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NAFTA: The Record to Date

The North American Free Trade Agreement (NAFTA) has generally contributed to the expansion of U.S. agricultural trade with Canada and Mexico, according to a report submitted to the U.S. Congress by the Secretary of Agriculture in mid-August. Implemented on January 1, 1994, NAFTA is having a dramatic impact on U.S. trade of some agricultural commodities—boosting exports and/or imports substantially above levels that would have occurred without the agreement—while generating a subtle positive effect on most of the others.

Under NAFTA, U.S. agricultural trade with Canada and Mexico has grown substantially. Agricultural exports to these two countries have risen from an annual average of $7.4 billion during 1989-93 to an average $11.3 billion during 1994-98. Agricultural imports from Canada and Mexico have also increased—climbing from an average $6.2 billion during 1989-93 to $10.5 billion during 1994-98.

Preliminary evidence suggests that U.S. agricultural trade with Mexico is expanding at an increased pace. Agricultural exports to Mexico grew at an average annual rate of 14.4 percent during NAFTA's first 5 years (1994-98), compared with 11 percent during 1989-93. Agricultural imports from Mexico are also growing at a faster rate, gaining an average 12.1 percent during 1994-98 compared with 9 percent during 1989-93.

Available information suggests similar growth in U.S.-Canada trade following implementation of the U.S.-Canada Free Trade Agreement (CFTA) on January 1, 1989. NAFTA subsumes CFTA, incorporating its provisions within the expanded agreement. Although statistics for U.S.-Canada trade before 1989 are not strictly comparable with subsequent data, growth in agricultural exports to Canada appears to have jumped from an average annual 6 percent during 1984-88 to 9.6 percent during 1989-93 under CFTA. Agricultural imports from Canada also grew—by 14.1 percent per annum during 1989-93, much faster than the 10.4-percent rate during 1984-88. After this early spurt of trade growth from the agreement, trade has continued to expand under NAFTA but at a slower pace, with agricultural exports to Canada increasing 5.7 percent on average and agricultural imports from Canada increasing 11 percent.

Besides facilitating growth between parties to the agreement, NAFTA has also fostered a reorientation of agricultural trade, resulting in U.S. exporters and importers devoting greater attention to the North American market. During 1994-98, Canada and Mexico were the destination for 21 percent of total U.S. agricultural exports compared with 18 percent during 1989-93, and the origin of about 32 percent of total U.S. agricultural imports compared with 26 percent during the earlier period.

A sizable portion of North American agricultural trade consists of intra-industry or "two-way" trade. This is particularly true for Canada and the U.S. Each counts the other as an important export market for a wide range of common products—including grains and feed, livestock and animal products, and oilseeds and oilseed products. Given the geographic size and topography of the three NAFTA members, transportation costs may make cross-border exchanges between two proximate points less costly than within-country trades between two distant points. Unfortunately, previous trade barriers often discouraged such beneficial cross-border exchanges.

NAFTA facilitates exploration of cross-border opportunities, thereby reducing transportation costs. As a result, existing regional patterns of trade have intensified, and new patterns have been established. For instance, pork producers in western Canada tend to export to the U.S. west coast, while U.S. producers tend to export to eastern Canada. Similarly, Mexican ranchers, when confronted with drought in 1995, marketed many of their cattle for slaughter in the U.S.

Obviously, not all changes occurring in U.S.-Canada and U.S.-Mexico agricultural trade since NAFTA's implementation are attributable to the agreement. Weather conditions, exchange rate movements, changes in macroeconomic performance, evolving consumer preferences, population growth, and technological change are among the factors that have been particularly influential.

USDA's Economic Research Service (ERS) estimated trade changes from NAFTA, isolating the NAFTA impact from other factors. For commodities that were subject to *quotas* or other quantitative restrictions before NAFTA, the volume of trade during 1994-98 was compared with previously allowed quantities. This assumes no over-quota trading except where analysts determined that pre-NAFTA limits were not enforced. For

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U.S. Ag Trade with Canada and Mexico Expanded Following Trade Agreements

	Average annual growth in U.S. agricultural trade					
	Exports to:			Imports from:		
	Canada	Mexico	Rest of world	Canada	Mexico	Rest of world
	Percent					
1984-88	6.0	9.4	1.8	10.4	8.8	4.2
1989-93	9.6	11.0	2.5	14.1	9.0	1.3
1994-98	5.7	14.4	0.2	11.0	12.1	6.8

U.S.-Canada Free Trade Agreement (CFTA) implemented in 1989. North American Free Trade Agreement (NAFTA) implemented in 1994.
Sources: Foreign Agricultural Trade of the U.S. (FATUS), USDA, for all data except U.S. exports to Canada; UN Comtrade imports reported by Canada and aggregated according to FATUS classifications for U.S. exports to Canada.

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commodities that were subject to *tariffs* before NAFTA, an economic model was used to estimate the impact of tariff changes.

NAFTA Impact Varies By Commodity & Country

For several U.S. agricultural exports, NAFTA has had a relatively large proportional impact—i.e., an estimated increase exceeding 15 percent relative to trade without the agreement. These exports include beef and processed tomatoes destined for Canada, as well as cattle, dairy products, apples, and pears destined for Mexico. The agreement has spurred growth greater than 15 percent in several U.S. imports as well, including Canadian beef and Mexican peanuts. NAFTA is estimated to have depressed U.S. trade for only one commodity-trade partner combination—U.S. imports of Canadian cattle—but these imports still experienced an overall increase during the first 5 years of the agreement.

Among livestock products, *beef* and *pork* commerce has benefited appreciably from NAFTA. U.S. beef exports to Canada are perhaps twice as high as they would have been without an agreement. Moreover, NAFTA tariff changes are estimated to have increased U.S. pork exports to Mexico by some 5 to 10 percent above the level that would have been expected otherwise. NAFTA may also have offset some of the decrease in U.S. hog exports to Mexico during the country's economic crisis in 1995.

U.S. *cattle* exports to Mexico are estimated to have grown by some 15 to 25 percent because of NAFTA tariff changes. However, increased cattle trade with Canada has been influenced more by the exemption of Canadian beef from the 1979 U.S. Meat Import Law than by NAFTA.

U.S. *corn* exports to Mexico are somewhat higher due to NAFTA than they would have been otherwise, but strong growth in corn exports in recent years is due primarily to other developments within Mexico. These include not only a series of severe droughts, but also the implementation of domestic policy reforms—for example, the government reduced its very high price supports for corn to be more in line with U.S. and world prices, and ended its official prohibition against feeding corn to livestock.

The surge in *wheat* imports from Canada in 1994 was due primarily to weather-related events, although some increase is attributable to tariff reductions that began under CFTA and continued under NAFTA. Disease and wet weather damaged Canada's wheat crop, resulting in an unusually large supply of lower grade wheat suitable for feed, while flooding in the Midwest dramatically reduced the U.S. corn crop. U.S. wheat exports to Canada have been insignificant despite CFTA/NAFTA tariff reductions. In 1998, the U.S. and Canada negotiated an agreement on wheat trade regulations that should improve U.S. access to Canadian markets.

NAFTA's impact on U.S.-Canada trade in *oilseeds and oilseed products* illustrates the expansion of "two-way" trade opportunities, fostering additional trade in processed products such as vegetable oil and soybean meal. In contrast, the change in U.S.-Mexico oilseed trade has been limited mainly to a rise in U.S. exports of both primary and processed goods—particularly soybeans, and vegetable oil from soybeans and sunflowers.

NAFTA has significantly influenced U.S. *cotton* trade. Through reduction of U.S. and Mexican tariffs and rules of origin that favor textiles and apparel manufactured by NAFTA members from yarn and fiber produced by NAFTA members, the agreement has stimulated exports to Canada and Mexico. These reforms coincided with other developments that diminished the competitiveness of Asian textile and apparel producers during much of the 1990's—including difficulties in the Chinese cotton sector and rising wages in South Korea (prior to its economic crisis).

The U.S. and Mexico are also moving toward liberalized trade in *sugar*. NAFTA specifies a formula, based on the difference between Mexico's projected production and projected domestic consumption, that gradually expands the duty-free quota for this trade (see page 17). U.S. imports of Mexican sugar have jumped from $64,000 in 1993 to $23 million in 1998. The annual average volume of sugar imports from Mexico during 1994-98 was 328 percent greater than its standard, pre-NAFTA allocation of the U.S. sugar quota.

U.S. exports of *vegetables* and *fruits and juices* to Canada and Mexico have grown during the NAFTA era, rising from an annual average of $1.9 billion during 1989-93 to $2.7 billion during 1994-98. Imports have also climbed, from an average $1.6 billion in 1989-93 to $2.7 billion in 1994-98. Although North American trade in fruits and vegetables has generally flourished since NAFTA, it is primarily because of other factors, such as changing consumer preferences, strong consumer demand in the U.S., adverse weather conditions, and peso devaluation and subsequent recession in Mexico during late 1994 and 1995.

NAFTA was expected to raise U.S. *tomato* imports from Mexico by about 8 to 15 percent above what would have occurred

NAFTA Impacts Are Reflected in Growth of North American Trade

	Annual average trade					Estimated trade effect due solely to NAFTA	
	Value		Volume				
	1989-93	1994-98	1989-93	1994-98			
	----*US$ million*----		-------*1,000*-------		*Unit*	*Direction*	*Strength*
Selected U.S. *exports* to Canada:							
Beef and veal	304	329	73	95	*Met. ton*	Increase	High
Processed tomatoes†	58	107	64	127	*Met. ton*	Increase	High
Vegetable oils	71	166	83	201	*Met. ton*	Increase	Moderate
Cotton	61	94	42	62	*Met. ton*	Increase	Moderate
Fresh tomatoes	94	103	122	128	*Met. ton*	Increase	Moderate
Selected U.S. *exports* to Mexico:							
Cattle and calves	95	77	145	131	No.	Increase*	High
Dairy products	162	155	NA	NA		Increase*	High
Apples	23	50	45	93	*Met. ton*	Increase	High
Pears	14	21	29	42	*Met. ton*	Increase	High
Sorghum	377	308	3,416	2,567	*Met. ton*	Increase*	Moderate
Vegetable oils	73	218	124	338	*Met. ton*	Increase	Moderate
Beef and veal	135	236	46	82	*Met. ton*	Increase	Moderate
Pork	59	69	27	35	*Met. ton*	Increase	Moderate
Cotton (including linters)	85	326	67	214	*Met. ton*	Increase	Moderate
Selected U.S. *imports* from Canada:							
Beef and veal	246	509	107	234	*Met. ton*	Increase	High
Fresh and processed potatoes	98	221	360	618	*Met. ton*	Increase	Moderate
Fresh tomatoes	5	45	4	28	*Met. ton*	Increase	Moderate
Cattle and calves	668	908	968	1,268	*No.*	Decrease**	High
Selected U.S. *imports* from Mexico:							
Peanuts (shelled and in-shell)	--	3	--	4	*Met. ton*	Increase	High
Sugar	8	12	30	31	*Met. ton*	Increase	High
Fresh tomatoes	256	477	335	610	*Met. ton*	Increase	Moderate
Processed tomatoes†	16	12	21	14	*Met. ton*	Increase*	Moderate
Melons	80	108	287	359	*Met. ton*	Increase	Moderate

NA = Not applicable. -- = Negligible.
*Without NAFTA, trade would have decreased more. **Without NAFTA, trade would have increased more.
†Trade data for processed tomatoes exclude tomato juice.
Estimates reflect changes in trade due solely to NAFTA and are based on assessments by ERS analysts. Increase-high = Trade is more than 15 percent higher during 1994-98 than it would have been without NAFTA. Increase-moderate = Trade is 6 to 15 percent higher than without NAFTA. Decrease-high = Trade is more than 15 percent lower than without NAFTA.

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without the agreement. But the positive influence of tariff reductions on U.S.-Mexico tomato trade has been tempered by a price-floor agreement between principal Mexican and U.S. growers. U.S. *potato* imports from Canada are estimated to be about 5 to 10 percent larger under CFTA/NAFTA tariff reductions than they would have been otherwise.

NAFTA has had a positive influence on many aspects of U.S. fruit trade. For example, *grape* exports have benefited from the end of Mexican import licensing, and exports of fresh *pears* to Mexico have expanded, due in part to tariff reductions that are proportionately larger in relation to price than reductions for other fruits such as *apples*. ERS estimates that U.S. imports of Mexican *cantaloupe* are some 17 to 25 percent larger than they would be without the tariff cuts of NAFTA and the Uruguay Round agreement.

Occasionally, NAFTA has worked to offset decreases in trade. NAFTA tariff reductions, for instance, tempered the decline of U.S. *sorghum* exports to Mexico during 1995-97, when many Mexican livestock producers switched from sorghum to corn feeding of cattle. This dampening effect was particularly important in 1995, when the Mexican economy experienced severe recession and U.S. agricultural exports to Mexico dropped more than $1 billion between 1994 and 1995. Lower trade barriers made U.S. and Canadian exports more affordable to Mexican consumers, while offering Mexican producers a greater opportunity to market their output outside Mexico.

Effects Extend Beyond Trade

NAFTA's influence extends well beyond changes in trade flows. In conjunction with NAFTA, efforts to resolve conflicts related to sanitary and phytosanitary (SPS) regulations have been given renewed emphasis through the trilateral NAFTA Committee on SPS Measures. In addition, producers in the three NAFTA countries have worked to fine tune quality standards and to participate actively in the formulation of new standards and inspection procedures. One major innovation is

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inspection and approval of produce at a regional level, or sometimes even at the individual producer level. For example, the U.S. now permits avocado imports from approved growers in the Mexican state of Michoacán, and recognizes the state of Sonora as being free of hog cholera, paving the way for hog imports.

Similarly, Mexico has lifted its ban on citrus imports from Arizona, as well as from citrus areas of Texas that are not regulated for fruit fly. When such initiatives are successful, they open the door to new international markets. However, when SPS efforts stumble, trade tends to suffer. This was the case with the inspection process originally established for U.S. apple exports to Mexico, which was so costly to shippers that it was substantially revised.

NAFTA has likely had a positive, though small, effect on U.S. agricultural employment. Employment in crop and livestock production increased slightly (1.3 percent annually, on average) between 1989-93 and 1994-98. At the same time, however, employment opportunities are narrowing in some agriculture-related industries, such as textiles and apparel, in which the U.S. is less competitive. While these structural changes generally predate NAFTA, the accord appears to have reinforced long-term trends.

The NAFTA Transitional Adjustment Assistance (NAFTA-TAA) Program was established to provide job training, career counseling, and financial allowances to workers who lose jobs or whose hours or wages are reduced as a result of changing trade with Canada and Mexico. Petitions for assistance may be filed by labor unions, company officials, community-based organizations, or groups of three or more workers. Of the 1,794 petitions approved between 1994 and 1998, only 19 were in agriculture.

Despite concern that capital investment in the U. S. farm sector might decline once the agreement was adopted, nominal capital expenditures in U.S. agriculture grew from $13.9 billion to $16.2 billion between 1993 and 1997. In real terms (constant dollars), capital expenditures increased in 1996 and 1997, reversing declines in 1994 and 1995.

NAFTA has also facilitated the flow of inter-country investments in North American agricultural production and food processing industries. U.S. investment in Mexican agricultural production totaled $45 million during 1994-97, and U.S. investment in Mexican food processing has grown from $2.3 billion in 1993 to $5 billion in 1997. Similarly, U.S. investment in the Canadian food processing industry has more than doubled since 1990. Preliminary evidence indicates that increased U.S. direct investment in the Mexican food sector complements agricultural trade.

Integration of the North American market under NAFTA has spurred changes outside production agriculture. For example, Mexico's food distribution system is in the midst of a major structural change, with supermarket chains rapidly gaining market share (*AO* August 1998). Moreover, as the distribution systems of North America become more closely integrated, additional strategic alliances are likely to be formed between retail food chains in Canada, Mexico, and the U.S., accompanied by harmonization of standards, contracts, and processes of dispute resolution, and facilitating greater complementary trade.

Improvement in infrastructure, another important facilitator of trade, is an additional outcome of the agreement. The Mexican government appears to be committed to such improvement, already proceeding with significant investments in road construction, embarking on the final phase of railway privatization, and making substantial advances in the privatization of sea and air transportation. These activities should provide significant dividends to agricultural trade during the next decade.

Although only one-third of the NAFTA transition period has elapsed, many of the agreement's provisions are already in place. The changes that have occurred during the first 5 years of NAFTA offer a hint of the accord's long-term impact. Gains that are already apparent include expansion of agricultural trade that better utilizes the relative strengths of the three NAFTA economies; reorientation of trade in which regional, cross-border exchanges may replace less economical within-country exchanges; and continued advances in various institutions that facilitate trade.

Through elimination of numerous trade barriers, Canada, Mexico, and the U.S. are enabling economic agents throughout North America to respond more efficiently to changing conditions and to benefit more fully from their relative strengths. Ultimately, these developments should lead to a more integrated and prosperous North American economy. AO

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Forthcoming reports by USDA's Economic Research Service contain further information on the impact of NAFTA. Text of the first of these reports is on the Internet at

http://usda.mannlib.cornell.edu/reports/erssor/international/wrs-bb/1999/.

Watch for these reports in text and .pdf format on the ERS website at www.econ.ag.gov.