

World Agriculture & Trade



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Mexican Supermarkets Spur New Produce Distribution System

The Mexican produce distribution system is in the midst of major structural change. Although small, specialized produce shops or stalls account for the bulk of consumer produce purchases, supermarket chains are rapidly gaining market share.

Supermarket growth in Mexico is explosive: the number of stores has leapt from less than 700 in 1993 to 3,850 in 1997. The pace is continuing with several new store openings scheduled each week. Convenience stores that retail fresh produce are also expanding rapidly. Combined, these recent developments are changing the way produce makes its way from the farm to the consumer—the rapid rate of innovation at the retail level is forcing changes in the distribution chain.

Mexican firms are constructing state-of-the-art supermarket chains that are challenging the capacity of the produce distribution network. Truck fleets, wholesale markets, packers and shippers, and farmers are all trying to adapt to new demands. A similar transformation occurred in U.S. produce markets following the Second World War. The development of the produce distribution system in Mexico will not replicate the evolution of the U.S. system, but there are and will be many similarities.

The contemporary supermarket is the product of almost 70 years of adaptation to continuous innovations in infrastructure, technology, and management. The supermarket was created August 4, 1930, when the first King Kullen store opened in Jamaica, New York. Supermarkets distinguished themselves from earlier retail food establishments by offering self-service shopping; separate departments for produce, meat, bakery, and other grocery items under one roof; discount pricing; a centralized distribution system; and large-volume procurement.

The dramatic growth of supermarkets in the U.S. in the 1930's and 1940's coincid-

ed with the rapid rise in automobile and refrigerator ownership. Automobiles made it possible for consumers to carry larger purchases home over longer distances, and created competition with smaller neighborhood retailers. Household refrigeration enabled consumers to keep food in storage for longer periods of time, enabling household members to shop less frequently, perhaps only once or twice a week for highly perishable items such as fresh fruits and vegetables.

Supermarkets have existed in Mexico for decades, but until the 1980's they were few and catered principally to upper-income households and expatriates. Consequently, they have had an upscale, high-price image. The success of the recent expansion is the result of extending the customer base to lower-income households.

Most Mexicans purchase produce in stall-like shops in municipal markets (41 percent) or from produce carts that set up in neighborhood street markets, *tianguis* (20 percent). Unlike supermarkets, these are not self-service operations: the consumer asks for a kilo of tomatoes and the proprietor selects and weighs the product. The customer and the proprietor often know each other, so there is a social element to the exchange. Although most urban households have refrigeration, produce tends to be consumed within a day of purchase. Consequently, these shops stock ripe produce and their customers shop several times a week.

Supermarkets present a radically different shopping experience. In Mexico, supermarkets, called *tiendas de autoservicio*, are literally self-service stores. Some

Major Supermarkets Show Rapid Growth in 1990's

| Company | Outlets | | Annual growth rate |
|--------------------|------------------|------|--------------------|
| | 1993 | 1997 | |
| | Number of stores | | Percent |
| Gigante | 180 | 192 | 1.7 |
| Cifra | 114 | 372 | 56.6 |
| Comercial Mexicana | 120 | 147 | 5.6 |
| Casa Ley | 42 | 72 | 17.9 |
| Soriana | 23 | 53 | 32.6 |
| Chedraui | 20 | 27 | 8.8 |

*Includes other new stores not recorded in 1993.

Sources: 1993, "Retail Food Stores: Handbook for Exporting to Mexico"; 1997, "Sistemas Agroindustriales en Mexico: Indicadores, Situación Actual, Tendencias."

Economic Research Service, USDA

supermarket produce is prepackaged and sticker-priced, but most is displayed in bulk and weighed at the check-out. Although there are produce personnel on the shop floor, a supermarket transaction is anonymous compared with a traditional market. Some Mexican consumers find this intimidating, particularly those who have recently moved to the city from the countryside.

There is strong competition between supermarkets and traditional markets. As in the U.S., supermarkets place newspaper advertisements to draw customers into the store during the midweek lull in volume. In Mexico, a second objective is to convert traditional shoppers into supermarket shoppers. One chain even bills its weekly sales as “*tianguis* days” to emphasize the low, street-market prices and to expand its customer base.

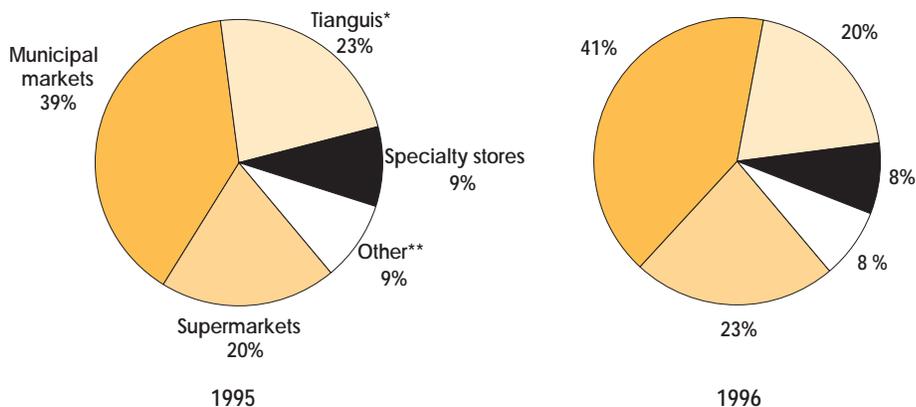
Because it is price-sensitive and purchased frequently, produce is a common loss-leader, and featured prices are often below wholesale costs. Supermarkets recoup the negative margin on featured produce if customers make other, nondiscount purchases and become regular customers. Small produce stalls cannot afford to match the chains’ produce discount, and their market share is gradually eroding.

Forging a New Supply Chain

The emerging marketing system is changing not only the kinds of produce demanded by Mexican households, but its quality, consistency, packaging, and handling. The development of U.S. supermarket chainstore operations in the 1950’s and 1960’s was spurred in part by infrastructure development. The U.S. interstate highway system and the growth of refrigerated truck transportation freed produce shippers from dependence on railroads and allowed deliveries to facilities outside central market districts. This enabled chain stores to build their own distribution centers and accommodate high-volume direct shipments from producers under central inventory control.

Chains benefit from economies of scale in storage, distribution, and marketing. The higher a firm’s sales volume, the more widely it can spread its fixed costs. Greater sales volume also yields more

Supermarkets Garner a Growing Share of Mexico's Produce Markets



*Produce carts set up in neighborhood street markets. **Includes “corner” stores.

Source: Food Marketing Institute, “Trends in Mexico: Consumer Attitudes and the Supermarket, 1996.”

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predictable demand and lower inventory risk. However, to realize these efficiencies, chain stores need a guaranteed flow of consistent quality produce to serve consumer demand. For a tightly managed inventory system to work, the entire supply chain must be coordinated. So chain stores are willing to pay a premium for these services.

Chain stores ensure quality control by contracting directly with a grower/shipper’s sales agent or a produce broker to have product shipped directly to their private distribution centers, rather than obtaining products from local wholesale markets. By internalizing wholesale services within the firm, they are able to avoid the extra costs and time associated with obtaining produce through an intermediary.

As direct procurement by chains expands, the share of produce flowing through central wholesale markets declines. In the U.S., the central wholesale share has stabilized around 30 percent, although increased demand for specialty, organic, and “ethnic” produce has recently raised the share slightly. Mexico is entering a stage in which the wholesale share will decline rapidly. However, because consumption growth is so robust, the absolute volume of wholesale shipments may not fall.

Pressure To Upgrade Packing

Chain stores drive down costs at all links in the distribution chain. One focus of efficiency gain is reducing the proportion of produce that must be discarded because of damage or poor quality. Good quality control at the farm and packer/shipper level generates savings for the rest of the distribution chain—no one wants to haul poor-quality produce to an urban distribution center only to have to throw it out. Thus, the demand for predictable quality generates a demand for better sorting, packing, and shipping.

In the U.S., produce packing evolved through several stages. Bulk hauling in large wooden crates or jute sacks first shifted to smaller standardized wooden crates, then to fiberboard cartons. Cartons are generally cheaper, provide superior protection, and yield fewer losses. The next innovation (unitization) placed cartons on standard-sized pallets. This allowed the use of forklifts, reducing loading times, product losses, and labor costs. Unitization is widespread in the U.S., although not universal.

In Mexico, in contrast, unitization is the exception rather than the rule. Produce that is primarily exported, such as vine-ripe tomatoes or bell peppers, faces the scrutiny of major chain buyers in the U.S., Europe, and Asia, fueling substantial

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investment in state-of-the-art sorting, handling, and packing technology. Export tomatoes, for example, are exactly sorted for size, color, and quality. They are packed in high-quality cases; stacked on pallets; and chilled, stored, and shipped in controlled atmosphere containers. Mexican apples are also immaculately packed because of direct competition with imports from the U.S., Canada, Chile, and New Zealand.

Products that are not principally exported or do not face import competition are usually less well sorted and packed. Product losses are unnecessarily high and much of the cost of sorting is shifted from areas near the farm with low labor costs to higher cost areas in town.

Mexican Government Assists Transition

In the U.S., the legal and regulatory infrastructure for produce marketing developed under the umbrella of various USDA agencies, particularly the Agricultural Marketing Service. In Mexico, regulation of the supply chain is divided between two ministries: SAGAR—the Ministry of Agriculture—responsible for production agriculture, and SECOFI—the Ministry of Commerce—responsible for agricultural marketing from the farmgate to the consumer.

SECOFI has been working with ANTAD, the Mexican supermarket trade association, to develop industrywide standards for produce grades, cartons, and packages. SECOFI is also establishing information networks to better integrate state-level and regional markets. The central market of Mexico City plays an unusually large role in matching supply and demand among provincial markets. It is common for produce to be shipped to Mexico City only to be purchased for use in a market close to the production region. This “product tourism” through Mexico City results in unnecessary transportation costs and shipping losses.

Mexico City’s central market may dominate because it has sufficient liquidity to ensure that a shipment will be sold promptly and paid for in a timely manner. The growing market for produce quality should attract investment by independent packer/shippers, but uncertainty about dispute settlement between farmers and shippers may be inhibiting investment at this stage of the supply chain. An improved system of payment and dispute resolution may reduce product tourism and encourage independent packer/shippers.

In the U.S., the Perishable Agricultural Commodities Act (PACA) requires commercial buyers and sellers of fruits and vegetables to be licensed and makes contract disputes subject to arbitration. Licenses are revoked if traders do not honor their commitments. In Mexico, business is often conducted with a handshake; however, commerce over longer distances makes one’s word of honor vulnerable to opportunism. The use of formal contracts will likely expand further into the countryside.

As SECOFI works with the supermarket industry and its supply chain, SAGAR is developing programs to help smaller farmers adapt to these new demands of the retail sector. The equipment required to efficiently sort and pack is often very expensive. Credit is also expensive, so only larger, well-capitalized farms and firms have been able to deliver consistent quality to supermarkets. Smaller farms do not, individually, ship enough produce to justify such investments. Consequently, they are at an increasing disadvantage as the demand for quality expands. Unlike in the U.S., marketing cooperatives are not widespread in Mexico, nor has incorporation been common among smaller farms.

The universal pattern of industrialization has been that most smaller scale farmers are forced off the land and into manufacturing and service occupations. This is a difficult transition and many countries have tried to moderate the process through

agricultural and rural development policies. In Mexico, despite many policies to ameliorate conditions in the rural economy, the supermarket revolution will likely hasten agricultural consolidation.

Implications for International Trade

A long-term expansion in the volume and value of produce trade between the U.S. and Mexico reflects the continuing integration of the two economies. The trade flows are complementary with regard to season and reflect the growing demand for year-round supplies of fruits and vegetables. The bulk of Mexican exports to the U.S. are in the winter, and the bulk of U.S. exports to Mexico are in the summer and fall.

U.S. producers may have a window of opportunity for supplying Mexican supermarkets with the quality and consistency of produce the Mexican distribution system cannot yet deliver. Systems of quality assurance and a secure cold chain of refrigerated shipping have emerged in Mexico, but only in certain sectors. For example, packaged, prewashed salads imported from the U.S. have become popular in Mexico; concerns about food safety have raised the demand for packed salads. At the moment, U.S. firms are the primary suppliers of this product and the services and quality it embodies.

Further integration of the produce systems of North America should yield more strategic alliances between U.S. and Mexican retail chains; a fully integrated truck and rail network; harmonization of produce standards, contracts, and dispute resolution; and greater complementary trade.

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