inventory of Hortifruti in Costa Rica, tests are done on only 18 products for E. coli and pesticides, and that only with a limited sample once a month, from the lots of product delivered. They test pesticides with an expensive government lab (they lamented the high cost of 200 dollars per test and felt they could extend the testing were the tests cheaper) and E. coli with cheap private labs (10 dollars a test) and their own in-house small-scale testing with a cheap kit at the warehouse. If they find a problem, the do not de-list the supplier, but rather use the test results to go do specific technical assistance and training of the supplier. This is because their main emphasis is quality and volume, and they cannot they feel afford to be too pushy with suppliers as there is a limited set of capable suppliers in the country, and the preferred of the preferred supplier set are medium/large horticulturalists who are also exporting and thus have a number of alternatives that are as profitable.
In all three of the remaining countries (Guatemala, Honduras, Nicaragua), there are some products sold with organic labels, and a few products from a major supplier sold with the public/private certification "PIPAA" for food safety, but the chains do not require or enforce any certification except for organics. The safety label on a few products is done by the supplier voluntarily to get a competitive edge. The PIPAA program appears to have promise for application to supermarket chains in Guatemala, and could be a useful model for the other countries. The existence of a national entity to guide, train and inspect the adoption of safety standards was opportune to this organization. This national entity is known as the Agricultural and Environmental Integral Protection Program (PIPAA) which is in charge of dealing with export standards required by importing countries. After managing the snow pea pesticide dilemma from 1991 to 1993, and the Cyclospora-raspberry case since 1996 until the present date (Calvin et al., 2002), this entity has accumulated years of experience working with international agencies such as FDA, USDA, CFIA and PAHO, and has pioneered in a number of ventures in training inspectors, inspecting farms and participating in phytosanitary pre-clearance programs with the U.S. Department of Agriculture in melons, mango and papaya. In view of the need of applying all the expertise acquired in the export market to the local and regional market needs, PIPAA’s expertise was put together into a new service known as the Safety Certification Seal. The conditions to be complied are based on the best science available regarding process control in safety assurance programs.

Companies supplying the biggest supermarket company in Guatemala are upgrading their production systems with PIPAA’s Safety Certification Program, but it is not yet mandatory. The PIPAA standard has not yet been adopted as the mandatory, single standard for all the fresh produce supply. A conventional explanation is that implementing as a must for all suppliers will not help in driving prices down.
Conclusions

The findings are several, viewing behavior (supermarkets’ imposition of standards of safety and quality on suppliers) as a function of incentives and capacity variables: (1) The incentive to apply both quality and safety standards (not just price or cost of food) will rise as one goes from poorer to richer consumers who want to go beyond fulfilling necessities toward quality and have luxury of worrying about safety; (2) in the short-medium run, the incentives to “get quality right” will be more important than those to “get safety right” for most FFV products; the exception is leafy-greens, which have an image in most countries among consumers of being potentially unsafe (dripping with microbes that cause hepatitis, or full of pesticides). (3) Private safety standards will utilize public standards where they exist or will utilize internationally established safety standards. (4) The capacity to implement quality and safety standards (i.e., impose them on suppliers) will rise as supermarkets’ buying power over suppliers increases – that is, the more they centralize their own procurement and rely on contracts and direct producer relations, and the less they rely on spot markets such as the traditional wholesale market where the wholesaler intermediates the supplier and final buyer.

These case studies how rapidly the adoption of quality and safety standards is influencing markets in these countries. Future research will need to address how such market developments are impacting consumer welfare and industry structure. Markets segmented by quality and price may serve the varied needs of consumers more effectively than a single minimum quality standard, but this hypothesis remains to be tested for rapidly modernizing food systems.

A clear note of challenge to farmers comes through in the study. We noted that the great majority of the product acquired at present, albeit in an incipient penetration by supermarkets into the FFV market, comes from medium/large farmers with the exception of leafy greens. The continuation and deepening of the trend (which appears inevitable as
procurement systems continue to develop, suppliers adjust to standards, and the cost of testing products falls) toward the broader application of stricter quality and safety standards by supermarkets will be a challenge for smaller farmers, except for the most trained, equipped, and commercially oriented ones. For the producer, keeping that lucrative market is likely to be a very strong incentive to make sure all quality standards are met consistently, as he knows there are dozens of other producers out there waiting to replace him if he fails to comply.

The supermarket chains, locked in struggle with other chains in a highly competitive industry with low margins, seek constantly to lower product and transaction costs and risk – and all that points toward selecting only the most capable farmers, and in Latin America that means mainly the medium and large farmers. Moreover, as supermarkets compete with each other and with the informal sector, they will not allow consumer prices to increase in order to “pay for” the farm-level investments needed to meet quality and safety requirements. Who will pay for water-safe wells? Latrines and hand-washing facilities in the fields? Record keeping systems? Clean and proper packing houses with cement floors? The supplier does and will bear the financial burden. As small farmers lack access to credit and large fix costs are a burden for a small operation, this will be a huge challenge for small operators.

It is thus inevitable that standards demanded by consumers are increasingly a major driver of concentration in the farm sector of Latin America. As supermarkets’ direct share in the FFV market grows, and as their influence is increasingly felt on the practices of informal markets through competition for the most profitable clients (the middle and high income segments) and consumer expectations, the effect of rising standards will spread over the farm sector. While it is very probable that this means that consumers will consume fewer pesticides and harmful microbes, and have better quality FFV, it also means that development programs, in the context of weak public support systems for agriculture, will have a challenge
and a mandate to assist small farmers to make the transition. Innovative methods to accomplish this are explored in Boselie, Henson, and Weatherspoon (2003).
References


