

NAFTA's Impact on U.S. Agricultural Trade: An Overview

Introduction

NAFTA's influence on U.S. agricultural trade varies by commodity and trade partner. In some instances, NAFTA has had a tremendous impact on the export or import of a particular commodity with either Canada or Mexico. In most instances, however, NAFTA has generated a more modest effect. Through the elimination of numerous trade barriers, Canada, Mexico, and the United States are enabling producers, consumers, and other economic agents throughout North America to respond more efficiently to changing economic conditions and to benefit more fully from their relative strengths. Thus, U.S. agricultural trade with Canada and Mexico has generally grown somewhat more under NAFTA than it would have otherwise. These expanded trade ties offer the NAFTA economies additional insulation from the adverse effects of weather-related emergencies, localized economic downturns, and other factors.

Although the transition period for NAFTA's ambitious project of trade liberalization is only about one-half complete, many trade barriers were eliminated immediately upon the agreement's implementation, and others are rapidly nearing the end of their phase-out period. NAFTA's longest transition period—14 years (January 1, 1994, to January 1, 2008)—only applies to a handful of commodities: U.S. imports of Mexican frozen concentrated orange juice, certain winter vegetables, sugar, and peanuts; and Mexican imports of U.S. corn, sugar, dried beans, and milk powder. Thus, NAFTA's impact on U.S. agricultural trade to date should provide a good indication of the agreement's long-term impact.

Trends in U.S. NAFTA Trade

Since the implementation of NAFTA, U.S. agricultural trade with its NAFTA partners has grown in size and importance. Between 1993 and 2000, U.S. agricultural exports to Canada and Mexico increased from \$9.0 billion to a record \$14.2 billion, while U.S. agricultural imports from these countries climbed from \$7.4 billion to \$13.7 billion.

At the same time, NAFTA is facilitating a reorientation of U.S. agricultural trade in which U.S. exporters and importers devote greater attention to the North American market. In 2000, 28 percent of U.S. agricultural exports was destined for either Canada or Mexico, compared with 21 percent in 1993 and 17 percent in 1990. Similarly, Canada and Mexico supplied 33 percent of U.S. agricultural imports in 2000, compared with 29 percent in 1993 and just 25 percent in 1990.

A comparison of the growth rates for U.S. agricultural trade with the NAFTA countries and the rest of the world further underscores the increased importance of the North American market. Between 1993 and 2000, U.S. agricultural exports to Canada and Mexico grew at a compound annual rate of 6.8 percent, in contrast to 1.4 percent for U.S. agricultural exports to the rest of the world. Similarly, U.S. agricultural imports from Canada and Mexico increased at a compound annual rate of 9.3 percent between 1993 and 2000, while agricultural imports from the rest of the world increased only 5.2 percent.

Exports to NAFTA Partners

Canada is the second largest foreign customer of U.S. agriculture (after Japan), accounting for 15 percent of U.S. agricultural exports in 2000. Even though Canada is a mature market for U.S. exporters, U.S. agricultural exports to Canada have increased under CFTA and NAFTA, from \$4.2 billion in 1990 to \$7.6 billion in 2000. This expansion corresponds to a compound annual growth rate of 6.1 percent. Compared with Mexico, Canada purchases a much broader array of U.S. agricultural commodities. The top seven products—feeds and fodders, beef, cattle, coffee, soybean meal, chocolate, and lettuce—accounted for only 24 percent of the total in 2000. It takes at least another 40 commodities to reach the 50-percent mark.

Mexico is a rapidly growing market for U.S. agricultural exports. Since the implementation of NAFTA, U.S. agricultural exports to Mexico have expanded from \$3.6 billion in 1993 to \$6.5 billion in 2000, corresponding to a compound annual growth rate of 8.8 percent. Seven commodities accounted for 50 percent of the value of

this trade in 2000: soybeans, beef, corn, cotton, sorghum, feeds and fodders, and wheat.

U.S. agricultural exports to Mexico depend heavily on the health of the Mexican economy. In late 1994, the Mexican peso collapsed, and the difficult recession that followed sharply reduced the purchasing power of Mexican consumers and increased the short-term competitiveness of Mexican exports. Consequently, U.S. agricultural exports to Mexico plunged from \$4.6 billion in 1994 to \$3.5 billion in 1995, a decrease of more than \$1 billion, while Mexican agricultural exports to the United States surged from \$2.9 billion to \$3.8 billion. Fortunately, Mexico has experienced sustained economic growth since 1996. As a result, U.S. agricultural exports to Mexico increased 85 percent in value between 1995 and 2000.

U.S. agricultural suppliers hold dominant market shares in both Canada and Mexico. The U.S. share of Canada's total agricultural imports reached 66 percent in 2000, after hovering in the 61-to-63-percent range during much of the 1990's. The U.S. share of the Mexican market has increased slightly under NAFTA, from 73 percent during 1990-93 to about 75 percent during 1994-99.

Imports from NAFTA Partners

Under CFTA and NAFTA, U.S. agricultural imports from Canada have grown at an average annual rate of 10.6 percent. Between 1990 and 2000, this trade climbed from \$3.2 billion to \$8.7 billion. Ten commodities—beef, cattle, pork, biscuits and wafers, potatoes, cocoa, swine, and feeds and fodders, canola oil, and wheat—accounted for 52 percent of the total in 2000.

Similarly, U.S. agricultural imports from Mexico have increased at a compound annual rate of 9.3 percent under NAFTA. Between 1993 and 2000, imports grew from \$2.7 billion to a record \$5.1 billion. This trade is highly seasonal, as the Mexican growing season complements the U.S. growing season for a number of commodities, especially in the category of fruits and vegetables. In 2000, nine commodities—malt beverages, coffee, tomatoes, cattle, peppers, cucumbers, grapes, cauliflower, and broccoli—accounted for 55 percent of the value of this trade.

Evaluating NAFTA's Impact

Obviously, not all of the changes in U.S. agricultural trade with Canada and Mexico that have occurred

since NAFTA's implementation may be attributed to the agreement. Adverse weather conditions, exchange-rate movements, macroeconomic performance, evolving consumer preferences, population growth, and technological change are but a few of the factors other than NAFTA that have affected U.S. agricultural trade over the past 7 years.

The second part of this report contains a detailed, commodity-level analysis of NAFTA's impact on U.S. agricultural trade. Table C-1 summarizes the main findings of this analysis regarding the estimated change in U.S. agricultural trade that may be attributed directly to CFTA and NAFTA, isolating the effect of these agreements from other factors. For commodities that were subject to quotas or other quantitative restrictions prior to the two agreements, the volume of trade during 1994-2000 was compared with previously allowed quantities. This assumes no over-quota trading, except where it was determined that the quantitative restrictions in existence before CFTA and NAFTA were not enforced. For commodities formerly subject to tariffs, economic models and expert assessments were used to estimate the impact of tariff changes.

Livestock and Animal Products

U.S. trade with Canada and Mexico in livestock and animal products has continued to grow under NAFTA. Since NAFTA's implementation, U.S. exports to Canada and Mexico in this category have averaged \$2.4 billion per year, in contrast to \$2.1 billion in 1993 and \$1.5 billion in 1990. U.S. imports of livestock and animal products from the two countries averaged \$3.0 billion per year during 1994-2000, up from \$2.5 billion in 1993 and \$2.0 billion in 1990.

Canada and Mexico's combined share of U.S. imports of livestock and animal products also has increased, but their share of U.S. exports reveals no clear trend. During 1994-2000, Canada and Mexico supplied 45 percent of U.S. imports in this category, compared with 42 percent in 1993 and 35 percent in 1990. In contrast, the two countries accounted for 24 percent of U.S. exports of livestock and animal products during 1994-2000, 27 percent in 1993, and 22 percent in 1990.

CFTA and NAFTA have affected U.S. trade in livestock and animal products in a variety of ways. Upon NAFTA's implementation, Mexico immediately eliminated its tariff on non-breeding cattle from Canada and

Table C-1—Estimated change in the volume of U.S. agricultural trade with Canada and Mexico due solely to CFTA and NAFTA, 1994-2000

Product	U.S. exports to		U.S. imports from	
	Canada	Mexico	Canada	Mexico
Grains and products:				
Corn	Increase -- low	Increase -- medium	Increase -- medium	Negligible effect
Sorghum	Little to no trade	Decrease -- high	Little to no trade	Little to no trade
Barley	Negligible effect	Increase -- low	Increase -- low	Little to no trade
Oats	Little to no trade	Little to no trade	Negligible effect	Little to no trade
Wheat	Negligible effect	Increase -- low	Increase -- high	Increase -- low
Wheat products	Increase -- high	Negligible effect	Increase -- high	Increase -- high
Rice	Increase -- low	Increase -- high	Little to no trade	Little to no trade
Oilseeds and products:				
Oilseeds	Negligible effect	Increase -- medium	Negligible effect	Negligible effect
Meals and oilcakes	Negligible effect	Decrease -- low	Increase -- low	Negligible effect
Vegetable oils	Increase -- low	Increase -- low	Increase -- low	Negligible effect
Animals and animal products:				
Cattle and calves	Negligible effect	Increase -- high	Decrease -- high	Increase -- low
Beef and veal	Increase -- high	Increase -- medium	Increase -- high	Little to no trade
Hogs	Little to no trade	Negligible effect	Negligible effect	Little to no trade
Pork	Increase -- low	Increase -- low	Negligible effect	Little to no trade
Poultry meats	Increase -- low	Increase -- low	Increase -- low	Little to no trade
Dairy products	Negligible effect	Increase -- high	Negligible effect	Little to no trade
Other crops:				
Peanuts	Negligible effect	Negligible effect	Negligible effect	Increase -- high
Dry beans	Little to no trade	Negligible effect	Little to no trade	Little to no trade
Cotton	Increase -- high	Increase -- high	Little to no trade	Negligible effect
Sugar	Negligible effect	Negligible effect	Negligible effect	Increase -- high
Fruits and vegetables:				
Fresh tomatoes	Negligible effect	Increase -- low	Increase -- low	Increase -- medium
Processed tomatoes	Increase -- medium	Increase -- low	Increase -- low	Increase -- medium
Bell peppers	Increase -- low	Negligible effect	Increase -- low	Increase -- low
Cucumbers	Negligible effect	Little to no trade	Increase -- low	Increase -- low
Squash	Increase -- low	Little to no trade	Negligible effect	Negligible effect
Eggplant	Increase -- low	Little to no trade	Little to no trade	Increase -- low
Snap beans	Increase -- low	Little to no trade	Increase -- low	Increase -- low
Fresh potatoes	Increase -- low	Increase -- low	Increase -- medium	Little to no trade
Processed potatoes	Increase -- low	Increase -- high	Increase -- medium	Little to no trade
Frozen broccoli and cauliflower	Little to no trade	Little to no trade	Increase -- low	Increase -- low
Fresh citrus	Negligible effect	Little to no trade	Little to no trade	Increase -- low
Orange juice	Increase -- low	Little to no trade	Little to no trade	Increase -- low
Apples	Negligible effect	Increase -- high	Negligible effect	Little to no trade
Pears	Negligible effect	Increase -- high	Little to no trade	Little to no trade
Peaches	Negligible effect	Little to no trade	Little to no trade	Little to no trade
Grapes	Negligible effect	Increase -- low	Little to no trade	Negligible effect
Cantaloupe	Negligible effect	Little to no trade	Little to no trade	Increase -- medium
Watermelon	Negligible effect	Little to no trade	Little to no trade	Increase -- low

Estimates reflect changes in trade volume during 1994-2000 due solely to CFTA and NAFTA and are based on assessments of ERS analysts:

High = A change of more than 15 percent, compared to what would have occurred without CFTA and NAFTA

Medium = A change of 6 to 15 percent

Low = A change of 2 to 5 percent

Negligible effect = Less than 2 percent.

Source: Economic Research Service, USDA.

the United States, a tariff that it had imposed for all countries in late 1992. This tariff elimination is estimated to have increased the number of U.S. cattle exported to Mexico in 1994 by some 18-33 percent. Since then, exports have fluctuated in response to short-term economic conditions in both countries, ranging from a low of \$14 million in 1995 to a high of \$131 million in 1997.

With respect to U.S.-Canada cattle trade, the exemption of Canadian beef from the U.S. Meat Import Law has had a greater impact than CFTA and NAFTA tariff changes. In addition, the Restricted Feed Cattle Program (originally called the North-West Pilot Program) enables U.S. feeder cattle to be shipped to selected Canadian feedlots without going through the usual quarantine procedures. This program has helped to increase U.S. cattle exports to Canada from roughly 40,000 head in 1996 and 1997 to about 350,000 head in 2000. About 180,000 cattle participated in the program in 2000, and some 203,000 are taking part in 2001.

The elimination of Mexican tariffs on U.S. beef, coupled with sustained economic growth in Mexico, has given a sizable boost to U.S. beef exports to Mexico. During 1994-2000, this trade averaged \$309 million per year, in contrast to \$135 million during 1989-93. Although small in total value, Mexican beef exports to the United States have trebled under NAFTA—expanding from an annual average of \$2 million during 1989-93 to \$12 million during 1994-2000.

CFTA and NAFTA have had an especially powerful effect on U.S.-Canada beef trade. Perhaps the greatest impact is due to the removal of import quotas from this trade. In addition, the agreements provide the two countries with much greater access to each other's beef market, in comparison to both pre-CFTA levels and the general levels afforded by the Uruguay Round Agreement on Agriculture (URAA).

In an environment of freer trade, U.S. beef imports from Canada have grown steadily, from \$191 million in 1990 to \$981 million in 2000. In contrast, U.S. beef exports to Canada have trended downward over the last 7 years, from \$365 million in 1994 to \$299 million in 2000. This shifting trade balance is partially due to increased U.S. investment in Canadian meat processing. For instance, U.S. firms own the two largest slaughter plants in Canada. Still, U.S. beef exports to Canada are perhaps twice as high as they would have been other-

wise, due to the greater market access secured by CFTA and incorporated within NAFTA.

CFTA and NAFTA have had little effect on North American hog trade, since the health restrictions and duties that influence this trade are not directly related to either agreement. Due to animal health concerns, U.S. hog imports from Mexico are non-existent, and Canadian hog imports from the United States are small in number. Following Mexico's imposition of antidumping duties in early 1999, U.S. hog exports to Mexico dropped from about 208,000 head in 1998 to 52,000 head in 2000. Although U.S. hog imports from Canada quadrupled between 1989 and 2000—climbing from 1.1 million to 4.4 million head—this development is not due to CFTA and NAFTA since this trade already was duty-free at the time of CFTA's implementation.

Tariff elimination in U.S.-Canada pork trade has provided a small boost to U.S. pork exports to Canada. Exports averaged \$82 million per year during 1994-2000, up from \$32 million in 1993 and \$26 million in 1990. In contrast, U.S. pork imports from Canada demonstrated no clear trend during the 1990's. Imports averaged \$485 million per year during 1994-2000, above the 1993 level of \$307 million but somewhat below (in real terms) the 1990 level of \$428 million.

As part of NAFTA, Mexico is phasing out its tariffs on U.S. and Canadian pork. This has provided a small stimulus to U.S. pork exports to Mexico. During 1994-2000, this trade averaged \$93 million per year, in contrast to \$59 million during 1989-93. However, the far more significant drivers of this export growth have been the rapid recovery of the Mexican economy following its recession in 1995 and continuing economic growth since then.

NAFTA's impact on U.S. poultry exports to Canada and Mexico is difficult to assess. Canada maintains a "permanent" tariff-rate quota (TRQ) for poultry that will not be eliminated under NAFTA, but it has consistently allowed imports above that amount. In fact, prior to CFTA, the Canadian government would often offer supplemental permits for chicken imports in excess of existing quotas. Similarly, Mexico has not enforced the quantitative limits of its TRQ on U.S. poultry, so it is possible that the Mexican government would have waived its licensing requirement for U.S. poultry had NAFTA not been implemented.

Currently, U.S. imports of Mexican poultry products are virtually non-existent due to U.S. health restrictions. However, Mexico and the United States are working together to specify conditions under which Mexico can safely export such products to the United States. For instance, processors in the Mexican states of Sinaloa and Sonora are now allowed to import live birds from the United States for slaughter and processing and then ship the processed parts back to the United States, subject to USDA approval of the Mexican facilities.

NAFTA has not had much effect on U.S.-Canada dairy trade, as CFTA did not substantially address the quantitative restrictions that govern this trade. NAFTA has expanded U.S. access to the Mexican dairy market, but other factors have worked to limit U.S. dairy exports to Mexico. International prices for dairy products have declined, and the United States reduced its subsidies for dairy exports as part of the URAA. As a result, U.S. dairy exports to Mexico averaged \$162 million per year during 1994-2000, roughly the same as the 1989-93 average.

Grains and Feed

For most grains and grain products, the impact of NAFTA on U.S.-Canada and U.S.-Mexico trade is small in comparison to the influence of other factors. Generally, NAFTA has amplified expansions in trade that would have occurred without the agreement. In addition, NAFTA has tempered reductions in trade, such as those that resulted from Mexico's severe recession in 1995.

Under NAFTA, the Canadian and Mexican markets have grown in importance to U.S. grain and feed traders. During 1994-2000, NAFTA's share of U.S. grain and feed exports averaged 17 percent, compared with 13 percent in 1993 and 11 percent in 1990. NAFTA's share of U.S. imports in this category averaged 61 percent during 1994-2000—a dramatic increase from the levels of 57 percent in 1993 and 48 percent in 1990.

Two-way trade in grains and feed has long been a feature of U.S.-Canada economic relations. Each country is a major supplier of these commodities to the world, and each counts the other as one of its most important export markets. This somewhat unusual situation has led to frictions between the two countries. Still, this two-way trade has continued to grow under NAFTA. U.S. grain and feed exports to Canada aver-

aged \$1.2 billion during 1994-2000, up from \$960 million in 1993 and \$576 million in 1990. U.S. imports of Canadian grain and feed averaged \$1.5 billion during 1994-2000, in contrast to \$948 million in 1993 and \$538 million in 1990.

CFTA and NAFTA have facilitated a geographic reorientation of the Canadian grain sector. Prior to CFTA, Canadian grain flows tended to move in an East-West direction that was artificially imposed by trade barriers and transportation subsidies. Now, these flows are more likely than in the past to move from north to south.

U.S. exports constitute the vast majority of U.S.-Mexico grain and feed trade. These exports averaged \$1.5 billion per year during 1994-2000, in contrast to \$924 million during 1989-93. The United States is a key supplier of cereals to Mexico, accounting for 89 percent of Mexican imports during 1994-99. Canada supplied 9 percent. U.S. imports of Mexican grains and feed averaged \$137 million during 1994-2000, more than 3 times the 1989-93 average of \$42 million.

In 2000, U.S. grain and feed exports to Canada and Mexico equaled \$3.1 billion. In terms of value, the most important commodities in this trade were corn (\$637 million), sorghum (\$442 million), and wheat (\$197 million). The major subcategory of feeds and fodder (excluding oilcakes) accounted for \$639 million. Grain and feed imports from Canada and Mexico totaled \$1.9 billion. The commodities with the largest share of these imports were wheat (\$228 million), oats (\$117 million), and barley (\$75 million). Biscuits and wafers accounted for \$509 million.

The NAFTA countries are implementing many significant changes in their trade policies for grains and feed. With respect to corn, NAFTA's most prominent change is Mexico's replacement of import licensing with a TRQ, which itself will be eliminated in 2008. In addition, Mexico has consistently permitted imports of U.S. corn to surpass the quantitative level specified by the TRQ without applying the high over-quota tariff allowed by NAFTA. Beginning on June 7, 2001, Mexico levied minor over-quota tariffs of 1 percent on yellow corn and 3 percent on white corn, following a long period in which no over-quota tariff was applied. These minor tariffs will remain in effect until the end of 2001.

These policies have facilitated U.S. corn exports to Mexico. During 1994-2000, this trade averaged \$521

million per year, compared with \$400 million in 1990 and just \$35 million in 1993, a year in which this trade was unusually low. Reforms in Mexico's domestic agricultural policies and a series of severe droughts have provided additional stimulus to U.S. corn exports.

CFTA and NAFTA have had a small effect on U.S.-Canada corn trade, which just entered its fourth year of being completely free from tariff restrictions. U.S. corn exports to Canada averaged \$112 million per year during 1994-2000, in contrast to \$80 million in 1993 and \$72 million in 1990. Corresponding imports from Canada averaged \$30 million during 1994-2000, which also was the value of this trade in 1992 and 1993.

Upon NAFTA's implementation, Mexico immediately eliminated its seasonal tariff on U.S. sorghum. However, U.S. sorghum exports to Mexico also have been affected by the greater access provided by Mexico to U.S. corn. In response to these changes and significant modifications of Mexico's domestic agricultural policies, many livestock producers in Mexico have switched from sorghum to corn feed. Thus, the combined effect of the tariff reductions for corn and sorghum has been to discourage Mexican sorghum imports from the United States. In recent years, declining sorghum prices have boosted U.S. sorghum exports to Mexico, from \$250 million in 1997 to \$441 million in 2000.

CFTA and NAFTA gradually eliminated the tariffs on U.S.-Canada wheat trade, providing a substantial boost to U.S. imports of Canadian wheat. During 1994-2000, these imports averaged \$268 million per year, up from \$210 million in 1993 and \$80 million in 1990. U.S. wheat product exports to Canada also have benefited from tariff elimination. This trade averaged \$48 million per year during 1994-2000, compared with \$27 million in 1993 and \$12 million in 1990.

Despite Canada's elimination of its tariff on U.S. wheat, Canadian imports of this product in the form of grain remain inconsequential. The low level of this trade reflects both Canada's historic strength in wheat production and the long-term impact of continuing restrictions on wheat imports as a result of various regulatory actions. In 1998, Canada and the United States negotiated an agreement on wheat trade regulations that should improve U.S. access to the Canadian market. However, the two countries continue to spar over the activities of the Canadian Wheat Board, and the Office of the U.S. Trade Representative recently initiated a Section 301 investigation of this subject.

As part of NAFTA, Mexico eliminated its import-licensing requirement and is now phasing out its tariffs on U.S. and Canadian wheat. These actions have provided a small stimulus to U.S. wheat exports to Mexico. This trade averaged \$195 million per year during 1994-2000, compared with \$70 million during 1989-93. In response to market incentives, Mexican farmers have devoted less land to wheat than in previous years. Thus, NAFTA may be indirectly fostering U.S. wheat exports to Mexico by encouraging Mexican farmers to produce other crops.

Mexico's phytosanitary requirements effectively ban rice imports from Asia, allowing the United States to serve as the predominant foreign supplier of rice to the Mexican market. In 2000, U.S. rice exports to Mexico equaled \$102 million, compared with \$56 million in 1993. Should Asian rice exporters satisfactorily address Mexico's phytosanitary requirements, the tariff advantage enjoyed by the United States under NAFTA would become extremely important. However, rough rice accounts for the bulk of Mexico's rice imports, and no major Asian rice exporter currently allows this product to be exported.

Oilseeds and Oilseed Products

NAFTA's impact on U.S.-Canada trade in oilseeds and related products is substantially different from its impact on U.S.-Mexico trade. With respect to U.S.-Canada trade, CFTA and NAFTA have made a small contribution to increased two-way trade in processed goods, particularly vegetable oil. With respect to U.S.-Mexico trade, NAFTA has led to increased U.S. soybean exports, as Mexican vegetable oil demand is primarily satisfied by domestically produced oil crushed from imported oilseeds.

As is the case with agricultural trade as a whole, NAFTA is facilitating a process in which Canada and Mexico account for a greater share of U.S. trade in oilseeds and oilseed products. During 1994-2000, these two countries purchased 16 percent of U.S. oilseed and oilseed product exports, in contrast to 14 percent in 1993 and 11 percent in 1990. Similarly, Canada and Mexico supplied an average of 38 percent of U.S. oilseed and oilseed product imports during 1994-2000, up from 37 percent in 1993 and 30 percent in 1990. Mexico accounted for 69 percent of U.S. oilseed and oilseed product exports to NAFTA countries during 1994-2000.

In 2000, U.S. oilseed and oilseed product exports to Canada and Mexico equaled \$1.6 billion. The most important commodities in this trade were soybeans (\$750 million), soybean meal (\$189 million), and sunflower oil (\$87 million). The United States supplies about three-fourths of Canada's total oilseed imports (in value terms) and is the predominant exporter of soybeans to Mexico. During 1994-99, the United States supplied 96 percent of Mexican soybean imports in terms of volume, while Argentina and Brazil supplied 2 percent and 1 percent, respectively. U.S. oilseed and oilseed product imports from Canada and Mexico totaled \$636 billion in 2000, with canola oil and rapeseed accounting for \$228 million and \$52 million, respectively.

CFTA and NAFTA have not greatly affected U.S.-Canada oilseed trade, which was relatively free of restrictions at the time of CFTA's implementation. However, tariff reductions under the two agreements have boosted vegetable oil trade between the two countries. During 1994-2000, U.S. vegetable oil exports to Canada averaged \$185 million per year, in contrast to \$100 million in 1993 and \$57 million in 1990. U.S. imports of Canadian vegetable oil (including waxes) averaged \$322 million during 1994-2000, up from \$213 million in 1993 and \$89 million in 1990.

By reducing barriers to U.S. feed grains, NAFTA has facilitated a noteworthy expansion in the Mexican feed industry. This development has created a much larger demand within Mexico for protein meal and the imported soybeans needed to product this product. Thus, NAFTA has provided an important indirect impetus to U.S. soybean exports to Mexico. This trade averaged \$674 million per year during 1994-2000, compared with \$334 million per year during 1989-93.

As part of NAFTA, the United States established a tariff-rate quota (TRQ) for raw peanuts from Mexico, enabling Mexico to export substantial quantities of that product to the United States for the first time. Between 1994 and 2000, this trade increased from \$1 million to \$4 million, although it often fluctuates from one year to the next.

Other Field Crops

NAFTA has had an important impact on U.S. trade of other field crops. Two noteworthy examples—cotton and sugar—are discussed here.

NAFTA affects U.S. cotton trade via two routes. First, NAFTA is paving the way for duty-free cotton trade

within North America. Canada did not levy a tariff on imported cotton prior to CFTA, and the United States and Mexico have completed the first 7 years of their 9-year transition to duty-free trade in cotton. Second, NAFTA's rules of origin provide for virtually unlimited access to the U.S. market for textiles and apparel manufactured by a NAFTA member from yarn and fiber produced by a NAFTA member. Ultimately, NAFTA will assure free trade within North America not only for cotton but also for many products made from cotton.

These changes have combined with more powerful developments, including the peso devaluation and various difficulties facing Asian textile exporters, to boost U.S. cotton exports to Canada and Mexico. During 1994-2000, these exports (including linters) averaged \$432 million, in contrast to \$250 million in 1993 and \$112 million in 1990. In 2000, these exports reached \$578 million.

Mexico and the United States are moving toward freer trade in sugar through the application of a complicated formula, based on the difference between projected production and projected domestic consumption, that is used to calculate the duty-free quotas for this trade. This process is occurring over a lengthy transition period (1994-2007). So far, U.S. imports of Mexican cane and beet sugar have grown from \$64,000 in 1993 to \$29 million in 2000. This development, coupled with low world prices for sugar, places additional stress on the U.S. sugar program.

Regarding U.S.-Canada sugar trade, the United States initially interpreted CFTA as meaning that any U.S. imports of Canadian sugar in excess of the U.S. TRQ should be subject to the low CFTA tariff rather than the prohibitive second-tier tariff associated with the TRQ. This action greatly stimulated these imports during 1990-94. But in 1995, the United States began to apply the most-favored-nation (MFN) tariff to over-quota imports, in accordance with the URAA.

Vegetables

North American vegetable trade has continued to flourish under NAFTA. U.S. vegetable exports to Canada and Mexico (including dried beans, dried peas, and dried lentils) averaged \$1.7 billion per year during 1994-2000, in contrast to \$1.3 billion in 1993 and \$1.0 billion in 1990. U.S. vegetable imports from its NAFTA partners also have grown, from \$1.2 billion in 1990 and \$1.4 billion in 1993 to an average of \$2.2

billion since 1994. In 2000, this trade encompassed \$2.0 billion in U.S. exports and \$3.0 billion in U.S. imports.

Over the last decade, the United States has solidified its position as Canada's main foreign supplier of vegetables. The United States accounted for 81 percent of Canada's vegetable imports during 1994-2000, compared with just 70 percent during 1984-88. Mexico supplied 8 percent of Canadian vegetable imports during 1994-2000. The United States also accounted for 85 percent of Mexico's vegetable imports during 1994-2000, while Canada supplied 11 percent.

Mexico has long been a major supplier of vegetables to the U.S. market, accounting for 40 percent of the total value of U.S. vegetable imports during 1994-2000. However, Canada's share of the U.S. market has risen in recent years, from 10 percent in 1990 to 25 percent in 2000. Overall, Canada and Mexico's share of U.S. vegetable imports has increased under NAFTA, from 53 percent in 1990 and 55 percent in 1993 to an average of 59 percent during 1994-2000.

U.S. vegetable imports from its NAFTA partners totaled \$3.0 billion in 2000. Some of the most important components of this trade in terms of value were tomatoes (\$573 million), potatoes (\$434 million), and peppers (\$386 million). Corresponding exports to Canada and Mexico equaled \$2.0 billion. Commodities with a large share of this trade included lettuce (\$168 million), tomatoes (\$143 million), and potatoes (\$77 million).

CFTA and NAFTA have had an important impact on two of the largest components of U.S. vegetable trade with Canada and Mexico: tomatoes and potatoes. U.S. tomato imports from Mexico expanded from an annual average of \$256 million during 1989-93 to \$470 million during 1994-2000. Although NAFTA tariff reductions have provided a moderate boost to this trade, NAFTA's influence has been tempered by a series of price floors implemented by principal Mexican and U.S. growers under a suspension agreement to settle an antidumping investigation.

U.S. tomato exports to Canada have fluctuated under CFTA and NAFTA. During 1994-2000, this trade averaged \$105 million, up from \$80 million in 1990 but down from \$111 million in 1993. ERS analysts estimate that the tariff changes initiated by CFTA have increased the volume of this trade by some 14-18 percent, compared with what would have occurred in

the absence of these changes. CFTA and NAFTA also have contributed to increased U.S. tomato sauce exports to Canada. This trade expanded from \$4 million in 1990 and \$43 million in 1993 to an annual average of \$53 million during 1994-2000.

In a major development, U.S. (and Mexican) tomatoes now face increased competition from Canada, due to a rapidly growing greenhouse industry in that country. U.S. tomato imports from Canada have ballooned from \$3 million in 1990 to \$161 million in 2000. Tariff reductions are a small contributing factor to the emergence of this trade, which is driven in large part by increasing U.S. demand for high-quality, higher-priced tomatoes and the strong U.S. dollar.

NAFTA has provided a moderate boost to U.S. imports of processed tomatoes from Mexico. Over the past several years, this trade has branched out from primarily tomato paste into tomato juice and sauce. Tomato juice imports were non-existent until 1996 but equaled \$7 million in 2000. Similarly, tomato sauce imports were minor until 2000, when they reached \$4 million.

Through Mexico's establishment of TRQ's for processed potato products from the United States, NAFTA has had a large, positive impact on U.S. processed potato exports to Mexico, particularly for frozen french fries. As the TRQ's for this product expands during the transition to free trade, U.S. exports of frozen french fries to Mexico have increased substantially, from \$6 million in 1993 to \$22 million in 2000.

U.S. imports of Canadian potatoes (fresh and frozen) averaged \$274 million during 1994-2000, in contrast to \$104 million in 1990 and \$129 million in 1993. Although the elimination of U.S. tariffs on Canadian potatoes has provided a moderate boost to this trade, other factors have played an important role, including the expansion in Canadian potato production and processing and the relative strength of the U.S. dollar.

Fruits and Fruit Juices

Overall, U.S. fruit trade with Canada and Mexico has grown substantially since the implementation of NAFTA. U.S. imports of fruits and prepared fruits (including juice) from Canada and Mexico have grown from \$410 million in 1990 and \$422 million in 1993 to an average of \$792 million per year during 1994-2000. Corresponding exports have averaged \$1.3

billion under NAFTA, in contrast to \$888 million in 1990 and \$1.0 billion in 1993.

U.S.-Canada trade in fruits and prepared fruits is well established. Excluding juices, U.S. exports of such products did not demonstrate a clear trend over the past decade, fluctuating between \$686 million in 1994 and \$794 million in 2000. In contrast, U.S. juice exports to Canada increased gradually over this period. During 1994-2000, this trade averaged \$222 million per year, in contrast to \$162 million in 1993 and \$138 million in 1990. In value terms, orange juice accounts for 55 percent of these exports. U.S. orange juice exports to Canada averaged \$121 million during 1994-2000, compared with \$83 million in both 1990 and 1993. Through the elimination of Canada's tariff on retail-ready orange juice and technological changes in the packaging and marketing of orange juice, the composition of this trade has shifted from frozen concentrate to single-strength juice.

U.S. imports of Canadian fruits and prepared fruits grew steadily during the 1990's. During 1994-2000, these imports (excluding juices) averaged \$116 million, up substantially from \$62 million in 1990. Berries other than strawberries constitute more than half of this trade. U.S. imports of Canadian fruit juice are relatively small, averaging \$18 million during 1994-2000.

Trade data clearly show the deleterious consequences of the peso devaluation and subsequent recession on U.S. exports of fruits and prepared fruits to Mexico. Between 1994 and 1995, total exports in this category (including juice) plummeted from \$197 million to \$91 million. During 1994-2000, this trade averaged \$163 million per year, in contrast to \$70 million during 1989-93. With the continued expansion of the Mexican economy, this trade reached \$277 million in 2000, signaling the probable long-term opportunities in Mexico for U.S. fruit exporters.

NAFTA has had a substantial impact on several aspects of U.S. fruit trade with Mexico. Thanks in part

to the end of Mexican licensing requirements, U.S. grape exports to Mexico have averaged \$22 million per year under NAFTA, in contrast to \$3 million during 1989-93. The elimination of Mexican tariffs on U.S. pears has strengthened U.S. pear exports to Mexico. This trade averaged \$26 million per year during 1994-2000, compared with \$14 million during 1989-93. Continuing economic growth in Mexico should provide an additional impetus to this trade, which reached \$42 million in 2000.

U.S.-Mexico apple trade has faced many challenges since NAFTA's implementation, including Mexico's economic crisis of late 1994 and 1995, the levying of antidumping duties by Mexico, and difficulties in securing an inspection process that facilitated trade while addressing phytosanitary concerns. As a result, U.S. apple exports to Mexico have fluctuated substantially, from \$40 million in 1995 to \$102 million in 2000. Still, NAFTA tariff reductions and the elimination of Mexico's licensing requirement have provided a substantial boost to U.S. apple exports to Mexico. This trade averaged \$61 million per year during 1994-2000, compared with \$23 million during 1990-93.

U.S. imports of Mexican fruits and prepared fruits have averaged \$586 million per year under NAFTA, up from \$287 million during 1989-93. This growth reflects expanding consumer demand associated with the strong U.S. economy, changing consumer preferences in the United States, and, to a lesser extent, changes in trade restrictions under NAFTA. For example, the gradual elimination of the seasonal U.S. tariffs on Mexican cantaloupe has facilitated U.S. cantaloupe imports from Mexico. This trade averaged \$47 million per year during 1994-2000, compared with \$42 million during 1989-93. Holding all other factors constant, NAFTA and URAA tariff changes were expected to increase this trade by some 17-25 percent above what would have occurred in the absence of these agreements.

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Table C-2—U.S. agricultural trade with NAFTA (Mexico and Canada), 1992-2000

Commodity	Value										Share of world							
	1992	1993	1994	1995	1996	1997	1998	1999	2000	1993	1994	1995	1996	1997	1998	1999	2000	
	<i>\$ Million</i>										<i>Percent</i>							
Agricultural exports to world	43,159	42,915	46,251	56,347	60,417	57,217	51,815	48,278	51,580	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Exports to NAFTA:																		
Agriculture, total	8,746	8,937	10,163	9,345	11,583	11,963	13,169	12,700	14,195	20.8	22.0	16.6	19.2	20.9	25.4	26.3	27.5	
Animals & animal products	2,164	2,126	2,401	1,868	2,165	2,718	2,891	2,833	3,304	26.5	26.0	17.0	19.3	23.8	27.2	27.7	27.9	
Grains & feeds	1,873	1,770	2,188	2,094	3,198	2,360	2,909	2,829	3,070	12.6	16.1	11.2	15.3	15.4	20.8	20.2	22.4	
Fruits & preparations, ex. juice	785	839	871	794	809	881	880	935	1,041	35.9	33.5	29.9	30.5	31.6	34.6	37.2	37.9	
Fruit juices, including frozen	166	170	184	210	227	229	256	267	278	36.9	34.7	32.8	35.8	34.6	39.0	35.6	39.0	
Nuts & preparations	170	171	169	179	198	204	206	223	249	16.8	14.9	15.1	15.4	14.5	12.7	15.4	18.3	
Vegetables & preparations	1,227	1,321	1,515	1,372	1,486	1,701	1,918	1,871	2,042	43.7	42.0	37.7	38.9	41.0	45.4	43.5	45.7	
Oilseeds & products	1,006	1,028	1,184	1,193	1,562	1,770	1,626	1,563	1,599	14.1	16.4	13.3	14.4	14.6	17.1	19.1	18.7	
Other	1,356	1,511	1,652	1,635	1,937	2,100	2,483	2,180	2,612	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Forestry	n.a.	n.a.	1,635	379	1,538	1,878	1,908	2,067	2,251	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agriculture & forestry, total	n.a.	n.a.	11,798	9,724	13,121	13,841	15,077	14,767	16,446	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & non-agric., total	n.a.	n.a.	165,282	173,518	189,345	221,502	233,162	253,509	290,290	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agricultural imports from world	24,799	25,137	27,031	30,263	33,520	36,160	36,908	37,737	38,991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Imports from NAFTA:																		
Agriculture, total	6,522	7,384	8,194	9,467	10,556	11,561	12,482	12,881	13,740	29.4	30.3	31.3	31.5	32.0	33.8	34.1	35.2	
Bananas & plantains	103	94	59	47	44	63	57	40	24	8.8	5.5	4.1	3.7	5.1	4.7	3.3	2.1	
Coffee, including products	290	281	385	660	640	742	649	576	589	18.4	15.5	20.2	23.0	19.1	18.9	19.9	21.8	
Animals & animal products	2,228	2,467	2,326	2,739	2,800	3,053	3,132	3,294	3,764	41.9	40.4	45.6	46.0	47.0	45.2	45.2	45.3	
Cattle, live	1,245	1,341	1,151	1,409	1,121	1,119	1,144	1,000	1,152	100.0	100.0	99.7	100.0	99.6	100.0	100.0	100.0	
Grains, products, & feeds	828	1,008	1,372	1,403	1,669	1,862	1,707	1,815	1,875	57.0	59.6	60.7	62.8	62.9	59.3	60.7	60.7	
Fruits & preparations	391	380	438	570	616	639	808	993	852	27.6	29.6	35.2	32.1	31.7	37.0	36.0	31.4	
Fruit juices, incl. frozen	37	42	66	94	88	90	107	96	89	6.4	10.1	14.9	9.6	10.9	16.1	12.2	11.8	
Vegetables & preparations	1,072	1,379	1,491	1,746	2,066	2,201	2,727	2,715	2,977	54.9	53.1	54.7	58.6	59.4	62.3	59.3	62.9	
Tomatoes	139	310	326	423	618	576	668	609	573	95.4	94.7	94.0	91.9	88.8	88.1	88.4	89.5	
Sugar & related products	244	253	310	304	354	389	451	494	504	22.4	26.0	22.8	18.8	21.0	26.8	31.1	32.1	
Beverages, ex. fruit juices	373	387	460	494	607	715	865	1,019	1,199	19.0	20.7	20.2	20.8	21.1	22.8	23.4	25.2	
Oilseeds & products	361	440	663	641	814	800	872	707	636	37.5	43.4	36.6	39.9	37.6	42.0	38.2	34.3	
Cotton, ex. linters	0	0	0	2	16	0	0	5	1	0.1	0.0	22.3	5.7	12.4	0.9	3.9	2.6	
Seeds, field & garden	59	65	78	79	94	117	113	109	118	31.1	33.4	32.6	30.2	31.4	26.6	23.6	24.1	
Cut flowers	16	19	21	31	30	39	41	43	47	4.8	5.0	6.0	5.2	6.5	6.6	7.2	7.8	
Nursery stock, bulbs, etc.	90	103	110	131	155	185	227	248	281	37.9	37.5	37.9	40.9	45.3	48.6	48.8	51.1	
Other	430	468	418	526	562	666	728	727	783	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Forestry	n.a.	6,539	7,771	7,400	9,026	9,908	10,067	12,187	11,276	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agriculture & forestry, total	n.a.	13,923	15,965	16,867	19,582	21,469	22,549	25,068	25,016	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & non-agric., total	n.a.	151,133	177,899	207,032	229,469	253,881	269,553	308,432	366,764	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Trade balance:																		
Agriculture with world	18,361	17,779	19,220	26,084	26,897	21,057	14,907	10,541	12,588	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agriculture with NAFTA	2,223	1,553	1,969	-122	1,026	402	687	-181	455	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Forestry with NAFTA	n.a.	n.a.	-6,136	-7,021	-7,488	-8,030	-8,159	-10,120	-9,025	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & forestry with NAFTA	n.a.	n.a.	-4,167	-7,143	-6,462	-7,628	-7,472	-10,301	-8,570	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & non-agric. with NAFTA	n.a.	n.a.	-12,617	-33,514	-40,124	-32,379	-36,391	-54,923	-76,474	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	

n.a. = not available or does not apply.

Sources: For forestry data, FAS BICO reports; for all other data, Foreign Agricultural Trade of the United States database.

Table C-3—U.S. agricultural trade with Mexico, 1992-2000

Commodity	Value										Share of world							
	1992	1993	1994	1995	1996	1997	1998	1999	2000	1993	1994	1995	1996	1997	1998	1999	2000	
	\$ Million										Percent							
Agricultural exports to world	43,159	42,915	46,251	56,347	60,417	57,217	51,815	48,278	51,580	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Exports to Mexico:																		
Agriculture, total	3,804	3,619	4,594	3,541	5,445	5,178	6,160	5,634	6,545	8.4	9.9	6.3	9.0	9.1	11.9	11.7	12.7	
Animals & animal products	1,259	1,176	1,363	825	1,088	1,534	1,673	1,574	1,879	14.6	14.7	7.5	9.7	13.4	15.7	15.4	15.9	
Grains & feeds	1,061	887	1,228	1,062	2,069	1,165	1,639	1,576	1,709	6.3	9.0	5.7	9.9	7.6	11.7	11.3	12.5	
Fruits & preparations, ex. juice	77	111	185	85	95	117	128	190	247	4.7	7.1	3.2	3.6	4.2	5.0	7.6	9.0	
Fruit juices, including frozen	7	8	12	6	7	8	15	16	30	1.7	2.3	0.9	1.1	1.2	2.3	2.1	4.2	
Nuts & preparations	37	37	44	33	45	44	47	60	80	3.6	3.8	2.8	3.5	3.1	2.9	4.1	5.9	
Vegetables & preparations	158	172	250	141	249	281	432	376	464	5.7	6.9	3.9	6.5	6.8	10.2	8.7	10.4	
Oilseeds & products	717	656	852	833	1,099	1,192	1,156	1,051	1,033	9.0	11.8	9.3	10.2	9.9	12.2	12.9	12.1	
Other	488	571	661	555	792	838	1,069	791	1,104	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Forestry	n.a.	n.a.	413	249	250	292	367	395	435	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agriculture & forestry, total	n.a.	n.a.	5,007	3,790	5,695	5,470	6,527	6,029	6,980	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & non-agric., total	n.a.	n.a.	50,843	46,292	56,761	71,378	79,010	86,909	111,349	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agricultural imports from world	24,799	25,137	27,031	30,263	33,520	36,160	36,908	37,737	38,991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Imports from Mexico:																		
Agriculture, total	2,379	2,720	2,895	3,836	3,765	4,111	4,688	4,883	5,079	10.8	10.7	12.7	11.2	11.4	12.7	12.9	13.0	
Bananas & plantains	103	94	59	47	44	63	57	40	24	8.8	5.5	4.1	3.7	5.1	4.7	3.3	2.1	
Coffee, including products	252	251	333	592	570	664	511	446	464	16.5	13.4	18.1	20.4	17.1	14.9	15.4	17.2	
Animals & animal products	375	460	388	602	175	231	273	363	479	7.8	6.7	10.0	2.9	3.6	3.9	5.0	5.8	
Cattle, live	341	430	352	546	122	177	206	293	406	32.0	30.6	38.6	10.9	15.7	18.0	29.3	35.2	
Grains, products, & feeds	53	60	85	105	128	158	156	161	168	3.4	3.7	4.6	4.8	5.3	5.4	5.4	5.4	
Fruits & preparations	321	314	358	475	508	530	676	854	701	22.8	24.2	29.4	26.5	26.2	30.9	31.0	25.9	
Fruit juices, incl. frozen	26	31	58	80	74	65	91	71	68	4.7	8.8	12.7	8.1	7.9	13.6	9.1	8.9	
Vegetables & preparations	809	1,058	1,125	1,306	1,499	1,484	1,791	1,679	1,778	42.1	40.0	41.0	42.5	40.1	41.0	36.6	37.6	
Tomatoes	133	304	315	406	580	517	567	490	412	93.4	91.7	90.1	86.3	79.7	74.9	71.0	64.3	
Sugar & related products	31	38	69	91	121	129	158	177	175	3.4	5.8	6.9	6.4	7.0	9.4	11.1	11.1	
Beverages, ex. fruit juices	169	186	219	275	360	484	631	759	884	9.1	9.8	11.2	12.4	14.3	16.6	17.4	18.6	
Oilseeds & products	42	29	27	32	37	32	50	43	39	2.5	1.8	1.8	1.8	1.5	2.4	2.3	2.1	
Cotton, ex. linters	0	0	0	2	16	0	5	5	1	0.1	n.a.	22.3	5.6	8.0	0.6	3.9	2.6	
Seeds, field & garden	7	8	7	9	11	18	14	14	14	4.1	2.9	3.8	3.5	4.9	3.4	3.1	2.8	
Cut flowers	12	14	15	23	20	24	25	27	30	3.6	3.7	4.5	3.4	4.0	4.1	4.6	4.8	
Nursery stock, bulbs, etc.	7	8	6	8	10	11	13	14	16	2.8	2.1	2.3	2.5	2.7	2.7	2.7	2.9	
Other	173	169	147	187	194	216	243	229	238	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Forestry	n.a.	318	300	304	393	440	407	416	378	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agriculture & forestry, total	n.a.	3,038	3,195	4,140	4,158	4,551	5,095	5,299	5,457	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & non-agric., total	n.a.	39,917	49,493	61,684	72,963	85,830	94,709	109,721	135,926	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Trade balance:																		
Agriculture with world	18,361	17,779	19,220	26,084	26,897	21,057	14,907	10,541	12,588	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agriculture with Mexico	1,425	899	1,699	-295	1,680	1,067	1,472	751	1,466	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Forestry with Mexico	n.a.	n.a.	113	-55	-143	-148	-40	-21	57	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & forestry with Mexico	n.a.	n.a.	1,812	-350	1,537	919	1,432	730	1,523	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & non-agric. with Mexico	n.a.	n.a.	1,350	-15,392	-16,202	-14,452	-15,699	-22,812	-24,577	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	

n.a. = not available or does not apply.

Sources: For forestry data, FAS BICO reports; for all other data, Foreign Agricultural Trade of the United States database.

Table C-4—U.S. agricultural trade with Canada, 1992-2000

Commodity	Value										Share of world							
	1992	1993	1994	1995	1996	1997	1998	1999	2000	1993	1994	1995	1996	1997	1998	1999	2000	
	\$ Million										Percent							
Agricultural exports to world	43,159	42,915	46,251	56,347	60,417	57,217	51,815	48,278	51,580	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Exports to Canada:																		
Agriculture, total	4,942	5,317	5,569	5,804	6,138	6,785	7,009	7,066	7,650	12.4	12.0	10.3	10.2	11.9	13.5	14.6	14.8	
Animals & animal products	905	950	1,038	1,042	1,077	1,184	1,218	1,258	1,425	11.8	11.2	9.5	9.6	10.4	11.5	12.3	12.0	
Grains & feeds	812	883	960	1,032	1,130	1,195	1,270	1,253	1,361	6.3	7.0	5.5	5.4	7.8	9.1	9.0	9.9	
Fruits & preparations, ex. juice	708	728	686	709	714	763	752	745	794	31.2	26.4	26.7	26.9	27.4	29.5	29.6	28.9	
Fruit juices, including frozen	159	162	171	204	220	222	241	251	248	35.2	32.4	31.8	34.7	33.5	36.7	33.5	34.8	
Nuts & preparations	133	134	126	145	154	160	160	163	169	13.2	11.0	12.3	11.9	11.3	9.8	11.3	12.5	
Vegetables & preparations	1,068	1,149	1,265	1,231	1,237	1,420	1,485	1,495	1,579	38.0	35.1	33.9	32.4	34.3	35.2	34.8	35.3	
Oilseeds & products	289	372	332	360	462	578	470	512	566	5.1	4.6	4.0	4.3	4.8	4.9	6.3	6.6	
Other	868	940	991	1,080	1,144	1,262	1,414	1,389	1,508	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Forestry	n.a.	1,113	1,222	130	1,288	1,586	1,541	1,672	1,816	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agriculture & forestry, total	n.a.	6,430	6,791	5,934	7,426	8,371	8,550	8,738	9,466	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & non-agric., total	n.a.	100,444	114,439	127,226	132,584	150,124	154,152	166,600	178,941	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agricultural imports from world	24,799	25,137	27,031	30,263	33,520	36,160	36,908	37,737	38,991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Imports from Canada:																		
Agriculture, total	4,143	4,664	5,299	5,631	6,791	7,450	7,794	7,998	8,662	18.6	19.6	18.6	20.3	20.6	21.1	21.2	22.2	
Bananas & plantains	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Coffee, including products	38	30	52	68	70	78	137	130	126	2.0	2.1	2.1	2.5	2.0	4.0	4.5	4.7	
Animals & animal products	1,852	2,007	1,938	2,137	2,625	2,821	2,859	2,931	3,285	34.0	33.7	35.6	43.2	43.5	41.3	40.2	39.5	
Cattle, live	903	911	799	863	999	943	938	708	746	67.9	69.4	61.0	89.1	83.9	81.9	70.7	64.8	
Grains, products, & feeds	775	948	1,287	1,298	1,541	1,704	1,551	1,654	1,707	53.5	55.9	56.1	58.0	57.5	53.9	55.3	55.2	
Fruits & preparations	70	66	80	95	108	109	132	139	151	4.8	5.4	5.8	5.6	5.4	6.0	5.0	5.5	
Fruit juices, incl. frozen	11	11	9	14	14	25	16	25	21	1.7	1.3	2.2	1.6	3.0	2.5	3.2	2.8	
Vegetables & preparations	263	322	366	439	568	716	936	1,036	1,198	12.8	13.0	13.8	16.1	19.3	21.4	22.6	25.3	
Tomatoes	6	6	10	17	37	59	101	120	161	2.0	3.0	3.9	5.6	9.1	13.3	17.4	25.1	
Sugar & related products	213	214	241	213	234	260	293	318	329	19.0	20.2	15.9	12.4	14.1	17.4	20.0	20.9	
Beverages, ex. fruit juices	204	201	241	219	247	231	235	260	315	9.8	10.8	9.0	8.5	6.8	6.2	6.0	6.6	
Oilseeds & products	319	411	635	608	777	767	822	664	597	35.0	41.7	34.8	38.1	36.1	39.6	35.9	32.2	
Cotton exc. linters	0	0	0	0	0	0	0	0	0	n.a.	0.0	0.0	0.0	4.4	0.3	n.a.	0.0	
Seeds, field & garden	53	56	71	70	83	98	99	94	104	27.0	30.5	28.9	26.7	26.5	23.2	20.5	21.3	
Cut flowers	4	5	6	7	10	15	16	15	18	1.2	1.4	1.5	1.7	2.5	2.5	2.6	2.9	
Nursery stock, bulbs, etc.	83	95	103	124	146	174	214	234	265	35.1	35.4	35.6	38.4	42.6	45.9	46.1	48.2	
Other	257	299	271	339	368	449	485	497	545	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Forestry	n.a.	6,221	7,471	7,096	8,633	9,468	9,660	11,771	10,898	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agriculture & forestry, total	n.a.	10,885	12,770	12,727	15,424	16,918	17,454	19,769	19,560	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & non-agric., total	n.a.	111,216	128,406	145,348	156,506	168,051	174,844	198,711	230,838	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Trade balance:																		
Agriculture with world	18,361	17,779	19,220	26,084	26,897	21,057	14,907	10,541	12,588	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agriculture with Canada	798	653	270	173	-653	-665	-785	-932	-1,012	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Forestry with Canada	n.a.	-5,108	-6,249	-6,966	-7,345	-7,882	-8,119	-10,099	-9,082	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & forestry with Canada	n.a.	-4,455	-5,979	-6,793	-7,998	-8,547	-8,904	-11,031	-10,094	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
Agric. & non-agric. with Canada	n.a.	-10,772	-13,967	-18,122	-23,922	-17,927	-20,692	-32,111	-51,897	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	

n.a. = Not available or does not apply.

Sources: For forestry data, FAS BICO reports; for all other data, Foreign Agricultural Trade of the United States database.