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Mexican Market for Five North Dakota Value-Added Agricultural Products

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Highlights

Five value-added food products were selected from an initial list of ten products identified in the 1995 North American Marketing Initiative Opportunity Scan by Senechal, Jorgenson, Hale & Company as products with high potential for export to Mexico. The five products included beef, breakfast cereals, processed (deli) meats, processed edible beans and grain-based snack foods.

The recent peso devaluation coupled with Mexico's antiquated food distribution infrastructure will make export sales a challenge for any U.S. exporter. However, Mexico's economy is expected to recover in the near future, improving consumer purchasing power and resulting in an increase in demand for consumer-ready food products. The implementation of NAFTA on January 1, 1994 is also expected to have a positive impact on export opportunities in Mexico.

Of the five identified product categories, several showed good potential for export opportunities, especially once the Mexican economy recovers. Those products with the best export potential included boneless cuts of beef; snack foods including corn chips, potato chips, and popcorn; and, on a small scale, frozen vegetables. Products with little or no increased export potential included processed (deli) meats, processed edible beans, and breakfast cereals.

MEXICAN MARKET FOR FIVE SELECTED NORTH DAKOTA VALUE-ADDED AGRICULTURAL PRODUCTS

Rebecca L. Leitch and William C. Nelson[1]

Introduction

Agriculture continues to play a vital role in North Dakota's economic base as it remains the most important sector generating new income in the state. However, falling farm numbers have resulted in declines in the level of direct farm employment and in small town retail trade. Despite declines in farm numbers, many alternative jobs have been created in the agriculture industry, including jobs in agricultural processing and marketing, agricultural input manufacturing, and farm related wholesale and retail trade (Leistritz and Coon 1994).

Self-sufficiency once was the goal of diversified farmers, villages and regions. However, the efficiencies of large-scale specialized production, processing and transportation systems have made the self-sufficient unit a very expensive entity to maintain. Large urban centers are importers of food, fiber and other raw materials and exporters of finished goods. The system of specialization is now world-wide with countries becoming known by the characteristics of their exports. A few countries like Japan and the Netherlands are known for exporting high technology and high quality products, while others primarily export raw materials for others to process and refine.

The United States contains both economies - high technology exports like computers and aircraft, and unprocessed products such as wheat and other agricultural products. Production and export of high technology products has generated above-average incomes and broadly based economic growth.

As we have seen in North Dakota, production and export of unprocessed agricultural products does not stop the decline of rural communities or the decline in regional population. Farms producing the products need less labor, fewer local inputs and are no longer dependent upon local buyers of their product.

Potential for generation of additional jobs and income in North Dakota's agricultural sector lies in the export of value-added agricultural products beyond our borders. It is the same rationale that led to the formation of the North Dakota State Mill & Elevator, American Crystal Sugar Cooperative and Dakota

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Growers Pasta. The more value which can be profitably added to the product prior to sale out of state, the more benefits, income and jobs are captured by the people of North Dakota.

Purpose

The 1995 North American Marketing Initiative Opportunity Scan by Senechal, Jorgenson, Hale & Company identified a number of value-added products with high potential for export to Mexico. Little quantitative information was provided on the trends of consumption, production, imports, etc., for these products.

The focus of this study was on the Mexican markets for five value-added agricultural products identified by Senechal, Jorgenson, Hale & Company. The five products include:

1. beef,
2. breakfast cereals,
3. processed (deli) meats,
4. processed edible beans, and
5. grain-based snack foods.

Specific objectives include:

1. characterize potential demand for imports by Mexico for selected value-added agricultural products,
2. identify market structure, competition, and distribution channels for the selected products, and
3. summarize the potential for North Dakota businesses to enter or expand imports to Mexico.

Selection of Products

These products were selected to represent a diverse mix of the products identified in the Senechal scan. They represent both intermediate and final levels of processing, both grains and livestock, and both cereals and legumes. They represent industries which are relatively open to enter, i.e. beef, and which are quite closed, i.e., breakfast cereals.

NAFTA and Historical Trade With Mexico

The North American Free Trade Agreement (NAFTA), implemented on January 1, 1994, eliminated import tariffs on many food and agricultural products. Those products whose tariffs were not eliminated upon implementation of the agreement will have their tariffs gradually reduced over a period from five to 10 years. Although Mexico has been an important trading partner, the signing of NAFTA greatly increases the potential of Mexico as an

importer of Northern Plains products. During the first six months of NAFTA implementation, U.S. exports to Mexico grew at over twice the rate of exports to the rest of the world. Unilateral lowering of tariffs through NAFTA have generated sharp growth in Mexico's retailing and consumer goods industry (U.S. International Trade Administration 1995).

Trade between the United States and Mexico increased from $58 billion in 1990 to an estimated $95.7 billion in 1994. U.S. food and agricultural exports expanded from $2.2 billion in 1988 to $4.5 billion in 1994, a 105 percent increase (U.S. Agricultural Trade Office 1995e). Since 1986 Mexico has been the third largest U.S. export market after Canada and Japan (U.S. International Trade Administration 1995). Mexico now accounts for 9 percent of total U.S. exports (U.S. Agricultural Trade Office 1994). The North American Free Trade Agreement is expected to generate even further increases in bilateral trade.

Mexico's population is estimated to be 90 million with an annual growth rate of about 2 percent. The population is expected to reach 100 million by the year 2000. Mexico is an exceptionally young country with nearly half of its citizens below the age of 20.

Sixty-one percent of Mexico's households live in poverty; however, 22 percent of the population, totalling nearly 20 million people and growing, have the purchasing power and desire to purchase imported consumer-ready products (U.S. Agricultural Trade Office 1995e). The remaining 17 percent of Mexico's population fall into the lower middle income class. Mexico's rapid population growth and rising prosperity along with a limited agricultural resource base could increase food demand greatly during the late 1990s (American Embassy 1994).

Consumer-ready products are leading the way in the growth of exports of agricultural product to Mexico. This growth is driven by three main factors:

- the increasing openness of the Mexican market,
- the improving affluence and changing tastes of Mexican consumers, and
- the modernization of the food distribution network (U.S. Agricultural Trade Office 1995e).

In addition, Mexico does not produce enough food on its own to feed its young and growing population. It also does not have the infrastructure necessary to produce most consumer-ready products (U.S. Agricultural Trade Office 1994). Therefore, Mexico must rely increasingly on imports.

There is a strong preference on the part of Mexican consumers for U.S. goods of many types. The advantages of

importing from the U.S. include more rapid delivery times, ease of communications, expectations for better follow-up and technical support, and familiarity with U.S. products (U.S. International Trade Administration 1995a).

The Mexican processed food industry has about 2,750 companies of all sizes and about 15 *maquiladoras* operating in approximately 80 cities (U.S. International Trade Administration 1995b). A *maquiladora* is a firm operating under Mexico's *maquila* program. This program was designed to allow the temporary import on a duty-free basis of equipment and inputs for processing in Mexico and the subsequent exports of the products covered (Hinkelman 1994).

A currency devaluation in late 1994 was expected to negatively impact U.S. exports to Mexico in the short-run. The devaluation resulted in decreased purchasing power due to high interest rates and inflation. Taxes and government revenues were also raised in an attempt to achieve a budget surplus (U.S. Department of Commerce 1995a). These impacts led to a decline in Mexican imports of U.S. goods in the short-run; however, the expected economic recovery combined with the effects of the NAFTA show indications of great potential for U.S. exporters.

Distribution Channels

Mexico's food distribution system is outdated and inefficient. Virtually all of the food products imported into Mexico are purchased through Mexican-based distributors or importers. Only a small number of major retailers and major food service chains circumvent the distributors/importers and import directly from U.S. exporters. Therefore, U.S. exporters do not have much choice other than to use the services of the Mexican food distributors/importers. These distributors/importers maintain regular contact with buyers, interface with the government, handle the necessary paperwork and insure that service is maintained (U.S. Agricultural Trade Office 1995).

As Mexico's economy recovers and grows, the operation of its food distribution system may improve. U.S. exporters may be able to export directly to the Mexican food sector without having to use the services of import middlemen. Implementation of NAFTA may also simplify trade transactions.

Food products are distributed through a number of means including supermarkets, discount warehouse markets, wholesale markets, mom-and-pop grocery stores (known as *abarrotes*), restaurant chains, fast-food chains, hotels and upscale restaurants, convenience stores, government-owned stores, and traditional neighborhood markets known as *mercados* and *tianguis*. The Mexican institutional sector, including hospitals and

schools, is also a large food distributorship (U.S. Agricultural Trade Office 1994).

Supermarkets, Discount Warehouses and Wholesale Markets

Supermarkets in Mexico tend to cater to consumers from the higher socio-economic classes, and most upscale supermarkets are as modern as U.S. stores. These stores are concentrated in the major cities and have outlet stores in secondary cities. Mexico's supermarket sector is expanding rapidly with many of Mexico's major supermarket chains entering into alliances with U.S. retailers. Discount warehouse markets are also expanding in number and make supermarket shopping accessible to an even wider range of consumer classes. Wholesale markets, known as Central de Abastos, are available in each Mexican city. These markets are the distribution centers for virtually all of Mexico's horticultural production and imports (U.S. Agricultural Trade Office 1994).

Abarrotes

There are estimated to be more than 200,000 *abarrotes* in Mexico. *Abarrotes*, small mom-and-pop stores, are where the majority of Mexican consumers purchase their groceries. These stores are the primary outlets for groceries in communities outside of the major cities. Refrigeration is very limited and sometimes nonexistent in these stores (U.S. Agricultural Trade Office 1994).

Restaurant Chains and Fast Food Chains

Restaurant chains cater mainly to businessmen at lunchtime and families at dinner time. The major restaurant chains use imported products purchased through local distributors. Fast-food chains are the fastest growing component of Mexico's food service sector with the majority of fast-food chains affiliated with or owned by U.S. companies. Fast-food chains affiliated with U.S. companies are more likely to import through their own sources and channels. Fast-food is costly by Mexican standards, so short-term growth in this sector may be limited (U.S. Agricultural Trade Office 1994).

Hotels, Upscale Restaurants and Convenience Stores

Hotels and upscale restaurants are big users of imported foods; however, they likely purchase individually through wholesalers who specialize in this sector. The major five-star hotels and upscale restaurants are concentrated in the resort

areas of Cancun and Acapulco and in the larger cities of Mexico City, Guadalajara and Monterrey. U.S. style convenience stores are growing in number in Mexico, especially in urban areas. These stores carry an assortment of consumer-ready food items (U.S. Agricultural Trade Office 1994).

Government Stores

Federal government-owned stores, or DICONSA stores, are shopped primarily by lower income consumers. In many rural Mexican communities, these stores represent the only retail food outlet. There are about 20,000 of these stores in rural Mexico and about 5,000 on the fringes of major cities. Bulk commodities such as beans, rice, masa, and flour are sold in these stores. Imported commodities sold in these stores are purchased by the central office in Mexico City (U.S. Agricultural Trade Office 1994).

Traditional Neighborhood Stores

Mercados and *tianguis* are two types of traditional markets in Mexico. *Mercados* are permanent covered neighborhood markets with merchants selling beef, poultry, cheese, fruits and vegetables. *Tianguis* are mobile outdoor markets that travel among neighborhoods selling a wide variety of food and non-food items (U.S. Agricultural Trade Office 1994).

Institutional Sector

Mexico's institutional sector is large. Buyers for this sector usually purchase goods from Mexican-based suppliers rather than purchasing directly from U.S. exporters. However, there is great potential for U.S. exporters in this sector. The Mexican government has an extensive school lunch program, and many factories and businesses provide meals to their workers (U.S. Agricultural Trade Office 1994).

Mexican Peso Devaluation and Its Implications For U.S. Exporters

On December 20, 1994 the Government of Mexico (GOM) was forced to expand the limit of its exchange rate band under the pressure of depleting foreign exchange reserves. A large current account deficit along with a trade deficit led to the decline in foreign exchange reserves. Other contributing factors included more attractive interest rates outside Mexico, increased investment opportunities in other developing countries, and uncertainties over a rebel movement in the southern state of Chiapas, resulting in diminished investment flows. The result of

the exchange rate band expansion was a 13.2 percent devaluation of the Mexican peso. Since then the peso has devalued from its 3.3 pesos/dollar to as high as 8.0 pesos/dollar, reflecting lack of confidence in the markets (U.S. Department of Commerce 1995a).

U.S. exports to Mexico fell dramatically in the first quarter of 1995; however, demand for U.S. goods is expected to rise as the peso stabilizes. The markets have calmed somewhat since the devaluation as a result of the announcement of the U.S.-led international financing package, a revised economic austerity program announced by the GOM, and an increase in Mexico's balance of trade.

The peso has recovered to about 6.7 pesos/dollar, but interest rates in the private sector remain high. As a result, purchasing activities by manufacturers and consumers have fallen dramatically. In addition, the GOM announced in mid-March that it would attempt to achieve a 4.4 percent budget surplus by increasing taxes and government revenues. Gasoline prices were raised by 35 percent while electricity prices were raised by 20 percent (U.S. Department of Commerce 1995a). These price increases will make transportation and storage of export products more expensive, especially if the products are perishable and require refrigeration.

Another area affected by the peso devaluation, and that U.S. exporters should be aware of, is financing and payments for shipments. High interest rates make trade financing more crucial and increase the risk to exporters. Exporters may experience canceled orders and difficulty in collecting on open account and other non-letter of credit shipments (U.S. Department of Commerce 1995a).

The full ramifications of the devaluation and economic recovery plan will not be known for some time. Short-term expectations have been dampened; however, long-term opportunities in the Mexican market remain attractive to U.S. companies. Mexico's geographic proximity, large population, and the benefits generated by NAFTA create a large, permanent marketplace for U.S. goods and services (U.S. Department of Commerce 1995a).

Procedure

Trade statistics were collected from the National Trade Data Bank. Market information was provided by the U.S. Agricultural Trade and U.S. Meat Export Federation Offices in Mexico City, in addition to information collected from various associations and organizations affiliated with each product. A library search was also conducted.

Mexican Market for Beef

Mexico is the U.S.'s third largest, and most rapidly growing, market for exported beef and veal products. Japan and Canada are first and second, respectively. The U.S. supplies all cuts of beef, but dominates the high quality market. Australia and New Zealand are the main competitors for the lower quality beef cuts (U.S. Agricultural Trade Office 1995d).

Beef raised domestically in Mexico is sold primarily through traditional markets such as butcher shops and public markets, but consumers are increasingly purchasing their meat products, especially the higher quality cuts, from supermarkets. Beef imported from the U.S. is more likely to be sold in Mexican supermarket and food service sectors (U.S. Agricultural Trade Office 1995d). Domestic production of boxed beef is negligible while beef carcasses are sold non-chilled in local markets which lack cold storage and cooler facilities (American Embassy 1994a).

The number of cattle raised in Mexico is expected to decline in 1995 due to high slaughter rates and a reduced calf crop resulting from a severe drought affecting the main northern cattle regions (Table 1). In addition, tuburculosis has been a problem in the Mexican livestock sector.

Table 1. Livestock Inventory, Mexico 1993, 1994, and Forecast 1995

Year	1993	1994	Forecast 1995
	- - - - -	000 head	- - - - -
Beef cow beginning stocks	12,850	13,000	13,000
Calf crop	9,850	9,500	9,050
Cow slaughter	1,620	1,630	1,620
Calf slaughter	1,700	1,730	1,700

Source: American Embassy, Mexico City, Mexico. Livestock Annual Report. 1994a.

Consumption of beef by Mexican consumers has been relatively flat the last several years, but is expected to rebound to about 5 percent growth per year. Per capita consumption of beef increased from 13.2 kilos per capita in 1989 to 15.0 kilos per capita in 1993 (Table 2)(U.S. Agricultural Trade Office 1995d). With reduced domestic production and increasing beef consumption, it appears that Mexican beef producers may not be able to provide

the quantity of beef demanded by consumers. Therefore, Mexico must rely increasingly on imports of beef.

Table 2. Mexican Market for Beef Products, 1989, 1990, 1993 and Forecast 2000

Year	1989	1990	1993	Forecast 2000
	- - - - - - 000 metric tons - - - - - -			
Production	1,163	1,114	1,257	1,350
Imports	10	49	94	400
Consumption	1,173	1,163	1,351	1,750
Per capita consumption (kilos)	13.2	13.1	15.0	19.0

Source: U.S. Agricultural Trade Office, The Mexican Market for Beef and Beef Products, Mexico City, Mexico. 1995.

Officials of the U.S. Agricultural Trade Office in Mexico City believed that the Mexican beef industry will not be able to compete in the long-term with U.S. beef producers because of higher feed costs and inefficiencies in herd management. However, domestic producers may continue to maintain a share of the beef market because Mexican consumers are accustomed to Mexican grass-fed beef and generally prefer its taste and texture to U.S. grain-fed beef (U.S. Agricultural Trade Office 1995d).

Elimination of trade restrictions by NAFTA will lead to increased imports of U.S. beef. In addition, U.S. exports of beef to Mexico should increase because of competitive prices and higher quality meat while beef from non-NAFTA countries is still subject to high import tariffs. Furthermore, market promotion programs for U.S. red meats conducted in Mexico by the U.S. Meat Export Federation have opened niche markets. Export opportunities exist in the medium- and long-terms for increased meat sales as a result of these campaigns. Meat sales are also expected to increase with the anticipated growth of the Mexican economy. As a result, 1995 beef imports into Mexico are expected to increase to a level approximately equal to their earlier peak in 1993 of 136,000 metric tons (American Embassy 1994a).

As a result of the peso devaluation in late 1994, U.S. red meat exports declined by approximately 70 percent from late December 1994 through January 1995 (U.S. Meat Export Federation 1995). However, long-term prospects for continued growth appear to be good. Domestic beef prices may increase due to local

inflation resulting from the devaluation, closing the gap with imported beef prices (U.S. Agricultural Trade Office 1995d).

The National Trade Data Bank provides trade statistics on categories of beef (U.S. Department of Commerce 1995). Two broad categories of beef exports include fresh or chilled beef and frozen beef. Each of these categories is further subdivided into three subdivisions: carcasses and half-carcasses, boneless cuts, and bone-in cuts. Carcasses and half-carcasses are further subdivided into veal carcasses and all other carcasses. Boneless and bone-in cuts are subdivided into processed and nonprocessed cuts (Figures 1 and 2) (Appendix Table A).

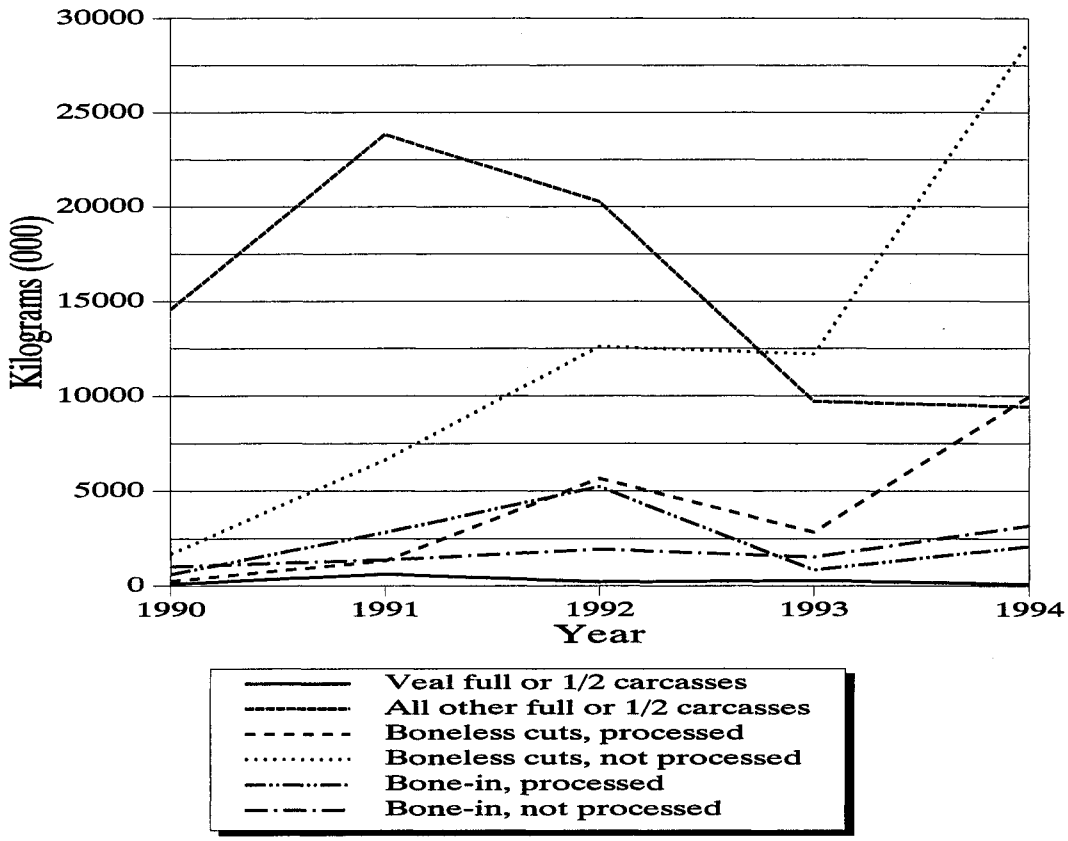

Figure 1. U.S. exports of fresh or chilled beef to Mexico, 1990 to 1994.

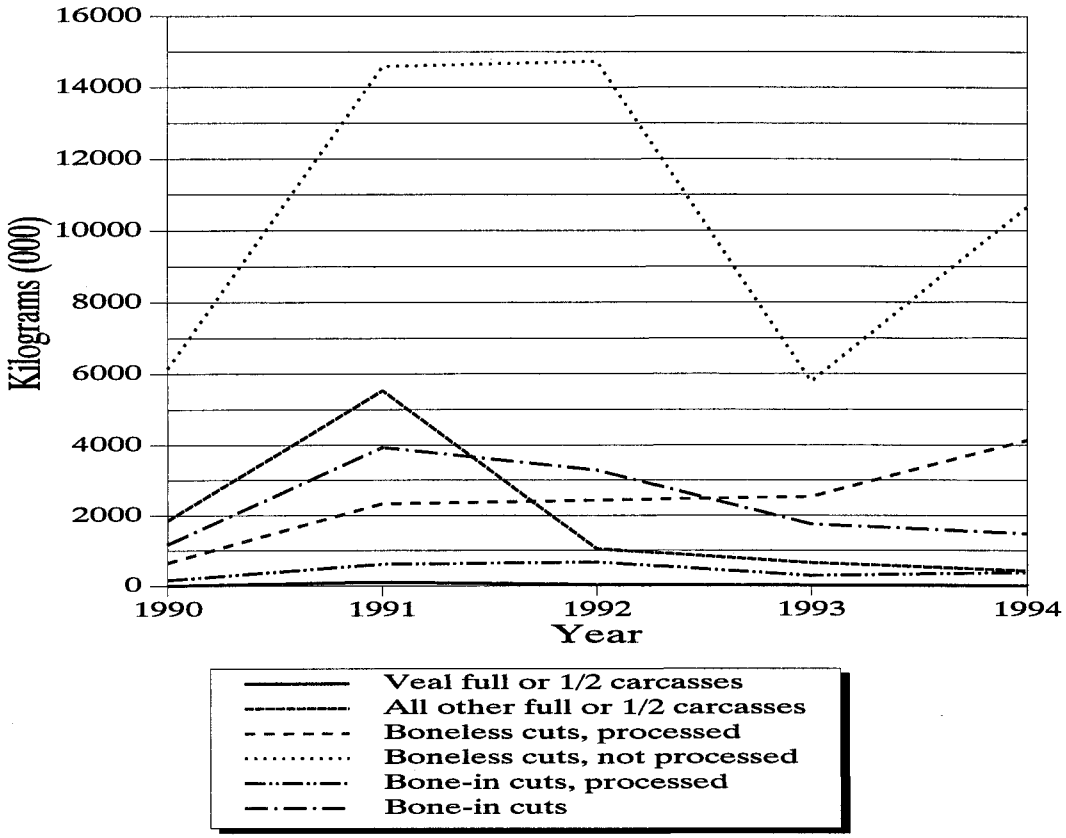

Figure 2. U.S. exports of frozen beef to Mexico, 1990 to 1994.

The term "processed" cuts refers to beef cuts which have been ground or comminuted, diced or cut into shapes for stew meat or similar uses, rolled or skewered, or specially processed into fancy cuts, special shapes, or otherwise made ready for particular uses by the retail consumer (U.S. International Trade Commission 1994). Exports of both fresh or chilled and frozen boneless unprocessed beef cuts have increased since 1993 with boneless processed beef showing an overall increase in exports over the time period of 1990 to 1994.

Mexican Market for Processed (Deli) Meats

Processed or deli meats fall into the harmonizing code category of sausages and similar products of meat, meat offal or blood. Figure 3 (Appendix Table B) presents U.S. exports of processed meats to Mexico from 1990 to 1994. "Processed" meat in this instance refers to meat products which have undergone

processing in addition to the cutting processes of beef described in the previous section.

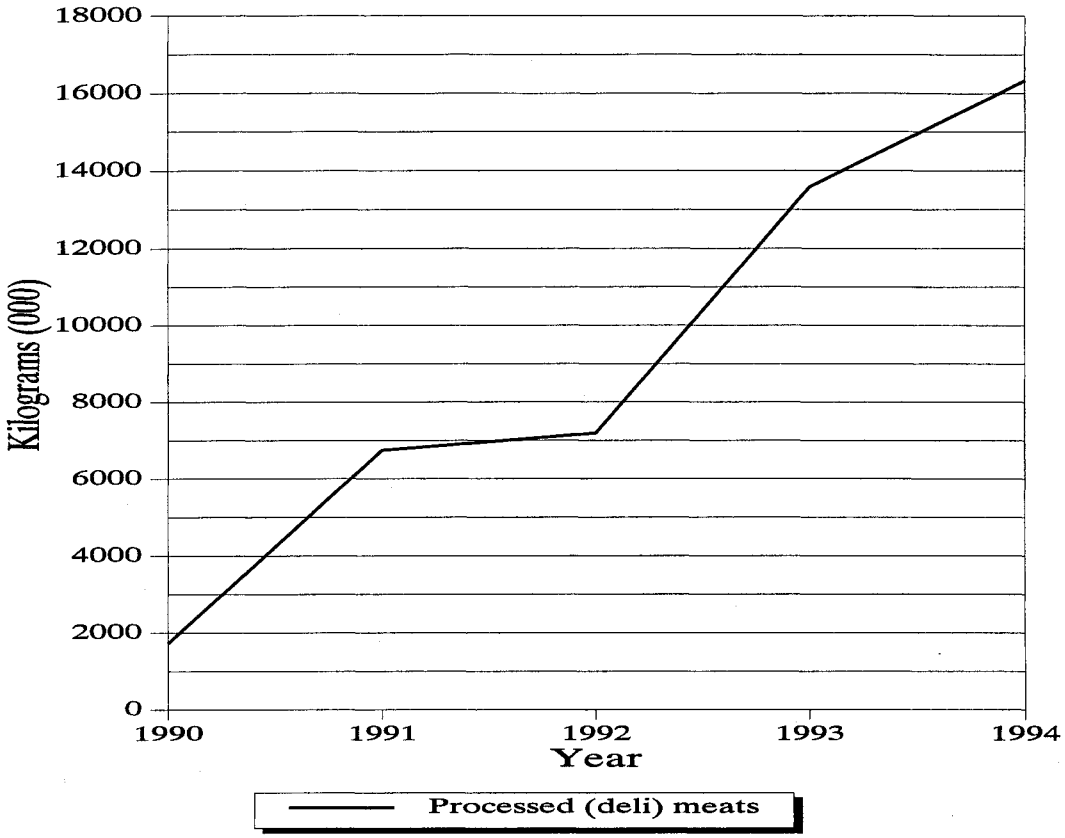

Figure 3. U.S. exports of processed (deli) meats to Mexico, 1990 to 1994.

Processed meats, or deli meats, includes meat products that have been homogenized, preserved, or otherwise prepared to make ready for consumer use (U.S. International Trade Commission 1994). These products may contain seasonings or flavorings, preservatives, or fillers. Examples of processed meats include sandwich meats, hot dogs, ham, sausages, bacon, and the like. This category includes meat products made from beef, pork, poultry, liver, blood, or meat offal.

The U.S. accounts for about two-thirds of the pork products imported by Mexico. Most of this volume is frozen pork purchased by Mexican sausage and meat processors for making ham and deli meats. Canada and Denmark provide competition with the U.S. on a small, but increasing, scale. Canadian pork is perceived to be

higher quality than U.S. pork and imports from Canada are mainly higher value cuts (U.S. Agricultural Trade Office 1995c).

Exports of processed (deli) meats to Mexico have been increasing at a steady rate from 1990 through 1994 (Figure 3). However, projections made in the American Embassy Livestock Annual Report indicate that Mexican sausage companies may begin importing greater quantities of unprocessed meats, specifically pork and pork variety meats, to compete against the rising sausage imports (American Embassy 1994a).

Mexican Market for Processed Edible Beans and Vegetables

It is difficult to estimate the Mexican market potential for processed edible beans since there are no official market statistics available for this food item. The only U.S. bean varieties with any market potential in Mexico are black beans and pinto beans. Mexico raises its own preferred bean varieties and Mexican consumers generally do not care for other varieties from the U.S. (Lehrer 1995). Pinto beans are currently priced lower than black beans. The FOB price of pinto beans, mid-bridge Laredo, Texas, was $550 per metric ton as of March 1, 1995 with black beans priced at $802 per metric ton (American Embassy 1995).

Mexico has been nearly self sufficient in production of dry edible beans, producing 5 percent of the world's dry bean production in 1992 (Lucier 1994). Mexico requires imports only in years of short crops (Lehrer 1995). Dry edible bean production in Mexico is expected to be 1.34 million metric tons in the 1994/95 marketing year, and 1.35 million metric tons in the 1995/96 marketing year. Higher Mexican domestic prices for dry edible beans and increased producer incentives offered under the PROCAMPO (Mexico's farm policy reform program) may lead to increased domestic output, which may result in a decline in imports of beans from the U.S. (American Embassy 1995).

Alternatively, U.S. exports of edible beans to Mexico could potentially increase in the future as the Mexican economy improves and as tariff reductions under NAFTA make U.S. beans more competitively priced. With potential increases of U.S. beans entering the market, Mexican bean producers may switch to higher priced cash crops (Fossum 1995).

The average area planted to dry beans in Mexico from 1984 to 1991 was 4.7 million acres with an average production level of 798,000 metric tons of beans for the same time period. Land costs in Mexico are high, with a price of $3,200 per acre in 1994 for land in the state of Sinaloa, a prime agricultural area. Bean crops in this state are irrigated without exception. Water rights cost about $30 per crop per year, with two crops grown per

year. Land in Chihuahua, another agricultural area, costs about $2,500 per acre for land with surface water access and about $800 per acre for dry land (McGill 1994).

Processed beans would likely be in the form of a canned or dehydrated bean product. The Mexican processed bean industry has suffered from a lack of modernization due to the availability of cheap labor. Canned bean products have not been readily accepted by Mexican consumers and are not expected to become a staple food item any time soon. Canned bean products cost about $1 per pound in the early 1994 (McGill 1994). Mexican consumers tend to prefer the traditional method of preparing meals of edible beans, purchasing raw beans at open air markets (Fossum 1995).

The consumption of edible beans in Mexico is comprised of 95 percent dry beans and 5 percent processed beans (canned, dehydrated). Because of the peso devaluation, there is virtually no market for imported processed beans in Mexico (Lehrer 1995). The Mexican per capita consumption of dry edible beans, 15 kilograms (33 pounds) per year, is one of the highest in the world. Dry bean consumption is expected to increase by about 3.8 percent to 1.35 million metric tons in marketing year 1994/95 and by 3.7 percent to 1.4 million metric tons in marketing year 1995/96 (Table 3). Since dry beans are a staple food item in Mexico, it is expected that consumption will increase as lower and middle income consumers switch back to beans because of the peso devaluation which has led to a decline in their purchasing power (American Embassy 1995). Upper class citizens, with greater purchasing power, would likely be the only group to purchase processed beans in Mexico. However, this group is small (Fossum 1995).

Table 3. Mexican Edible Bean Production and Consumption 1993, 1994, and Forecast 1995.

Marketing Year	1993/94	1994/95	Forecast 1995/96
	- - - 000 metric tons - - -		
Production	1,300	1,340	1,350
Imports	75	40	75
Consumption	1,300	1,350	1,400
Exports	37	30	30

Source: American Embassy, Mexico City, Mexico. Grain and Feed Annual Report. 1995.

The categories of edible beans included in the National Trade Data Bank include many bean varieties. The species of edible beans included in each category are the Vigna species and the Phaseolus species. The Vigna species includes asparagus beans, azuki beans, and mung beans. These are all Asian beans, and, therefore, it is assumed there are little or none of these beans exported from the U.S. The Phaseolus species includes navy beans and pinto beans in addition to french beans, green beans, haricot beans, kidney beans, runner beans, salad beans, snap beans, string beans, and wax beans. U.S. exports of processed edible bean products and dry edible beans to Mexico are presented in Figures 4 and 5 (Appendix Table C).

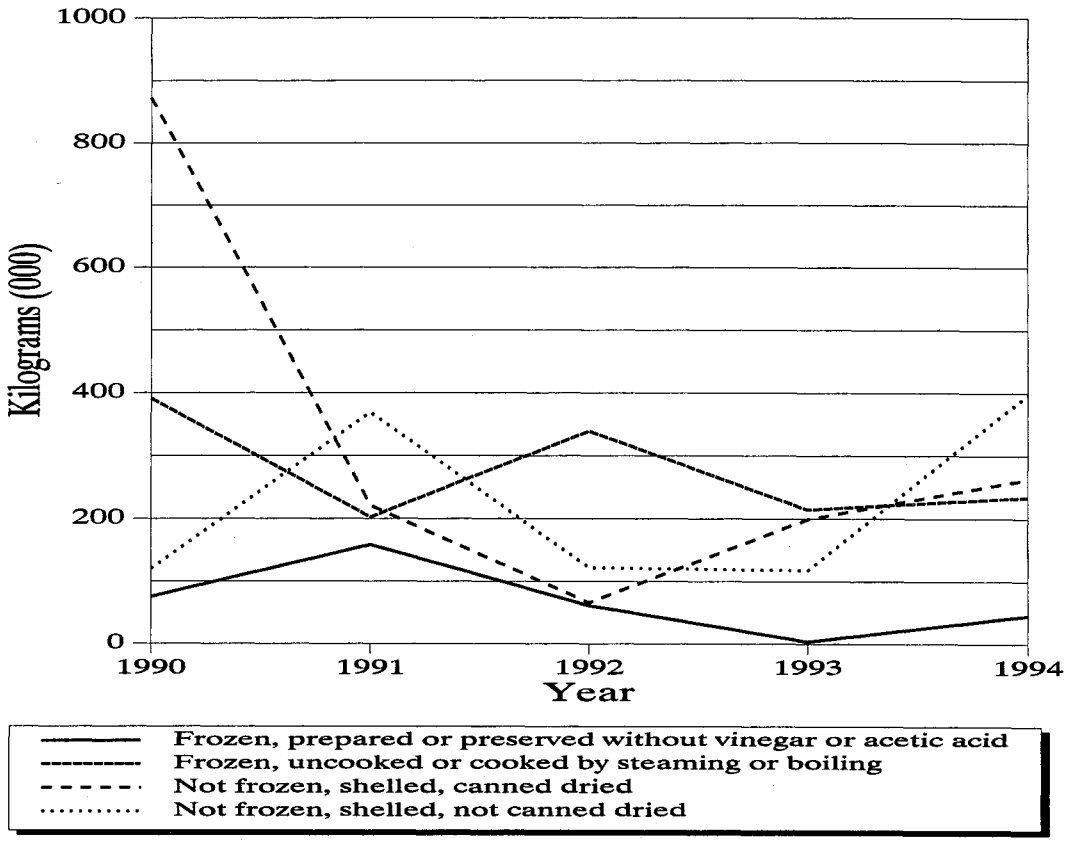

Figure 4. U.S. exports of processed edible beans to Mexico, 1990 to 1994.

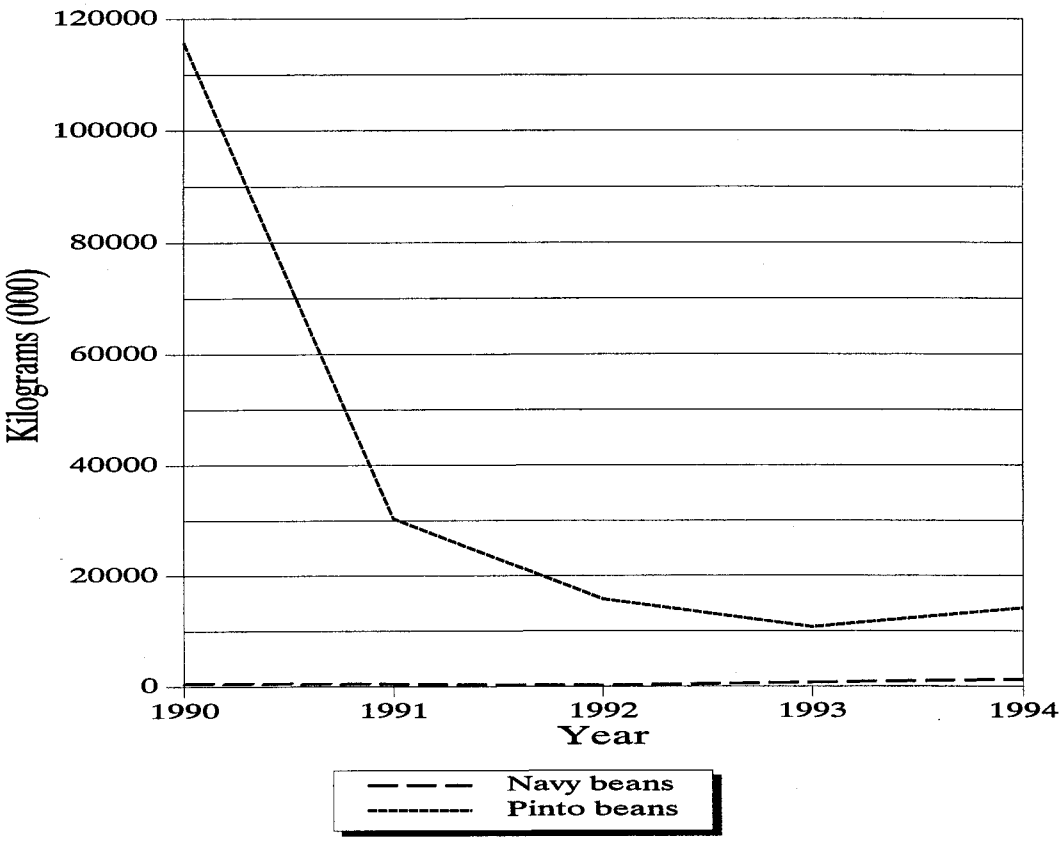

Figure 5. U.S. exports of dry edible beans to Mexico, 1990 to 1994.

In addition to processed edible beans, processed fruits and vegetables are potential export food items. Although Mexican statistics are imprecise, production of processed fruits and vegetables in 1993 was estimated at about $445 million and was growing at about 14 percent per year. Domestic production is controlled by about 30 Mexican processors that account for 90 percent of domestic production (U.S. Agricultural Trade Office 1995a).

Consumption of processed fruits and vegetables in Mexico has been increasing by about 38 percent per year (U.S. Agricultural Trade Office 1995a). This marked increase in consumption may be due to the increased domestic quantity supplied as a result of increased domestic production and imports, growing affluence and changing taste preferences among Mexican consumers, and modernization of retail food outlets.

The import market for processed fruits and vegetables in Mexico is growing rapidly with imports increasing at about 45 percent per year. In 1993, Mexico imported $64 million of processed vegetables. The U.S. controlled 79 percent of Mexico's import market for processed vegetables with export sales to Mexico of $51 million. The fastest growing competitor with the U.S. for processed vegetables is Spain (U.S. Agricultural Trade Office 1995a).

The most important imported processed vegetables in Mexico include potatoes, canned sauces, sweet corn, mushrooms, olives, and canned tomatoes. Potatoes were the fastest growing vegetable import (U.S. Agricultural Trade Office 1995a). Excluding olives, the remainder of the vegetables listed are potential export products that can be raised and processed in North Dakota.

The 1995 tariff rate on mushrooms, potatoes, vegetable preserves and sweet corn is 16 percent. Under the tariff reduction schedule prescribed under NAFTA, the pre-NAFTA tariff rate is to be reduced in ten equal yearly stages, beginning January 1, 1994, and tariffs will be completely eliminated by January 1, 2003 (U.S. Agricultural Trade Office 1995a). This lowering of tariffs should escalate future U.S. exports of processed fruits and vegetables to Mexico.

Market information on frozen vegetables is only available for sweet corn, green beans, mixed vegetables, and a category of other vegetables. In recent years, these products have become increasing popular, especially among the middle and upper classes. Unfortunately, since these products are relatively new, accurate information about total Mexican consumption is not available (U.S. Agricultural Trade Office 1994a).

Generally, most vegetable products in Mexico are purchased fresh at local markets. The import market for frozen vegetables has been relatively small since frozen vegetables are largely supplied domestically by Mexican food processors. However, Mexican food production facilities are not as technically advanced or as large as U.S. facilities. In spite of these conditions, domestic production is increasing rapidly. Mexican imports of frozen vegetables have been increasing, but on a relatively small scale. Competition from Mexican processors, combined with an inadequate transportation system and the lack of local refrigeration facilities make it difficult for importers to compete (U.S. Agricultural Trade Office 1994a).

Mexican Market for Breakfast Cereals

Few statistics and little market information is available on the market for breakfast cereals in Mexico. This information is likely highly proprietary due to the structure of this industry.

The breakfast cereal industry is dominated by five large food processing companies including Kellog's, Ralston's, Post, Quaker, and General Mills. According to researchers in the U.S.D.A. Foreign Agricultural Service, the U.S. Congress does not approve market studies by the Foreign Agricultural Service because of the industry structure (U.S. Department of Agriculture 1995). U.S. exports of breakfast cereals to Mexico increased 251 percent from 1990 to 1994 (Figure 6)(Appendix Table D). However, this growth has likely been among the large cereal processors.

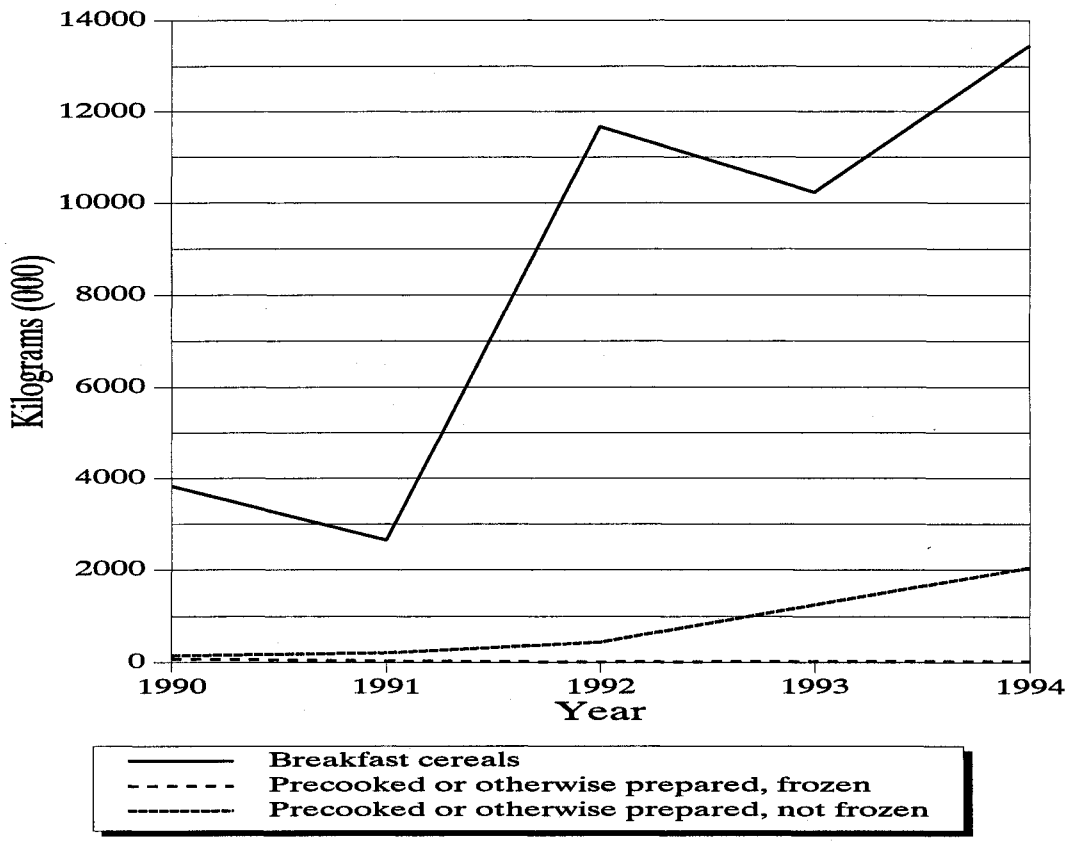

Figure 6. U.S. exports of breakfast cereals to Mexico, 1990 to 1994.

Mexican Market for Grain-Based Snacks

Imports of snack foods by Mexico (including corn chips, potato chips, popcorn, peanuts, and mixed nuts) expanded from $50 million in 1992 to over $69 million in 1993 and have been expanding at over 20 percent per year, with the U.S. maintaining a 98 percent market share (U.S. Agricultural Trade Office 1995e).

The U.S. is by far the dominant supplier for all snack foods imported into Mexico; however, Bimbo, a Mexican food processor, along with Marinela, a wholly-owned subsidiary, dominate nearly 80 percent of the retail shelf space for sweetbreads and cookies (U.S. Agricultural Trade Office 1995b).

Retail outlets for snack foods include supermarkets, convenience stores, and small mom and pop stores (*abarrotes*). Shelf-space for snack foods in supermarkets is limited, but expanding rapidly. Convenience stores also have limited shelf-space for snack foods items; however, what shelf-space there is available is typically stocked with consumer-ready items, including snack foods. Snack food items of all types are also prevalent in *abarrotes* (U.S. Agricultural Trade Office 1995e).

The U.S. controls the Mexican corn chip import market with 98 percent of total Mexican imports. Germany and Canada provide minimal competition with the U.S. for corn chips. The U.S. also dominates the Mexican domestic market, where the largest Mexican snack producer, Sabritas, is owned by Frito Lay (Pepsico). Barcel (Bimbo), a Mexican snack food processor, and a few smaller Mexican companies provide the balance of the competition. The Mexican market for corn chips is expected to expand by 15 to 20 percent per year through the end of the decade (U.S. Agricultural Trade Office 1995e).

The U.S. also dominates the market for potato chips in Mexico, supplying virtually 100 percent of the import market; competition is limited to nonexistent. Market growth for potato chips in Mexico is expected to be 10 to 15 percent per year. With popcorn, the U.S. controls 98 percent of the Mexican import market. U.S. exports of popcorn to Mexico are expected to grow at a minimum of 10 to 15 percent per year in the foreseeable future. Canada is the strongest competitor for popcorn. Mexican competitors include brands of the Sabritas and Barcel companies (U.S. Agricultural Trade Office 1995e).

Although reliable statistics on the Mexican market for snacks such as cookies and crackers are not available, estimates made by officials of the U.S. Agricultural Trade Office in Mexico City indicate declining consumption of cookies and crackers over the period from 1991 to 1993 (Table 4) (U.S. Agricultural Trade Office 1995b).

Mixed nuts snacks include almonds, pistachios, sweet peas, nuts, peanuts, and pumpkin seeds (U.S. Agricultural Trade Office 1995d). Focusing on North Dakota products, sweet peas and pumpkin seeds could be considered potential export items. U.S. exports of grain-based snack foods to Mexico are presented in Figures 7 and 8 (Appendix Table E).

Table 4. Mexican Consumption of Cookies and Crackers 1991 to 1993 and 1993 Per Capita Consumption

	1991	1992	1993	1993 Per capita consumption
	-(000) metric tons-			(kg)
Cookies & crackers	241	238	217	2.4

Source: U.S. Agricultural Trade Office, The Mexican Market for Bakery Products, Mexico City, Mexico. 1995.

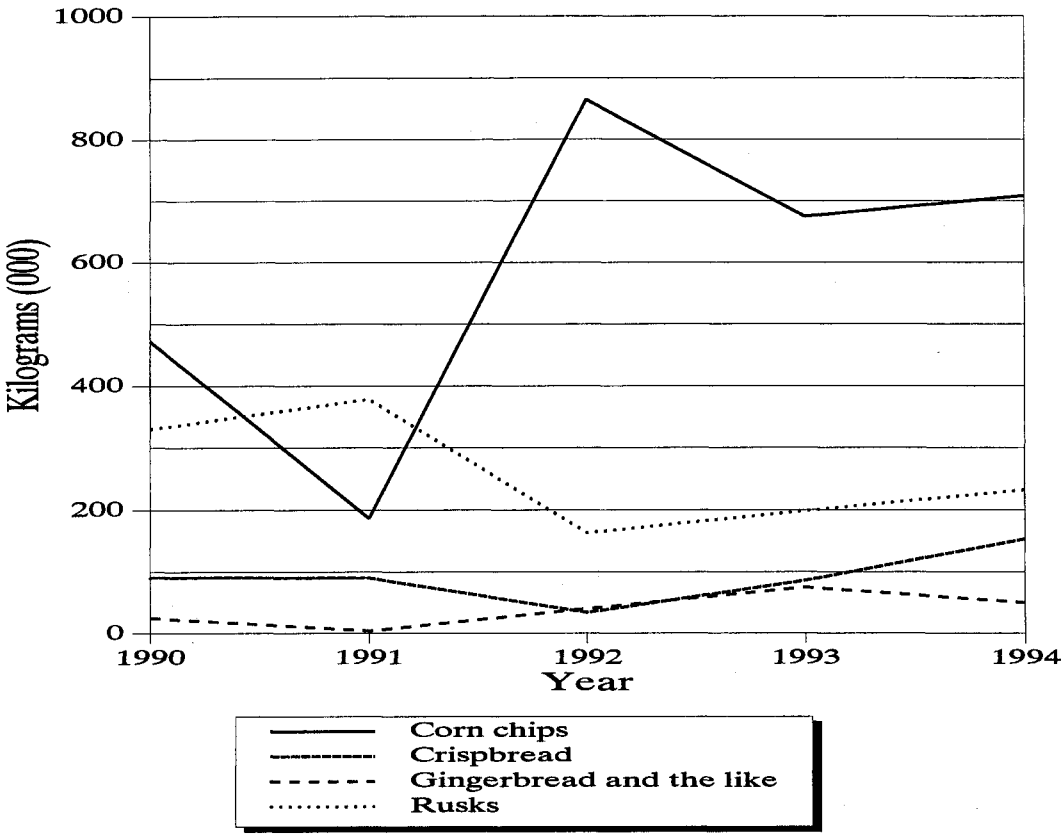

Figure 7. U.S. exports of grain-based snack foods to Mexico, 1990 to 1994.

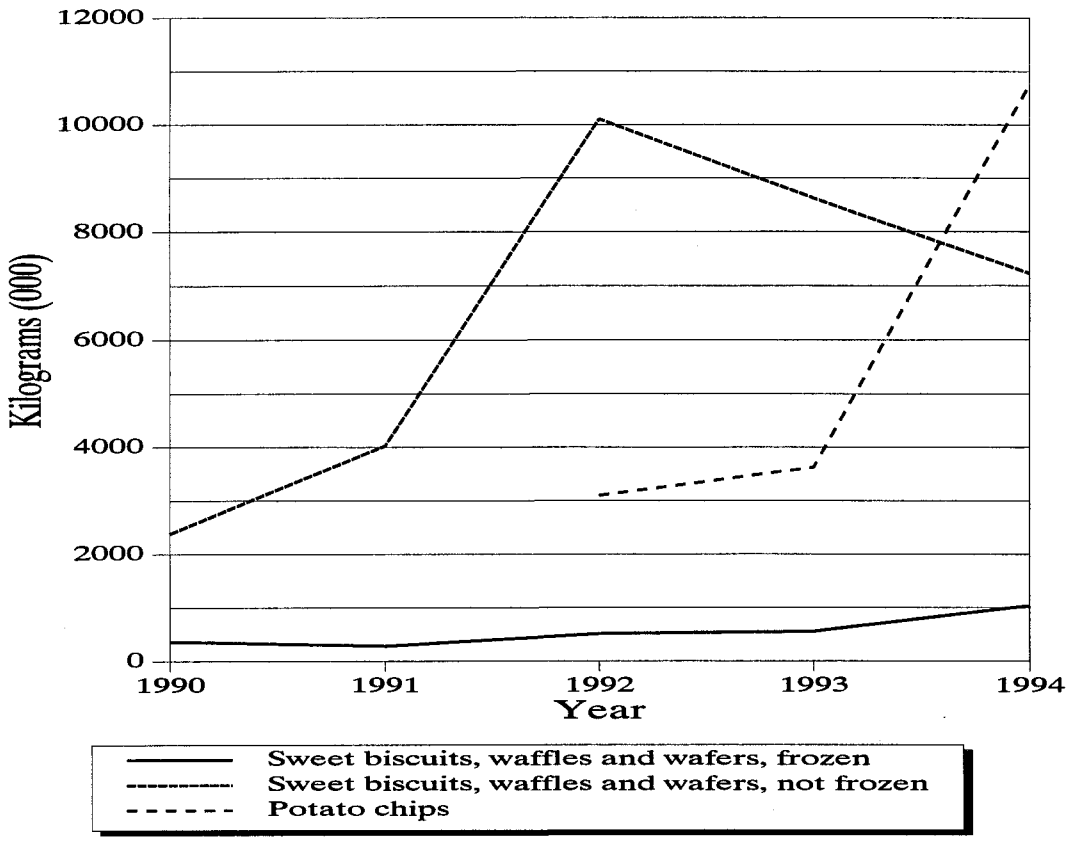

Figure 8. U.S. exports of grain-based snack foods to Mexico, 1990 to 1994.

Mexican imports of U.S. corn chips fluctuated greatly in the 1990 to 1994 time period. A drop in imports is observed from 1990 to 1991 followed by an increase in imports from 1991 to 1992. A decline from 1992 to 1993 was followed by an slight increase in 1994. Rusks and crispbread have shown a general increase in imports since 1992 while imports of gingerbread and the like have remained relatively flat. Imports of U.S. potato chips also increased dramatically since 1992.

Over the last three years, Mexican preference for U.S. bakery products such as sweet biscuits, cakes, and cookies has increased because of the wide variety available in supermarkets. Opportunities continue to be strong, especially for frozen products (U.S. International Trade Administration 1995c).

Competition

After the U.S. and Canada, which take 82.6 and 2.7 percent respectively, of Mexico's exports, Mexico's primary trading partners are Spain, Japan, France, Germany, Brazil, and Venezuela. Mexico has signed free trade agreements with Chile, Costa Rica, Venezuela and Colombia (U.S. International Trade Administration 1995).

With Mexico's reforms, improved international image and roles in GATT, the OECD, and NAFTA, the attractiveness of its marketplace has greatly increased. European and Asian competitors are expected to expand their marketing efforts in Mexico. Of all food and agricultural imports into Mexico, the U.S. commands about 80 percent of market share. U.S. market share jumps to over 90 percent for consumer-ready products. However, the U.S. faces stiff competition from Canada in wheat and livestock genetics, from Argentina in oilseeds and vegetable oils, and from Chile in fresh fruit (U.S. International Trade Administration 1995a).

The U.S. also faces competition from Spain in most gourmet products, from Greece and Chile in canned peaches, from Italy in pasta, from Chile, France and Spain in wines, from Iran in pistachios, and from Norway and Canada in fish (U.S. Agricultural Trade Office 1994).

Implications for U.S. Exporters

Of the five product categories examined in this report, several show very good potential for U.S. exporters.

Beef

The Mexican market for U.S. beef appears to be very attractive for U.S. beef exporters for a number of reasons, including:

- declines in the number of cattle raised in Mexico,
- expected increases in per capita beef consumption,
- elimination of trade restrictions as a result of NAFTA,
- market promotion efforts by the U.S. Meat Export Federation in Mexico, and
- anticipated growth in the Mexican economy.

Boneless cuts of beef, both fresh or chilled and frozen, processed and not processed have shown positive trends in the levels of exports to Mexico since 1993.

Processed (Deli) Meats

U.S. exports of processed (deli) meats to Mexico increased steadily over the period of 1990 to 1994. However, exports of processed meats are expected to level off, or decline, due to competition from Canada for pork and anticipated increases in production of processed meats by Mexican sausage companies. Consequently, the export potential of processed meats to Mexico may not be as attractive as the potential for beef if these expectations of competition and Mexican production become reality.

Processed Edible Beans and Vegetables

Mexican market potential for U.S. exporters of processed edible beans is difficult to estimate due to the lack of specific market statistics. Mexican per capita consumption of dry edible beans is expected to increase. This increase, however, may likely be an increase in consumption of dry beans rather than processed, consumer-ready beans as lower and middle income consumers switch back to beans as a staple food item with the decline in their purchasing power resulting from the peso devaluation. In addition, farm policy reform programs in Mexico may lead to increased Mexican production of beans resulting in a decline in imports from the U.S. For these reasons, the potential to export processed edible beans to Mexico appears to be less than promising.

Processed and frozen vegetables appear to have slightly better export potential than processed edible beans, but only on a small scale. Mexican production of processed fruits and vegetables was growing at a rate of about 14 percent per year in 1993 with consumption increasing at around 38 percent per year. The gap between domestic production and increasing consumption has been met by increasing imports, with the U.S. controlling about 79 percent of Mexico's imports of processed vegetables. Domestic production is increasing, however, and inadequate transportation and refrigeration may make it difficult for importers to compete.

Breakfast Cereals

The U.S. breakfast cereal industry is dominated by five major food companies. Due to the nature of this industry, it would be extremely difficult for smaller, independent cereal producers to compete without a specialty product to differentiate them from the major cereal processors.

Grain-Based Snacks

The U.S. is the dominant supplier of all snack foods imported by Mexico. Items with good potential for expansion in the Mexican market include corn chips, expected to grow at a rate of 15 to 20 percent per year; potato chips, expected to grow at 10 to 15 percent per year; and popcorn, expected to grow at 10 to 15 percent per year. Mexican consumption of cookies and crackers declined from 1991 to 1993, but may increase in the future with the anticipated growth in Mexico's economy. U.S. exports of rusks, crispbread, and potato chips to Mexico have been increasing since 1992 (see Appendix Table E).

Summary and Conclusions

This brief review of Mexican markets reveals several opportunities for North Dakota processors and potential processors. These include boneless cuts of beef (both chilled and frozen), deli meats, vegetables, and grain-based snacks. Based on recent trends and opinions of persons in the industry, imports of these items into Mexico will increase.

As published data do not provide sufficient detail, direct contact with importers/distributors in Mexico and more specific detailed market research must occur prior to making any decision concerning entry into the Mexican market. In addition, contact with American brokers experienced in the Mexican market and preparation of marketing and business plans is recommended.

Changes in the Mexican market are occurring rapidly; therefore, this study has a short shelf life. However, as interest and specific requests occur, updates can be done quickly due to the investment in this study.

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Appendix Tables

Table A. U.S. Exports of Beef to Mexico, 1990 to 1994.

	1990	1991	1992	1993	1994
	KG/Year				
Fresh or chilled beef					
Full & 1/2 carcasses					
Veal	90,218	613,462	197,180	259,983	83,026
All other	14,572,727	23,838,547	20,269,771	9,704,122	9,427,561
Boneless cuts					
Processed	238,173	1,314,481	5,659,244	2,844,592	9,965,629
Not processed	1,679,966	6,619,057	12,587,199	12,199,694	28,751,418
Bone-in cuts					
Processed	591,512	2,819,876	5,223,470	841,175	2,081,863
Not processed	1,000,607	1,372,792	1,940,201	1,520,339	3,180,415
Frozen beef					
Full & 1/2 carcasses					
Veal	787	97,757	31,610	9,718	279
All other	1,852,499	5,528,433	1,035,632	645,704	423,383
Boneless cuts					
Processed	650,234	2,327,074	2,425,606	2,523,511	4,132,151
Not processed	6,153,174	14,590,216	14,727,209	5,773,058	10,659,404
Bone-in cuts					
Processed	151,406	609,276	668,213	286,418	378,262
Not processed	1,165,024	3,920,137	3,273,318	1,742,490	1,469,816

Source: Office of Business Analysis. 1995. National Trade Data Bank. Economics and Statistics Administration, U.S. Department of Commerce, Washington, D.C.

Table B. U.S. Exports of Processed (Deli) Meats to Mexico, 1990 to 1994.

	1990	1991	1992	1993	1994
	KG/Year				
Processed meats	1,734,372	6,736,754	7,183,146	13,570,450	16,325,046

Source: Office of Business Analysis. 1995. National Trade Data Bank. Economics and Statistics Administration, U.S. Department of Commerce, Washington, D.C.

Table C. U.S. Exports of Edible Beans to Mexico, 1990 to 1994[a].

	1990	1991	1992	1993	1994
	- - - - - - - - - - - - -		KG/Year	- - - - - - - - - - - - -	
Frozen Beans					
Prepared or preserved otherwise than by vinegar or acetic acid	75,360	159,337	61,273	3,459	45,127
Uncooked or cooked by steaming or boiling in water	390,808	202,422	338,594	213,954	234,241
Not Frozen Beans					
Prepared or preserved otherwise than by vinegar or acetic acid					
Shelled, canned dried	872,481	220,835	65,786	198,549	262,012
Shelled, other than canned dried	119,931	368,820	121,914	117,752	396,923
Dried Shelled Beans, Not Seed					
Navy beans	538,146	432,771	191,526	715,231	1,266,284
Pinto beans	115,686,764	30,311,443	15,780,707	10,670,507	14,138,648

[a] Statistics were not available for beans, frozen or not frozen, which were prepared or preserved with vinegar or acetic acid.

Source: Office of Business Analysis. 1995. National Trade Data Bank. Economics and Statistics Administration, U.S. Department of Commerce, Washington, D.C.

Table D. U.S. Exports of Breakfast Cereals to Mexico, 1990 to 1994.

	1990	1991	1992	1993	1994
	- - - - - - - - - - - - -		KG/Year	- - - - - - - - - - - - -	
Breakfast cereals[a]	3,826,649	2,637,855	11,669,823	10,224,505	13,446,787
Precooked or otherwise prepared[b]					
Frozen	73,576	27,249	8,093	24,106	33,180
Not frozen	145,634	207,303	441,677	1,241,506	2,043,693

[a] Prepared foods obtained by the swelling or roasting of cereals or cereal products (for example, cornflakes); cereals other than corn, in grain form, precooked or otherwise prepared.

[b] Other than corn (maize).

Source: Office of Business Analysis. 1995. National Trade Data Bank. Economics and Statistics Administration, U.S. Department of Commerce, Washington, D.C.

Table E. U.S. Exports of Grain-Based Snack Foods to Mexico, 1990 to 1994.

	1990	1991	1992	1993	1994
	KG/Year				
Corn chips and other savory snacks	472,237	186,165	864,467	674,052	707,911
Crispbread	91,067	89,861	33,790	86,458	152,854
Gingerbread and the like	24,630	3,537	39,688	74,517	50,450
Sweet biscuits, waffles and wafers,					
Frozen	364,612	276,064	504,642	549,391	1,037,193
Not frozen	2,378,392	4,024,526	10,105,582	8,625,472	7,222,812
Rusks, toasted bread and similar toasted products	330,150	377,636	162,684	197,609	232,423
Potato chips	na	na	3,095,005	3,619,052	10,742,515
Confectionery sunflower seeds					
Shelled	na	257,946	348,263	505,000	1,035,917
Unshelled	na	381,829	533,028	1,375,611	1,883,410

Source: Office of Business Analysis. 1995. National Trade Data Bank. Economics and Statistics Administration, U.S. Department of Commerce, Washington, D.C.