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The Changing Dynamic of Mexican Produce Distribution

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Within the past decade and a half, the retail landscape of Mexico has been greatly transformed by the enormous proliferation of chain stores in the local marketing of perishable foodstuffs. Between 1986 and 1997, the number of Mexican self-service supermarkets and mass-merchandise retail chain stores that sold perishable food products (such as supercenters, hypermarkets, warehouse-type stores, and wholesale clubs) nearly doubled, from 522 establishments to 1.028 establishments. Prominent international retail firms (such as Wal-Mart, Carrefour, and Auchan) are increasingly staking their claim in the Mexican retail sector alongside such Mexican retail giants as Comercial Mexicana, Gigante, and Soriana.¹ In line with the current popularity of hypermarkets and supercenters elsewhere in North America and Western Europe, more than 60 percent of these retail chain stores-633 out of 1,028 establishments-consists of large retail facilities that occupy an average of 6,000 square meters (about 64,583 square feet) and offer a large variety of non-grocery and grocery items-ranging anywhere from fresh produce and meats to electronics, toys, and clothing-in the same store location. Although the Mexico City metropolitan area remains the center of the country's chain store activityaccounting for about 22 percent of the total number of supermarket and mass-merchandise retail operations, only slightly lower than the 28 percent concentration recorded in 1986-the spread of chain supermarkets and mass-merchandise chain stores in the past decade has penetrated every state of the country, though the southwestern region of Mexico (including the states of Guerrero, Chiapas, and Oaxaca) still lags notably behind the rest of the

country in terms of chain store development and penetration.

The rapid growth of chain stores in recent years underscores the fact that many Mexican consumers are responding very favorably to the introduction of self-service retail formats and that they enjoy the expanded product selection, reasonable prices, and superior climate control for perishable food products that is provided by such facilities. At traditional retail outlets for fresh produce in Mexico-such as open-air street markets (tianguis) or enclosed neighborhood public markets-refrigeration and cold storage for perishable products is virtually nonexistent, and the number of fresh produce items offered for sale usually amounts to 50 or fewer, compared to an average selection of about 200 items in the produce department of a typical Mexican chain store. Recent surveys of retail prices for fresh produce by the government agency in charge of upholding Mexico's Law of Consumer Protection (El Instituto Nacional del Consumidor y la Procuraduría Federal del Consumidor, known by the acronym PROFECO) suggest that chain supermarket and mass-merchandise stores are also providing serious competition for traditional market outlets for fresh produce in terms of prices. During a 15-week period between mid-August and early November 1999, for example, 45 percent of the lowest retail prices recorded by PROFECO, for approximately 80 fresh produce commodities, was found at stores within the supermarket and chain store category, compared to 51 percent found at open-air tianguis.

As a result of growing chain store popularity among many Mexican consumers, traditional markets have been increasingly displaced by self-service supermarkets and mass-merchandise retail stores as the primary source of food supplies in many Mexican communities. The influence of chain store retailing appears to be most prevalent in northern cities and border towns, where familiarity and comfort with the U.S.-style of food retailing is most predominant. In the northern city of Monterrey, Nuevo León, for example, recent surveys of household food shoppers indicate that as many as 93 percent of household consumers usually purchase their groceries in either a self-service supermarket or hypermarket (FMI, 1998).

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¹The 1986 figures were obtained from Rello and Sodi (1989). The 1997 figures were obtained from "Directorio 1998 de la Asociación Nacional de Tiendas de Autoservicio y Departamentales" (1998). Note that these figures exclude convenience stores from the total.

Nevertheless, the introduction of modern retail practices in Mexico is facing its share of consumer resistance and logistical obstacles in many parts of the country. In Mexico's most densely populated cities, Mexico City and Guadalajara, patronage of chain supermarkets and mass-merchandise retail stores for food purchases lags far behind the rate of other metropolitan areas. Only 57 percent of Mexico City residents and 38 percent of Guadalajara residents surveyed in January 1998 by the Food Marketing Institute (FMI) indicated that they usually purchased household groceries at a self-service supermarket, and only 14 percent of survey participants in each locality reported that they usually patronized a supermarket to purchase fresh fruits and vegetables (FMI, 1998). One factor that may contribute to the low levels of supermarket and chain store patronage in Mexico City and Guadalajara is the fact that many households in Mexico have limited access to motor vehicles and may have difficulty taking advantage of some of the unique features offered by supermarkets and mass-merchandise stores (such as "one-stop" shopping for a large range of merchandise or discount prices on bulksized products). Private car ownership among Mexican residents currently amounts to roughly one car for every 10 residents-compared to one car for every two residents in the United Statesand one might well expect the rates of private car ownership to be lowest in Mexico's most densely populated communities, where access to public transportation is more widespread. Consequently, for the segment of the consumer population without regular access to a vehicle, the neighborhood convenience of a market or store may be more favorable than an individual store's discount price policy or broad selection of merchandise. At present, the average Mexican food shopper is believed to visit a food market five times as frequently as the average U.S. food shopper, with FMI recording an average of 7.2 visits per week in January 1998, compared to about 2.2 visits per week in the United States (FMI, 1998). Moreover, the figure recorded for the Mexican food shopper in early 1998 actually represents a significant decline from the frequency of visits recorded three years earlier (11.5 visits per week) (FMI, 1998).

Another factor that may help to explain why the behavior of Mexico City and Guadalajara residents diverges so greatly from that of residents of other urban centers is the fact that Mexico City and Guadalajara enjoy milder climates than many other cities in Mexico, due to their high elevation. Consequently, residents of these cities may be less concerned about spoilage when purchasing perishable food items from markets where refrigeration is not used than are residents of cities with more tropical climates. During a December 1998 interview with representatives of Mexico's chief trade association for retail chain stores, the Asociación Nacional de Tiendas Autoservicio y Departamentales (ANTAD), officials from ANTAD estimated that perhaps 30 to 40 percent of Mexican residents in cities with very hot climates usually purchased fresh fruits and vegetables in climate-controlled supermarkets and mass-merchandise stores, compared to the 14 percent figure recorded by FMI for residents of Mexico City and Guadalajara.

Supermarkets and mass-merchandise stores also appear to be having some difficulty extending their appeal beyond higher-income households, especially in terms of fresh fruit and vegetable purchases, despite the fact that they frequently offer prices on produce merchandise that are competitive with more traditional market formats. While 82 percent of households with monthly incomes at or above 4,000 Mexican pesos usually purchase food in a supermarket, according to FMI survey statistics from January 1998, only 39 percent of surveyed households with incomes below 4,000 Mexican pesos do the same. In this case, the key to understanding differences in consumer behavior may be related to perceptions of value. For example, at traditional markets, most merchants sort their fresh fruit and vegetable inventory according to product size, maturity, and/or appearance and set different prices for their products based on these quality differentials, while produce department managers at supermarkets and mass-merchandise stores rarely sort fruits and vegetables before displaying them on retail shelves and typically charge the same price for the same commodity variety, regardless of differences in product size, maturity, and appearance. Consequently, it is usually easier to locate fresh produce items with precise quality characteristics at a traditional market than at a typical supermarket or chain store, and prices for fresh produce items at traditional markets are much more finely matched to differentials in quality, resulting in a lingering perception among many price-conscious Mexican consumers that traditional markets provide superior value.

In addition to facing a certain amount of consumer resistance related to shopping habits, managers of chain supermarkets and mass-merchandise retail stores in Mexico have had difficulty attaining the logistical efficiencies of their counterparts in the United States, which limits their ability to pass along cost savings to the consumer. Unlike the standard produce distribution practice in the U.S. retail sector-where approximately two-thirds of fresh produce supplies sold at retail supermarkets are shipped directly to the retailer from production regions (either by grower/shippers or by field brokers)---the Mexican produce distribution system continues to be characterized by strong participation from urbanbased intermediaries. During field interviews conducted in Culiacán, Sinaloa, Guadalajara, Jalisco, Mexico City, D.F., and Monterrey, Nuevo León, between March and December 1998, six out of seven chain store retail buyers interviewed by members of the AMS/ERS/Texas A&M University research team indicated that they obtained more than one-half of their produce supplies from local central wholesale markets, with several noting that 90 percent or better of their fresh produce supplies was purchased from urban wholesale market facilities.

The layered structure of the retail produce distribution system in Mexico—and the continued heavy dependence of retail produce buyers on local wholesalers for supply procurement—reflects the fact that retail produce receivers in Mexico face logistical, infrastructural, and regulatory challenges that are vastly different from those that exist in the United States, making it difficult or impractical for retail buyers to adopt a greater number of direct shipment programs from growers at the present time. Some of these barriers include:

• Lack of common marketing nomenclature. The absence of a commonly accepted and enforceable system of quality grades and standards for fresh fruits and vegetables in Mexico discourages produce receivers from engaging in longdistance transactions since produce merchandise purchased sight-unseen from domestic growers frequently fails to meet desired product specifications. Unlike the U.S. system—in which the application of a "number 1" grade or a "number 2" grade on a fresh fruit or vegetable commodity item indicates that the item conforms (or is supposed to conform) to a number of officially certified and precisely defined physical quality

characteristics, and meets explicit tolerances for defects or decay---the application of a "first-" or "second-"quality grade on Mexican fresh fruits and vegetables has no such intrinsic meaning. Produce items destined for the internal Mexican consumer market are generally sorted by either a packer or wholesaler into simple broad categories, such as "first-," "second-," and "third-" quality. Such quality classifications are frequently determined by the growers or wholesale operators themselves and are often based exclusively on an individual product's size or weight, rather than on the inclusion of such pertinent quality aspects as overall appearance, maturity, or condition. Consequently, many Mexican produce wholesalers and retail produce buyers report that they frequently receive deliveries of "first-quality" produce with large percentages of unripe, deformed, or rotten items, according to a major tropical fruit handler at the "Star" wholesale market in Monterrey, interviewed in March 1998, it was not unusual to receive a load with 10 percent defects.

Although the Mexican government has developed an official series of comprehensive quality norms for many fresh fruit and vegetable commodities, they are rarely, if ever, utilized because growers for the domestic produce market consider them impractical to implement and prospective buyers do not believe that they measure relevant product attributes. This represents a marked difference from the existing system of fresh fruit grades and standards in the United States, where government standards for individual fresh fruit and vegetable commodities-initiated and developed by industry request, and structured and adjusted over time to reflect the changing needs of produce growers and handlers-have become the industry standard.

• Unreliable cold chain maintenance during transport. In contrast to the United States, where routine access to refrigerated equipment and a tradition of steady communication between carriers and receivers of perishable products during transit allow retail produce buyers to obtain fresh fruits and vegetables from distant production areas with little fear of quality degradation, retail produce buyers in Mexico have far greater difficulty trying to ensure adequate cold chain maintenance during the distribution process. The

availability of refrigerated vehicles in Mexico reportedly lags far behind demand for refrigerated transport, and there is little, if any, oversight by the parties who pay for refrigerated transportation services (usually growers or their representative brokers) over the drivers who transport their products from rural production areas to urban markets. This lack of oversight reportedly leads to frequent handling abuses (for example, a truck driver may raise the temperature of his trailer to unacceptably high levels in order to reduce his diesel fuel consumption).

- Inadequate rural road conditions. Road infrastructure and maintenance remains very poor in many of Mexico's primary fruit and vegetable production regions. The highway and toll-road system in Mexico is primarily designed to support heavy passenger traffic between major cities and surrounding communities—rather than the efficient long-distance transport of commodities from rural areas to major population centers—and rural roads—even those that serve as a major artery to agricultural production regions—often suffer from severe neglect.
- Inappropriate packaging. The risk that fresh • fruit and vegetable cargo may experience significant damage during long-distance transport on these poorly maintained rural roads is aggravated by the fact that relatively few Mexican growers-except those who primarily supply goods to the export market-are in the habit of packaging their fresh fruits and vegetables in enclosed cartons that offer a substantial degree of product protection or insulation. Domestically produced fruits and vegetables-even highly perishable commodities such as vineripened tomatoes-are commonly transported from farm areas to urban wholesale markets in inexpensive open wooden or plastic crates typically filled to the brim, leading to extensive product-crushing and -bruising during transport.
- Limited assembly of farm products in rural areas. Many fruit and vegetable growers in Mexico—especially smaller-scale growers—lack access to local facilities in which their production can be sorted and packaged to meet the standards of product quality and uniformity desired by retail receivers. Through the years,

large integrated grower/shippers have tended to consolidate sorting and packaging functions in urban wholesale market facilities near destination markets, possibly in recognition of the fact that it is so difficult to ship perishable products directly from rural assembly points to urban markets in Mexico without extensive product damage and losses en route.

- Grower marketing associations poorly developed. Many small and medium-scale fruit and vegetable growers in Mexico are reluctant to participate in cooperative marketing ventures with other local growers, preferring to take their individual chances in the highly volatile agricultural spot market rather than by sacrificing prospective speculative gains by committing large portions of their production to the marketing needs of a cooperative. To the extent that these producers avoid marketing their production collectively with other growers, they largely exclude themselves from the possibility of engaging in direct business transactions with chain retail firms, as they are generally unable to supply products in a manner that satisfies the volume and delivery schedule requirements of even the most flexible retail chain.
- No official licensing of produce handlers. The • Mexican system lacks any sort of uniformly accessible legal mechanism, such as the Perishable Agricultural Commodity Act (PACA) in the United States, which facilitates the arbitration of contract disputes between produce buyers and sellers. PACA requires that most commercial produce shippers, handlers, and receivers operate in the United States to be licensed by the government, provides a forum for disputes between produce buyers and sellers to be arbitrated outside the courtroom, and authorizes USDA's Agricultural Marketing Service to punish contract violators with fines or commercial license revocation. In Mexico, given the current division of government responsibility for agricultural product marketing, however, it would be difficult to achieve the comprehensive regulation of the entire fresh produce distribution channel under the authority of one individual government agency, even if desired. The Mexican Secretariat of Agriculture, Livestock, and Rural Development (SAGAR) is generally responsible for overseeing and regulating agricultural

marketing activity at the farm-gate and regional assembly level, while the Mexican Secretariat of Commerce and Domestic Promotion (SECOFI) is generally responsible for overseeing and regulating agricultural product marketing activity at the wholesale and retail level. In the absence of easy legal resolution of contract disputes, Mexican growers and retailers are likely to remain cautious about conducting transactions with unfamiliar buyers and suppliers.

• Producer cash flow constraints. Most Mexican produce growers are accustomed to receiving immediate cash payment from their customers (primarily intermediary brokers) and are reluctant or unable to sustain the reduction in cash flow that results from shipping products directly to supermarkets, and chain stores, which are in

the habit of paying for merchandise as much as 45 days after delivery, typically demand more uniform product quality than other customers, reserve the right to reject products if they do not meet their precise specifications, and expect the grower to arrange and pay for delivery of the merchandise to their receiving facility.

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