Corn

Policy Changes Resulting from NAFTA

United States. Before NAFTA, the United States maintained tariffs of \$2.00 per metric ton on dent corn and \$9.80 per metric ton on non-seed corn other than dent. Under NAFTA, the United States immediately eliminated its tariffs on Mexican corn on January 1, 1994, and it continued to phase-out its tariffs on Canadian corn, as originally negotiated under CFTA. U.S. tariffs on Canadian corn were eliminated completely on January 1, 1998.

Mexico. Under NAFTA, Mexico immediately eliminated its import licensing requirement for corn and established duty-free TRQ's for the United States and Canada. Initially, the TRQ's were set at 2.5 million metric tons for the United States and 1,000 metric tons for Canada. These levels increase 3 percent each year during a 14-year transition, until the TRQ is eliminated on January 1, 2008. For 2001, the TRQ's are 3,074,685 metric tons for the United States and 1,230 metric tons for Canada.

Imports above the TRQ levels face an over-quota tariff that is being phased out over the transition period. In 1994, the over-quota tariff equaled the greater of 206.4 percent ad valorem or 19.7 cents per kilogram. For 2001, it is the greater of 127.1 percent or 12.1 cents per kilogram. However, Mexico generally has opted not to apply the over-quota tariff. Beginning on June 7, 2001, Mexico levied minor over-quota tariffs of 1 percent on yellow corn and 3 percent on white corn. These tariffs will remain in effect until the end of 2001.

Canada. Prior to 1989, Canada maintained import tariffs on corn ranging from 1.73 to 2.77 Canadian dollars per metric ton. Under CFTA and NAFTA, Canada gradually eliminated its tariff on U.S. corn over the 9-year period that ended on January 1, 1998.

Corn Trade under CFTA and NAFTA

U.S. corn exports to NAFTA partners generally have been increasing under the agreement, but this trade continues to fluctuate in response to changes in corn production and the government policies of Canada and Mexico (table I-1). For example, in 1996, Mexico suffered a severe drought and imported record amounts of U.S. corn, even in the face of high U.S. export prices.

Mexico has long been a major market for U.S. corn, with few imports from other suppliers. Trade has varied greatly over the years, in large part because of the impact of weather on Mexican production. However, Mexico's corn imports shrank to low levels during 1991-93, mainly due to Mexican agricultural policies that stimulated domestic corn production. Mexico's support prices for corn were well above international levels in the early 1990's, pulling planting area from other crops and into corn production. Moreover, Mexican trade barriers made it easier to purchase sorghum instead of corn.

U.S. corn exports to Mexico have exceeded the dutyfree amount specified by the NAFTA TRQ in each year except 1997, when Mexican production increased and total consumption declined (table I-1). Feed use of corn in Mexico declined in 1996, and has not recovered through 2000. However, with reduced support

	Fable I-1—U.S.	corn exp	ports to	Mexico,	1989-200
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		Actu	Actual exports		
Year	Quantitative level of the NAFTA TRQ	Volume	Value		
	Metric tor	Million dollars			
1989	n.a.	3,844,294	435		
1990	n.a.	3,486,277	400		
1991	n.a.	1,316,066	148		
1992	n.a.	1,137,238	129		
1993	n.a.	288,681	35		
1994	2,500,000	3,054,111	340		
1995	2,575,000	2,858,829	359		
1996	2,652,250	6,314,387	1,003		
1997	2,731,818	2,566,142	317		
1998	2,813,772	5,245,670	590		
1999	2,898,185	5,051,767	527		
2000	2,985,131	5,194,328	511		
Average, 1989-93	n.a.	2,014,511	229		
Average, 1994-2000) 2,736,594	4,326,462	521		

n.a. = not applicable

Sources: For trade data, Foreign Agricultural Trade of the United States database; for TRQs, NAFTA Tariff Schedule of Mexico.

prices and increasing consumer demand for meat, U.S. corn exports to Mexico have stayed above 5 million metric tons per year since 1998.

The United States also trades smaller but significant amounts of corn with Canada. U.S. corn exports to Canada have increased in years when corn production in eastern Canada failed to keep pace with domestic demand. Strong demand in Canada, both for feeding and industrial processing, boosted these exports to 1.2 million metric tons in 1998. However, Canada harvested a record large corn crop in the fall of that year, so U.S. corn exports to Canada declined to 968,971 metric tons in 1999. With sharply reduced production and expanding animal numbers, these exports reached a record of nearly 1.5 million metric tons in 2000, with a value of \$126 million.

U.S. corn imports from Canada averaged 315,004 metric tons per year during 1992-96, but they slipped below 220,000 metric tons in 1997, 1998, and 2000, years of low Canadian production. Imports mainly move to corn deficit areas in the eastern United States and to Puerto Rico, where the Jones Act makes transport from U.S. origins prohibitively expensive.

Trade Issues

In response to a complaint filed by the Manitoba Corn Growers Association, Canada's Commissioner of Customs and Revenue launched an investigation into the alleged injurious dumping and subsidization of certain U.S. corn on August 9, 2000. The investigation only concerns imports for use or consumption west of the Manitoba/Ontario border.

On November 7, 2000, the Commissioner made a preliminary determination of dumping and subsidizing and assessed a provisional duty of 1.58 Canadian dollars per bushel. Although the Commissioner's final determination in February 2001 reduced the combined dumping and subsidy amounts to 1.30 Canadian dollars per bushel, the provisional duty remained in effect until March 7, 2001. On that date, the Commissioner issued a final ruling that ended the case and the duties were refunded. Interestingly, the provisional duty had little effect on the volume of Canadian corn imports from the United States. Instead, its main impact was to divert imports to border crossings east of the Manitoba/Ontario border.

NAFTA's Impact on Corn Trade

U.S. corn exports to Mexico are somewhat higher due to NAFTA than they would have been otherwise. However, the strong growth in these exports is primarily due to changes in Mexico's domestic agricultural policies and a series of severe droughts in Mexico.

Prior to NAFTA, Mexico made substantial changes in its domestic agricultural policies. While these were not mandated by the trade agreement, they have provided an important stimulus to U.S.-Mexico corn trade. First, in the early 1990's, the Mexican government ended its official prohibition of feeding corn to livestock. This ban, intended to protect the supply of the country's staple food grain, was so effective that sorghum had become Mexico's chief feed grain.

Second, the Mexican government reduced its very high price supports for corn in order to bring them more in line with U.S. and international prices. This ended a policy that distorted land use and inflated the costs of corn to users. As a result, the amount of arable land devoted to corn production fell, and prices have come down to more reasonable levels for industrial users and feeders.

CFTA and NAFTA have had a small, positive effect on U.S.-Canada corn trade in both directions. However, local availability of corn in eastern Canada has had a greater impact on trade than the two agreements.

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Sorghum

Policy Changes Resulting from NAFTA

United States. Under NAFTA, the United States immediately eliminated its tariffs on Mexican sorghum on January 1, 1994.

Mexico. Under NAFTA, Mexico immediately eliminated its seasonal tariff of 15 percent on U.S. sorghum on January 1, 1994. Canada's improved access to the Mexican sorghum market under NAFTA is relatively meaningless since Canada does not produce sorghum in large quantities due to its cooler climate.

Canada. Under CFTA, Canada immediately eliminated its tariffs on U.S. sorghum on January 1, 1989. Under NAFTA, Canada did the same for Mexican sorghum on January 1, 1994.

Sorghum Trade under CFTA and NAFTA

The experience of U.S. sorghum exports to Mexico under NAFTA may be divided into two periods: 1994-96 and 1997 to the present. During the first period, export volume decreased, despite Mexico's tariff elimination for U.S. sorghum. This decrease in trade is the product of developments in the Mexican corn sector. Mexican feed use of sorghum declined during 1991-94, as livestock producers started to use more corn as a feed grain. Once the Mexican government reduced its very high support prices for corn, the amount of land devoted to sorghum increased and sorghum production rebounded. As a result, Mexican feed use of sorghum has grown since 1995. Limited water supplies for irrigation also encourage a shift from corn to sorghum production.

As a result of increased domestic sorghum production and product switching in livestock rations in favor of corn, U.S. sorghum exports to Mexico declined from 3.6 million metric tons in 1993 to 3.4 million metric tons in 1994. Exports fell to 2.2 million metric tons in 1995 and 2.0 million metric tons in 1996, as U.S. corn exports to Mexico continued to exceed the TRQ. However, due to higher prices during 1994-96, the value of these imports changed less than the volume. In fact, the value actually increased in 1994 and 1996.

This trend reversed itself beginning in 1997, as prices declined and import volume increased. In 1999, Mexican imports of U.S. sorghum exceeded 4 million tons for the first time in 7 years. In 2000, these imports reached 4.7 million metric tons, nearly surpassing the record set in 1992. Mexico's feed manufacturers have purchased more U.S. sorghum because the product automatically enters Mexico duty-free and is not governed by a TRQ. In contrast, corn importers must obtain permission from the Mexican government to utilize the corn TRQ for Canada or the United States. In 2001, Mexico is likely to import less sorghum because of the small U.S. crop.

The United States also exports very small amounts of sorghum to Canada - less than 1 percent of corn's volume, the leading U.S. feed grain export to Canada. Under CFTA and NAFTA, U.S. sorghum exports to Canada have risen from 1,707 metric tons to an average of 4,121 metric tons during 1996-2000, but this trade remains small compared to corn.

Trade Issues

In late 1996, the Mexican government's slow issuance of phytosanitary permits delayed U.S. sorghum exports

to Mexico. After consultations with suppliers, importers, and end-users, the government began to issue these permits in a more timely fashion.

NAFTA's Impact on Sorghum Trade

Without NAFTA's elimination of Mexican tariffs on U.S. sorghum, U.S. sorghum exports to Mexico would probably have fallen further than they did during 1994-96. Had the reduction in tariffs not occurred, it is likely that sorghum would have been less pricecompetitive against corn and imports would have declined further as increasing quantities of feed corn were imported. However, if corn imports had not increased (partly as a result of NAFTA), then U.S. sorghum exports to Mexico would have been much higher during 1994-2000.

The elimination of Canadian tariffs on U.S. sorghum has helped the product to compete in the Canadian market, but transportation costs limit the potential growth of U.S.-Canada sorghum trade. Other U.S. feed grains are produced closer to the Canadian border, and sorghum's price discount is not usually enough to interest Canadian users.

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Barley

Policy Changes Resulting from NAFTA

United States. *Under CFTA and NAFTA, the United* States gradually eliminated its tariff on Canadian barley over the 7-year period that ended on January 1, 1996. Under NAFTA, the United States immediately eliminated its tariffs on Mexican barley on January 1, 1994.

Mexico. Prior to 1994, Mexico required the licensing of barley imports from Canada and the United States. In addition, Mexico's base tariff on barley was the greater of 128 percent ad valorem or 15.5 cents per kilogram, while its base tariff on malt was the greater of 175 percent ad valorem or 21.2 cents per kilogram.

Under NAFTA, Mexico immediately eliminated its import licensing requirement for U.S. and Canadian barley on January 1, 1994. In its place, Mexico created a duty-free TRQ for each country. For 1994, the TRQ's were set initially at 30,000 metric tons for Canada and 120,000 metric tons for the United States. These amounts increase by 5 percent each year, until the TRQ's are eliminated on January 1, 2003. For 2001, the TRQ for the United States equals 168,852 metric tons, and the TRQ for Canada equals 42,213 metric tons.

Imports above these amounts face an over-quota tariff that is being phased out over the transition period. For 1994, the initial over-quota tariff for barley was set at the greater of 122.8 percent ad valorem or 14.8 cents per kilogram. For malt, the initial over-quota tariff equaled the greater of 168 percent ad valorem or 20.3 cents per kilogram. For 2001, the over-quota tariff for barley equals the greater of 48.6 percent or 5.8 cents per kilogram, while the corresponding tariff for malt equals the greater of 66.5 percent or 8 cents per kilogram. These tariffs are scheduled for complete elimination on January 1, 2003.

Canada. Under CFTA, Canada agreed to a 9-year elimination of tariffs on U.S. barley imports. Under Article 705 of CFTA, Canada agreed to remove its quantitative restrictions when the 2-year average of the level of U.S. Government support for barley is less than that of Canada's.

Canada required import licenses for U.S. barley and barley products until August 1, 1995, when it converted these licenses to TRQ's in accordance with URAA. Over-quota tariffs were initially set at more than 100 percent and then reduced by 36 percent over the 6-year period that ended on January 1, 2001. The within-quota tariff was eliminated on January 1, 1998.

Barley Trade under CFTA and NAFTA

The United States imports significant amounts of malting barley from Canada, reflecting a trend that began in the late 1980's. This trade is driven by the relative strength of the U.S. dollar and a continued interest in diversified supplies, dating back to the North American drought of 1988. The largest U.S. brewer now contracts with Canadian farmers to grow U.S. barley varieties in Canada for use in the United States. Following a sharp drop in U.S. feed grain production in 1993 due to adverse weather, U.S. barley imports nearly tripled in 1994, reaching a record 1.9 million metric tons. These imports consisted largely of feed barley. Since 1994, imports generally have declined in volume. In 2000, this trade equaled 566,375 metric tons, with a value of \$75 million. Virtually all the barley imported by the United States comes from Canada.

U.S. barley exports to Mexico grew in volume during the first three years of NAFTA, climbing steadily from

78,058 metric tons in 1993 to 269,610 metric tons in 1996. This placed Mexico as the largest foreign market for U.S. barley, as sales to other markets slumped. Since then, competition from Canada has caused U.S. barley exports to Mexico to decrease. During 1997-2000, this trade averaged 112,673 metric tons per year. This level is favorable when compared to 1991-93, but it is less than the volume of trade in 1989 and 1990. Still, Mexico is the third largest foreign market for U.S. barley, following Saudi Arabia and Japan.

Mexico's barley imports are largely tied to the beer industry. Most U.S. barley exports to Mexico are used for malting. Rising beer production reflects both domestic and export demand, with Mexico supplying a substantial amount of beer to the United States. Mexico is the largest beer exporter to the United States, surpassing Canada in 1996 and Holland in 1997. However, the increase in U.S. malting barley exports to Mexico in 1994 and 1995 was accompanied by an overall drop in U.S. exports of malting barley. The expansion of malting facilities in Mexico brought about a partial shift in imports from barley malt to malting barley to be processed in Mexico.

Trade Issues

Canadian TRQ on Barley. Under URAA, Canada converted its barley import license to a TRQ. The United States viewed the creation of the TRQ as a violation of NAFTA, since the agreement generally prohibits member countries from increasing tariffs or introducing new tariffs. Ultimately, Canada and the United States presented their arguments before a NAFTA dispute resolution panel. On December 2, 1996, the panel issued its final report, finding that Canada's application of the TRQ to U.S. goods conforms with its NAFTA obligations. However, in 1998, Canada agreed to eliminate the TRQ, setting the stage for increased U.S. barley exports to Canada. This trade topped 30,000 metric tons in 1999 and 2000, as product moved to feedlots near the border in Alberta and Saskatchewan. Still, these volumes are relatively small.

NAFTA's Impact on Barley Trade

U.S. barley imports from Canada have been very large since 1994, but the impact of CFTA and NAFTA on this trade has been minor at best. The sharp rise in U.S. barley imports from Canada in 1994 was mainly the result of a feed grain shortage in the United States caused by flooding in the U.S. Midwest during 1993, not because of NAFTA. NAFTA has had a small, positive impact on U.S. barley exports to Mexico, with guaranteed annual increases in the duty-free TRQ of 5 percent. In the absence of NAFTA, Mexico's import licensing requirement would have continued to limit barley imports for feed, but it is likely that Mexico's expanding beer industry would have encouraged the Mexican government to issue additional import licenses for malting barley.

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Oats

Policy Changes Resulting from NAFTA

United States. The United States already had a Most Favored Nation (MFN) tariff of zero on oats prior to 1989, and it has continued this policy under CFTA and NAFTA.

Mexico. Mexico applies an MFN tariff of 10 percent ad valorem on oats imports. Under NAFTA, Mexico is phasing out its tariffs on U.S. and Canadian oats over the 9-year period that ends on January 1, 2003. For 2001, the tariff equals 2 percent.

Canada. Canada already had an MFN tariff of zero on oats imports prior to 1989, and it has continued this policy under CFTA and NAFTA. Under Article 705 of CFTA, Canada ended its import licensing requirement for U.S. oats and oat products in 1989.

Oat Trade under CFTA and NAFTA

The United States is the largest oats importer in the world, despite exporting small quantities to the NAFTA partners, and Canada is the largest oats exporter to the United States. U.S. oat imports from Canada are now substantially larger in volume than they were prior to CFTA, but this trade continues to experience sharp fluctuations from one year to the next. During the first 5 years of CFTA (1989-93), U.S. oat imports from Canada ranged from 296,272 to 984,515 metric tons, compared with 298,580 metric tons in 1987 and 417,567 metric tons in 1988. In 1994, this trade reached 1.1 million tons, the first time that U.S. oat imports from Canada had surpassed the mark of 1 million metric tons.

Historically, Finland and Sweden have been Canada's two main competitors in the U.S. market for imported oats. However, when Finland and Sweden joined the European Union (EU) in 1995, the amount of export subsidies available for Scandinavian oats fell, opening the door for increased Canadian oat exports to the United States at the expense of European producers. In 1997, exports reached 1.5 million metric tons, establishing a new record. In 1998 and 1999, they dropped to about 1.1 million metric tons per year, as the EU provided increased competition. In 2000, reduced competition from the EU allowed Canadian oat exports to the United States to reach 1.4 million metric tons, with a value of \$117 million.

Today, the oats markets of Canada and the United States are more closely integrated than the markets of most other commodities. The removal of oats from the control of the Canadian Wheat Board in 1988 was an important step that has allowed free markets to evolve. The relative strength of the U.S. dollar has made purchases of Canadian oats more attractive, and Canada generally produces more consistent supplies of high-quality oats than the United States. While U.S. oats production has continued to decline, Canada's oats production has increase slightly in recent years. There is some evidence of more oats being grown in Manitoba, closer to the U.S. population centers. However, the major growing areas are in the more distant provinces of Alberta and Saskatchewan.

Trade Issues

There have been no trade issues involving oats.

NAFTA's Impact on Oat Trade

CFTA and NAFTA have not directly affected U.S.-Canada oat trade, because the U.S. tariff on oats from Canada and other sources was already set at zero. The increase in oat imports from Canada during 1994 and 1995 reflects longer-term trends of more integration of the countries' grain markets, especially with the removal of the Canadian Wheat Board (CWB) from oat trade. The United States has increasingly become a net importer of oats and, because of geographical proximity, an attractive market for Canada. The accession of Finland and Sweden to the EU accelerated this trend by limiting their ability to compete in the U.S. market.

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Wheat

Policy Changes Resulting from NAFTA

United States. Under CFTA, the United States phased out its tariffs on Canadian wheat over the 9-year period that ended on January 1, 1998. Under NAFTA, the United States gradually eliminated its tariffs for common wheat from Mexico over the 4-year period that ended on January 1, 1998, and it is doing the same for durum wheat from Mexico over the 9-year period that concludes on January 1, 2003. For 2001, the tariff for durum wheat equals 0.154 cents per kilogram.

Mexico. Under NAFTA, Mexico immediately eliminated its import license requirement for all wheat on January 1, 1994. In addition, Mexico is phasing out its tariff on U.S. and Canadian wheat over the 9-year period that ends on January 1, 2003, starting from a base of 15 percent ad valorem. For 2001, the tariff rate equals 3 percent.

Canada. Under CFTA and NAFTA, Canada gradually eliminated its import tariff on U.S. wheat over the 9-year period that ended on January 1, 1998. Under the provisions of CFTA's Article 705, Canada removed its import license requirement for U.S. wheat and wheat products in 1991.

Wheat Trade under CFTA and NAFTA

North American wheat trade has grown erratically under CFTA and NAFTA, with weather playing an important role. U.S. wheat exports to Mexico averaged 1.6 million metric tons per year during 1996-2000, more than 3 times the average volume during 1989-94. U.S. wheat imports from Canada broke the mark of 1 million metric tons for the first time in 1992 and peaked at 2.4 million metric tons in 1994. Since then, imports have ranged from 1.5 to 2.2 million metric tons per year.

Mexico's total wheat imports and its wheat imports from the United States declined in the first year of NAFTA (1994) because favorable weather resulted in a large Mexican wheat crop. Two years of drought followed, reducing the Mexican crop and boosting imports, in spite of the Mexican peso crisis in late 1994 and its accompanying recession in 1995. Lower exports supplies in Canada also helped to strengthen U.S. wheat exports to Mexico in 1995. Both Canada and the United States provide export credit guarantees to Mexico. These guarantees helped sustain Mexican wheat imports when foreign exchange might have been a constraint. Although NAFTA tariff reductions were implemented gradually, they helped to facilitate Mexican imports during the drought years of 1995 and 1996 and helped to mitigate the damage to Mexican import demand caused by the peso crisis.

Since 1996, Mexico's wheat area generally has remained lower than its level during 1982-95 because of the many alternative uses for irrigated land. As wheat consumption has grown with an improving economy, Mexico's total imports have reached record levels. However, competition between Canada and the United States has been intense, since Mexico is phasing out its tariffs on both Canadian and U.S. wheat as part of NAFTA. Year-to-year changes in Mexican wheat production also affect U.S. wheat exports to Mexico. As a result, U.S. wheat exports to Mexico have fluctuated over the last 5 years, ranging from 1.1 million metric tons in 1997 to 1.8 million metric tons in 1999. In 2000, this trade equaled 1.7 million metric tons, with a value of \$197 million.

Canada is the main source of U.S. wheat imports, being a surplus producer with low transport costs to much of the U.S. market. In 1994, U.S. wheat imports from Canada surged to 2.4 million metric tons, an increase of 36 percent over the previous year's level. This dramatic increase was caused primarily by weather-related events in Canada and the United States and not by CFTA and NAFTA. Wet weather at harvest time and disease damaged the quality of Canada's wheat crop in 1993, and since the 1992 crop was also of low quality, Canada's supply of feed wheat was exceptionally high. At the same time, summer flooding in the U.S. Midwest dramatically reduced the size of the U.S. corn crop. With feed wheat supplies unusually large in Canada and feed grain supplies tight in the United States, the stage was set for a surge in U.S. imports of Canadian wheat.

U.S. wheat imports from Canada dropped to 1.5 million metric tons in 1995 and 1.3 million metric tons in 1996, as grain supplies on each side of the border returned to a more normal situation. Moreover, the 1year TRQ and end-use certificates (EUC's) imposed in the latter stages of 1994 (see Trade Issues section) may have offset any stimulus to trade caused by reduced tariffs. Also, U.S. wheat imports from Canada continued to decline in 1996 because of limited supplies within Canada and because other export destinations offered higher returns than the U.S. market. This was the result of a dramatic increase in world wheat prices in 1995/96.

Since 1997, U.S. wheat imports have been concentrated in the U.S. Northeast, where wheat producers from eastern Canada have a comparative transportation advantage over wheat growers in the western United States. During 1997-99, this trade averaged 2.1 million metric tons per year. In 2000, imports declined slightly to 1.8 million metric tons, with a value of \$227 million.

Trade Issues

Of all the grains, wheat has experienced the most contentious trade disputes since the implementation of NAFTA.

Tariff Rate Quota on U.S. Wheat Imports from Canada. The sharp rise in U.S. wheat imports from Canada during the 1993/94 crop year, following several years of increasing imports, resulted in a request for a U.S. International Trade Commission (ITC) Section 22 investigation. The ITC determined that the increased imports of wheat, wheat flour, and semolina were materially interfering with USDA's price and income support programs and forwarded its recommendations for possible action to the President. These recommendations ranged from a strict import quota of 900,000 metric tons to various TRQ's.

In September 1994, Canada and the United States confronted this unfolding dispute by completing a Memorandum of Understanding (MOU) on Grains. Under the MOU, the United States established a temporary TRQ for the 12-month period running from September 12, 1994 to September 11, 1995. Access at the lower NAFTA tariff levels was limited to 300,000 metric tons for durum wheat and 1,050,000 metric tons for other wheat (excluding white winter wheat not produced in western Canada).

Mexico's Countervailing Duty Investigation on U.S. and Canadian Wheat Imports. On April 4, 1994, the Mexican government initiated a countervailing duty investigation on subsidized wheat imports from the United States and Canada. Mexico also began to subsidize flour millers that purchased domestic wheat. The subsidy was set at a value equal to the price difference between imported and domestic wheat. Austerity measures led to the cancellation of this subsidy in 1995. In March 1996, the Mexican Government terminated the investigation because the United States had stopped using the Export Enhancement Program (EEP) and because Canada had eliminated the Western Grain Transportation Act (WGTA) on July 31, 1995. The WGTA was the only wheat export subsidy notified by Canada in the Uruguay Round negotiations.

Karnal Bunt. A fungal disease has presented challenges to the U.S. wheat industry. Karnal bunt is harmless to humans but can cause an unpleasant odor and taste in flour made from wheat that is highly affected by the disease. The fungus is spread by airborne spores that also can be carried on plants, soil, farm equipment, and vehicles.

The first discovery of Karnal bunt in the United States occurred in March 1996 in Arizona. Subsequently, the fungus was found in parts of California, New Mexico, and Texas. During 1999 and 2000, the fungus was not found in national surveys. However, wheat fields in several parts of Texas were found to be infected in June 2001. Currently, USDA and the Texas Department of Agriculture are working to address the problem, and a Federal quarantine has been imposed in areas where Karnal bunt was detected.

Canada's initial response to the 1996 discovery was to ban all imports and trans-shipments of U.S. durum wheat and all grain imports from the four quarantined States in order to ensure the integrity of the Canadian grain system. Although Canada only imports a small amount of U.S. wheat, approximately 1 million tons of U.S. wheat annually pass through the Canadian ports of the St. Lawrence Seaway system to third-country markets. Following bilateral negotiations with the United States, Canada agreed to permit in-transit shipments of U.S. wheat through the Seaway once again, beginning in early April 1996. In-transit shipments are those that do not stop at Canadian ports. Canada also allowed non-durum wheat from the United States to be transshipped through Canadian grain elevators and agreed to reassess its prohibition on durum wheat based on additional survey and sampling data provided by the United States.

Following the signing of a Record of Understanding on agricultural trade in December 1998, Canadian and U.S. authorities have worked to establish new phytosanitary requirements that adequately address the Karnal bunt problem while providing greater opportunities for U.S. wheat exports to Canada. As part of the Wheat Access Facilitation Program, approved growers in eligible States may ship wheat under a "Master Phytosanitary Certificate." With this certificate, each individual wheat shipment is not required to be tested, as long as at least one sample per grower, per crop, is officially tested and found to be free of Karnal bunt spores. This program was implemented for Montana and North Dakota in 1999. In addition, Canada has applied a "regionalized" approach to the testing of U.S. wheat exports for Karnal bunt. As of April 1, 1999, Canada recognized 14 States to be free of Karnal bunt: Connecticut, Maine, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, New Jersey, New York, North Dakota, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

After the first U.S. discoveries of Karnal bunt, Mexico announced that it would prohibit the importation of wheat produced or stored in Arizona, New Mexico, California, and certain parts of Texas. Mexico will import U.S. wheat from non-quarantined areas if the grain is tested and certified to be free of Karnal bunt or, if produced within the quarantine area, fumigated with methyl bromide.

Karnal bunt has been detected in some areas of northwest Mexico since the late 1970's, long before the implementation of NAFTA. In 1983, the United States banned wheat imports from Mexico to prevent the introduction of the fungus. Article 722 of NAFTA established a Committee on Sanitary and Phytosanitary Measures. In the committee's June 1996 meeting, Mexico sought recognition from the United States that the Mexicali Valley region is free of Karnal bunt and eventually a protocol was established allowing some Mexican wheat to enter the United States.

End-Use Certificates. As a result of the Article 705 calculations under CFTA, Canada removed its import licensing requirement for U.S. wheat and wheat products in 1991. Subsequently, Canada required that U.S. wheat be accompanied by an end-use certificate (EUC) to ensure that Canadian variety controls and quality standards are maintained. The purpose of the U.S. EUC requirement is to prevent imports from benefiting from U.S. export programs. The United States will continue this requirement as long as Canada also maintains its EUC requirement.

The JCG examined the EUC requirements of both Canada and the United States and concluded that the requirements were cost-raising irritants to trade. As a result, the JCG recommended that both countries eliminate their EUC requirements. Unfortunately, Canada and the United States have not been able to agree upon a satisfactory replacement for the EUC's. Section 301 Case. In response to a petition filed by the North Dakota Wheat Commission on October 23, 2000, the U.S. Trade Representative initiated a Section 301 investigation of certain trade practices of the Canadian Wheat Board (CWB). It is alleged that the CWB engages in unreasonable trade practices, both in the United States and in third countries, and that these practices have resulted in economic harm to U.S. wheat growers. According to the petition, the CWB has pricing flexibility not available to private wheat traders, which allows it to make standing offers to undersell U.S. wheat in certain markets, consistently offering to sell wheat at less than the market value.

NAFTA's Impact on Wheat Trade

Policy changes, including those associated with NAFTA, resulted in record wheat imports by Mexico in 1998, even though the tariff reduction was not large. The indirect effect of NAFTA on Mexico's wheat area may contribute significantly to increasing imports. Under NAFTA, U.S. wheat exports to Mexico have risen from 967,000 tons in 1993 to 1.7 million tons in 2000. The value of these exports jumped from \$143 million in 1993 to \$344 million in 1996, as U.S. prices gained strength due to tight supplies and strong demand, but with lower prices in 1997 and 1998 the value of wheat shipments has declined.

Tariff reductions under CFTA and NAFTA have contributed to increased U.S. wheat imports from Canada. The sharp rise in U.S. wheat imports from Canada in 1994 was mainly the result of weatherrelated events and not because of the two agreements. However, NAFTA has facilitated imports, as Canadian grain flows that used to run from west to east within Canada due to tariffs, quotas, and transportation subsidies, now move south to the United States, in keeping with the expectations of location economics.

Confronting uneven State enforcement of U.S. trade regulations, and asymmetrical wheat trade regulations, Canada and the United States negotiated an agreement in 1998 that improved U.S. access to Canadian markets and allowed for the careful monitoring of trade. However, U.S. wheat is not moving to Canada in any significant volume. During 1991-94, U.S. wheat exports to Canada averaged 21,250 metric tons per year, but they equaled only 496 metric tons in 2000 and just 20 metric tons in 1999.

Although U.S. wheat exports to Canada in the form of grain have been insignificant despite CFTA and

NAFTA tariff reductions, wheat product exports have continued to grow. Tariff reductions helped increase U.S. wheat product exports to Canada. Canada removed its import licensing requirement for U.S. wheat and wheat products in 1991 under the calculations of CFTA Article 705.

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Rice

Policy Changes Resulting from NAFTA

United States. Prior to 1995, the general U.S. tariff on imported rice ranged from 0.69 to 3.3 cents per kilogram, depending on the type of rice. Under the URAA, the United States reduced this tariff by 36 percent over the 6-year period that ended on January 1, 2001. For example, the MFN tariff for regular milled white rice dropped from 2.2 to 1.4 cents per kilogram. Under NAFTA, the United States is phasing out its tariff on Mexican rice over the 9-year period that ends on January 1, 2003.

Mexico. Before NAFTA, Mexico imposed import tariffs for the United States of 20 percent on brown and milled rice and 10 percent on rough and broken rice. In 1990, the tariff rate for milled and brown U.S. rice was raised from 10 percent to 20 percent in response to demands from Mexican millers who wanted to maintain a high mill utilization rate. Under NAFTA, Mexico is gradually lowering these rates to zero over the 9-year period that ends on January 1, 2003. For 2001, the tariff rates are 4 percent for brown and milled rice and 2 percent for rough and broken rice.

Canada. Under CFTA and NAFTA, Canada steadily reduced its tariffs on milled and semi-milled rice from the United States, until these tariffs reached zero on January 1, 1998.

Under URAA, Canada reduced its tariff for broken rice and whole or semi-milled rice from countries with MFN status from 5.51 to 3.53 Canadian dollars per metric ton over the 6-year period that ended on January 1, 2001. Canada's MFN tariff for 2001 is equivalent to about 2 percent of the average price of Thailand's high quality long grain rice (100 percent, Grade B).

Canada does not levy an import tariff on brown or rough rice. Canada produces no rice domestically, and Mexico does not export rice to Canada.

Rice Trade under CFTA and NAFTA

U.S. rice exports to Canada and Mexico have increased 81 percent by volume and 54 percent by value since the inception of NAFTA, even though total U.S. rice exports have not exhibited any long-term growth. The volume of rice exports to Mexico in 2000 was more than three times the volume of rice exports to Canada. U.S. rice trade with Mexico has continued the general increase that was evident before January 1994 when NAFTA went into effect.

Before the mid-1980's, the Mexican government severely restricted the importation of rice through tariffs and quotas. Since 1982, Mexico has undergone phenomenal changes in its economic policy, becoming much more market-oriented. By the mid-1980's, the government began to phase out its protectionist policies and introduced major policy reforms to reduce the role of government in the economy. In 1986, Mexico joined the General Agreement on Tariffs and Trade (GATT) and subsequently reduced import tariffs and import requirements for many commodities as a first step to liberalizing trade. The combined effects of this unilateral trade liberalization and a drought were responsible for Mexico importing a record 189,000 metric tons (milled basis) of rice in 1989, with the United States as the sole supplier. In 2000, the United States exported more than 560,000 metric tons (product-weight basis) of rice to Mexico, making it the largest single-country foreign market for U.S. rice that year. On a milled-equivalent basis, over two-thirds of U.S. rice sales to Mexico are rough rice.

The United States currently has a virtual monopoly on rice trade with Mexico, primarily due to phytosanitary restrictions on Asian rice that Mexico enacted in 1993. During 1990-93, Mexico imported substantial quantities of Asian rice, but Mexico's crop was diminished by infestations believed to have come from rice imported from Asia. Citing fears of contamination from the Khapra beetle and other infestations, the Mexican government banned the importation of all Asian rice on September 20, 1993. The Khapra beetle was eradicated more than 40 years ago in the United States, and no known U.S. infestation currently exists.

In December 1996, Mexico dropped its absolute ban on Asian rice in compliance with the WTO. Asian rice access to Mexico is now subject to a detailed risk analysis of diseases and pests. Rice imports from Asia are impractical under these rules. Besides the United States, Argentina and Uruguay are the only other major foreign suppliers of rice to the Mexican market. Per capita rice consumption in Mexico has risen slowly since the mid-1990's, reaching almost 13 pounds in 2000, but it is still less than half the U.S. level. Even today, Mexico has one of the lowest per capita consumption rates of any Latin American country, implying substantial room for growth. Rice generally has been the most expensive food grain in Mexico, with consumer prices increasing faster than those for other staple foods.

The United States is the largest supplier of rice to Canada, accounting for about 70 percent of Canada's annual imports. Thailand supplies most of the rest. Canada also purchases high-priced basmati rice from India and Pakistan and small quantities of high-quality japonica from Italy. Imports from these non-U.S. sources increased during the 1990's.

Canada's rice imports have exhibited noticeable growth since the late 1980's, after being nearly stagnant during the prior decade. U.S. rice exports to Canada reached a record 183,127 metric tons in 1999 and declined slightly to 179,954 metric tons in 2000, compared with less than 94,000 metric tons in 1988. More than half of these exports are high-quality, regular milled, long-grain white rice. Brown rice and parboiled rice each account for nearly 20 percent. Canada's imports of rough rice are negligible.

With no domestic rice production, Canada's import expansion can be traced primarily to population growth, the changing tastes of consumers, and the ethnic composition of recent immigrants. Although growth in per capita use has recently slowed, per capita consumption is now almost 18 pounds, more than twice the level estimated in 1985. Lower tariffs on U.S. rice under CFTA and NAFTA and on rice from other countries under URAA have slightly reduced the price of rice in Canada, likely accounting for a small share of the increase in rice consumption since 1989. However, the tariff on U.S. rice was not very high when CFTA went into effect - less than 2 percent of the price of imported U.S. rice - and overall, rice is an inexpensive food in Canada.

Trade Issues

Mexican Phytosanitary Requirements for Asian Rice. On December 12, 1996, the Mexican government issued new import regulations that specified diseasefree requirements for rice of Asian origin and required extensive quarantines for rice from some countries. While the new regulations have not yet directly opened the market to Asian rice, they potentially pave the way for disease-free Asian varieties to enter Mexico. Asian access is subject to the presentation of a detailed pest risk analysis indicating that the applying country is free of certain pests and diseases. Although Thailand has long pressured Mexico on this point, there is no indication that any Asian country has presented the proper documentation as of yet.

Mexican Detention of Railcars with U.S. Paddy Rice. In November 1998, Mexican authorities detained a number of railcars containing U.S. paddy rice destined for Mexican mills, citing phytosanitary concerns. In early December 1998, the Mexican government released the railcars.

Mexico Initiates Antidumping Investigation of U.S. Milled Rice. In December 2000, the Mexican government began an antidumping investigation concerning long-grain milled rice from the United States. Mexican millers allege that U.S. long-grain milled rice is being sold to Mexican buyers at prices less than those prevailing in the United States for comparable products. Preliminary results of Mexico's investigation will be released in late June, indicating whether or not any antidumping duties will be applied to U.S. exports of long-grain milled rice.

NAFTA's Impact on Rice Trade

Because Mexico's phytosanitary requirements effectively ban rice imports from Asia, NAFTA has had only a minor positive effect on U.S. rice exports to Mexico. However, without these strict phytosanitary standards, the tariff advantage enjoyed by the United States under NAFTA would be very important.

Given the unique U.S. position in the Mexican rice market, it is worthwhile to consider the potential impact on various classes of rice should Asian exporters find a way to satisfy Mexican phytosanitary concerns. In the market for milled rice, Thailand and Vietnam would likely have a price advantage over the United States, even when the transportation cost of shipping rice from Asia to Mexico is taken into account. However, other factors would favor U.S. milled rice over Asian rice. First, improvements in the transportation system to move rice from the United States to Mexico have increased the competitiveness of U.S. producers. Second, Mexican consumers seem to prefer the high quality and consistency of U.S. rice over lower-quality Asian rice and even high-quality Thai rice. Finally, U.S. rice can be shipped to Mexico in a much shorter time and in much smaller amounts

than rice from Thailand or Vietnam. However, if both the current ban and NAFTA did not exist, it is quite conceivable that Thailand and Vietnam would export substantial quantities of milled rice to Mexico at prices below the current U.S. level.

In the rough rice market, the United States would still be competitive, even if Asian exporters satisfactorily addressed Mexico's phytosanitary concerns. Several factors are responsible. First, neither Thailand nor Vietnam export rough rice, preferring to gain the value added from milling. In fact, no major rice-exporting country in Asia allows the shipment of rough rice. Although the major South American exporters export some rough rice, these shipments are currently quite small. Second, Mexico places a lower import tariff on rough rice than on milled rice. And third, Mexican millers prefer to import rough rice in order to maintain a high degree of mill utilization and to avoid competition with low-priced foreign milled rice.

However, with the upcoming elimination of Mexico's preferential tariff on rough rice in 2003, it is not obvious whether Mexico will continue to import primarily U.S. rough rice or shift to importing mostly milled rice, and if so, from which source. Although the United States would retain its transportation advantage, greater competition from South American exporters in the milled or rough rice market is possible, especially should the proposed Free Trade Agreement of the Americas (FTAA) be completed and implemented. Both Argentina and Uruguay currently ship small amounts of rice to Mexico.

The impact of CFTA and NAFTA on U.S. rice exports to Canada is quite small, probably less than 1 percent in volume. Continued tariff reductions under NAFTA have helped the United States remain the major rice exporter to Canada, and perhaps they have expanded U.S. sales to Canada by a very small amount. Although NAFTA gives the United States a price advantage over other exporters, most Asian rice exporting countries - except Thailand - currently ship rice of a quality lower than that favored in highincome countries. Rice shipped from Burma and Vietnam, as well as non-basmati rice from Pakistan and India, does not compete with U.S. rice in highquality markets like Canada, and it is highly unlikely that such competition would have occurred in the absence of CFTA and NAFTA. With the United States already Canada's principal supplier of high-quality

long-grain rice, only a small share of expanding sales can be attributed to NAFTA.

However, Asian rice-exporting countries do possess a cost advantage over U.S. producers. If any of these exporters significantly improve the quality of their rice - by reducing the percent broken, improving their milling structure, or upgrading their drying, transporting, and packaging facilities - then NAFTA would become more important to maintaining the U.S. market position. Thailand already exports high-quality long grain rice as well as jasmine, its high-priced specialty rice. U.S. prices are generally well above prices for Thai rice of comparable quality. Packaging, marketing, quality, and lower transportation costs are likely more important to U.S. rice sales to Canada than the elimination of U.S.-Canada rice tariffs under CFTA and NAFTA.

For the U.S. rice sector, NAFTA's primary effects have been increased exports, slightly higher U.S. prices, and a fractional increase in production due to the higher prices. Since rough rice accounts for the bulk of the increase in U.S. exports, little if any expansion in mill employment has resulted from NAFTA. However, very small increases in employment resulting from greater handling and transportation may have resulted due to larger export volumes.

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Oilseeds and Oilseed Products

Policy Changes Resulting from NAFTA

United States. Prior to 1989, the United States levied the following general tariffs on imported oilseeds and oilseed products:

Soybeans Soybean oil Soybean meal Sunflower seeds Rapeseed Rapeseed meal Canola oil Flaxseed zero 22.5 percent 0.3 cents per pound zero 0.4 cents per bushel 0.12 cents per pound 7.5 percent 22 cents per bushel Under CFTA, the United States immediately eliminated its tariffs for Canada on rapeseed, rapeseed meal, canola oil, and flaxseed on January 1, 1989.¹ Also, the United States phased out the tariffs on soybean oil and soybean meal over the 9-year period that ended on January 1, 1998.

Under NAFTA, the United States immediately eliminated its tariffs for Mexico on soybean meal, rapeseed, rapeseed meal, canola oil, and flaxseed on January 1, 1994. In addition, the United States is phasing out its tariff on Mexican soybean oil over the 9-year period that ends on January 1, 2003. For 2001, the soybean tariff rate is 2 percent.

Mexico. Prior to 1994, Mexico levied a seasonal tariff of 15 percent on U.S. soybeans. Under NAFTA, Mexico immediately reduced this tariff to 10 percent and narrowed the dutiable season from August 1-January 31 to October 1-December 31. In addition, Mexico is phasing out this tariff over the 9-year period that ends on January 1, 2003. For 2001, the seasonal tariff equals 2 percent.

Mexico also levied tariffs of 15 percent on soybean meal, 10 percent on crude soybean oil, and 20 percent on refined soybean oil before NAFTA. Under the agreement, Mexico is phasing out these tariffs for the United States, along with a tariff on minor oilseed meals and oils, over the 9-year period that ends on January 1, 2003. For 2001, the tariff rates equal 3 percent for soybean meal, 2 percent for crude soybean oil, and 4 percent for refined soybean oil.

Canada. Prior to 1989, Canada levied tariffs of 7.5 percent on soybean oil and 10 percent on other vegetable oils. Rapeseed, soybeans, soybean meal, and other meals entered duty-free. Under CFTA and NAFTA, Canada gradually eliminated the tariffs on soybean oil and other vegetable oils from the United States over the 9-year period that concluded on January 1, 1998. Under NAFTA, Canada immediately eliminated the same tariffs for Mexico on January 1, 1994.

Oilseed Trade under CFTA and NAFTA

U.S. oilseed exports to Mexico climbed from 2.0 million metric tons in 1993 to 3.7 million metric tons in 2000, a gain of 89 percent. Over the same period, the value of these exports rose 62 percent to \$766 million. Soybeans comprise about 95 percent of U.S. oilseed exports to Mexico and account for nearly all the growth in these exports. Moreover, Mexico's share of U.S. soybean exports increased from 9 percent in 1993 to 13 percent in 2000, in both value and volume terms. In contrast, U.S. oilseed imports from Mexico are negligible and consist primarily of sesame seed.

The volume of U.S. oilseed exports to Mexico dropped 8 percent in 1995 in the wake of the peso crisis and subsequent recession. These difficult conditions sharply contracted consumer demand for poultry, pork, and dairy products, which in turn reduced crushing demand for oilseed meals used to feed Mexican live-stock and dairy animals. As the Mexican economy recovered in 1996, U.S. oilseed exports to Mexico swelled 29 percent in volume, while higher prices raised export value by 54 percent.

During 1997-2000, U.S. oilseed exports to Mexico experienced moderate but sustained growth, with annual increases in volume ranging from 5 to 12 percent. However, as greater world supplies depressed oilseed prices, these exports declined in value from \$917 million in 1997 to \$727 million in 1999. In 2000, increased volume offset a decrease in price, boosting export value to \$766 million. Mexico also is importing a steadily increasing amount of Canadian rapeseed, which competes with U.S. exports.

New crushing facilities in Mexico have reduced the country's dependence on meal imports, even though U.S. soybean meal is increasingly affordable due to NAFTA's gradual elimination of Mexico's tariff on that product. Consequently, U.S. soybean meal exports to Mexico dropped from 365,433 metric tons in 1994 to 138,592 metric tons in 2000, a decrease of 62 percent. U.S. soybean meal still accounts for the bulk of Mexican protein meal imports, however.

Between 1993 and 1998, U.S. vegetable oil exports to Mexico doubled because of increasing consumption, declining tariffs, and larger U.S. supplies. The peso devaluation in December 1994 and short domestic oilseed supplies also hurt Mexican processors. Once the peso began to recover and tariffs for soybeans

¹ Canola seed is a variety of the oil crop rapeseed. Rapeseed oil is used in industrial applications such as lubricants, rubber, plastics, and nylon. Canola was bred to have much lower levels of toxic compounds in its oil and meal than conventional rapeseed, making the oil safe for food applications and the meal better for livestock feed. The U.S. Food and Drug Administration (FDA) approved the use of canola oil in the United States in 1985.

declined, the health of Mexico's small domestic oil processing industry started to improve, making domestic processors more competitive with imported oils. Still, U.S. vegetable oil exports to Mexico equaled 430,279 metric tons in 2000, just 3 percent off the record set in 1998. In addition, the United States has gained a larger share of the Mexican vegetable oil market, as greater canola seed imports have supplanted imports of canola oil from Canada.

Between 1988 and 2000, U.S. oilseed and oilseed product exports to Canada increased from \$263 million to \$566 million. With the prominent exception of vegetable oils, this change generally is not attributable to CFTA and NAFTA, since many U.S. oilseeds and oilseed products entered Canada dutyfree prior to CFTA.

U.S. soybean exports to Canada tend to fluctuate sometimes wildly - depending on Canada's domestic harvest and crush margins. For instance, record Canadian crops of soybeans and rapeseed in 1994 dropped the volume of U.S. soybean exports to Canada by nearly 90 percent, compared with 1993. Improved crushing margins in Canada have encouraged greater U.S. soybean exports to Canada, with volumes of 327,027 metric tons in 1999 and 325,024 metric tons in 2000.

Canada is one of the largest markets for U.S. soybean meal, representing 10-15 percent of total U.S. exports. In response to rising Canadian exports and domestic consumption, U.S. exports to Canada have climbed gradually over the past several years, from 650,178 metric tons in 1996 to a record 808,865 metric tons in 2000. These exports were valued at \$161 million in 2000. This trade is well established, as Canada did not levy a tariff on U.S. soybean meal prior to CFTA. For instance, U.S. soybean meal exports to Canada equaled 706,539 metric tons in 1988, with a value of \$179 million.

U.S.-Canada vegetable oil trade is a major beneficiary of CFTA and NAFTA, and this trade is substantial in both directions. U.S. vegetable oil exports to Canada increased from 36,798 metric tons in 1988 to 314,930 metric tons in 2000. Canada's share of total U.S. vegetable oil exports (in volume) grew from 2 percent to 15 percent over the same period. U.S. vegetable oil imports from Canada (primarily canola oil) rose from 147,619 metric tons to 635,879 metric tons over the 1990-2000 period. In 2000, these imports were valued at \$322 million. The two major U.S. oilseedprocessing companies have plants in Canada and Mexico, but not a majority of capacity in either.

The United States is the largest importer of Canadian protein meals. Under CFTA and NAFTA, U.S. imports of oilseed meals - primarily canola meal - have increased more than five-fold, from 235,527 metric tons in 1998 to 1.2 million metric tons in 2000. By liberalizing vegetable oil trade, the expansion of oilseed crushing in Canada has generated more oilseed meals, which are primarily sold to cattle feedlots in the United States. In 2000, U.S. canola meal imports from Canada equaled 1.2 million metric tons, with a value of \$137 million.

The expansion of oilseed crushing in Canada has led to greater availability of Canadian canola meal and oil in the U.S. market. Despite a sharp reduction in Canadian canola production in 1996, U.S. imports of Canadian canola oils and meals, as well as rapeseed itself, have continued to grow. High prices for protein meal pushed U.S. canola meal imports close to 1 million metric tons in 1996 and 1997, and imports have exceeded this mark each year since. Even record U.S. canola acreages during 1996-98 could not ease the relatively tight U.S. vegetable oil market, encouraging greater imports of seed and oil from Canada.

The appreciation of the U.S. dollar vis-à-vis the Canadian dollar since 1998 also has facilitated larger volumes of imports. This appreciation has been coupled with much lower prices for protein meals, cutting the value of U.S. oilseed meal imports from Canada by 7 percent in 1998 and 20 percent in 1999. In 2000, imports rebounded to \$146 million (an increase of 9 percent), as increased volume offset a decrease in price.

Trade Issues

There have been no major trade issues concerning oilseeds or oilseed products among the three NAFTA countries.

NAFTA's Impact on Oilseed Trade

NAFTA's reduction of soybean tariffs increased U.S. soybean exports to Mexico only marginally above what would have occurred without the agreement. Instead, NAFTA's major influence on soybean trade is indirect. Lower barriers to U.S. feed grains have greatly expanded the Mexican feeding industry, thereby creating a much larger demand for protein meal and the imported soybeans needed to produce it. Mexican oilseed production has plummeted under import pressure, although chronic pests and reduced government farm supports also have eroded the incentives for domestic production. NAFTA tariff reductions have done little to increase U.S. soybean meal exports to Mexico because of expanded Mexican crushing of U.S. soybeans.

In NAFTA's first 7 years, Mexico increased its share of edible oil that came from crushing imported oilseeds, a trend boosted by slightly greater tariff reductions for soybeans than for competing oils and meals. The majority of Mexican oil demand is now satisfied by oil crushed from imported oilseeds rather than imported oils. Still, NAFTA has modestly increased U.S. vegetable oil exports to Mexico above what would have occurred without the agreement.

CFTA and NAFTA have not had a major impact on U.S.-Canada trade in oilseeds and oilseed meals, mainly because this trade was quite liberal before CFTA. Much of the expansion in Canada's net trade is due to a larger surplus of canola meal (mostly used to feed cattle) and a deficit of soybean meal (mostly used to feed swine and poultry). Of all the oilseeds and oilseed products, CFTA and NAFTA have most affected U.S.-Canada trade in vegetable oil. The growth of this trade has modestly contributed to lower U.S. prices for domestically produced oilseeds. Between 1989 and 2000, Canadian vegetable oil output increased 0.9 million tons, while South American output expanded by 4.8 million and Southeast Asian output by 12.4 million. Therefore, gains in Canadian output have had a comparatively small impact on the world vegetable oil market. U.S. imports of Canadian vegetable oil are estimated to be 3-5 percent higher than what would have occurred without CFTA and NAFTA. The increase in U.S. vegetable oil exports to Canada as a result of CFTA is larger in proportionate terms but considerably smaller in absolute terms.

U.S. soybean crushing capacity expanded by 17 percent between 1993 and 1999, but employment in the U.S. oilseed crushing industry dropped from 10,700 in 1992 to 9,500 in 1997 (U.S. Bureau of the Census, *1997 Economic Census*). Employment has steadily declined from 17,000 in 1980, which suggests an ongoing structural change in the industry—increasing automation—that is not related to NAFTA. In Canada, oilseed processing expanded sharply over the last decade as domestic oilseed production doubled. In 1987, Canada had a daily oilseed processing capacity of 6,850 metric tons. Today, there are 11 oilseed processing plants in Canada with nearly 1,200 employees and an operating capacity of 16,865 metric tons per day.

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Peanuts and Peanut Products

Policy Changes Resulting From NAFTA

United States. Prior to NAFTA and URAA, peanut imports were limited by quotas established under Section 22 of the Agricultural Marketing Act of 1932. Under NAFTA, the United States established a TRQ for Mexican peanuts (shelled/in-shell). The initial annual quota for 1994 was 3,377 metric tons, with over-quota tariffs of 120 percent for shelled peanuts and 186.1 percent for in-shell. The TRQ increases 3 percent each year, and the over-quota duties are scheduled to be phased out by January 1, 2008. For 2001, the TRQ equals 4,153 metric tons, and the over-quota tariffs are 81.4 percent for shelled peanuts and 123 percent for in-shell peanuts.

U.S. peanut butter imports from Canada are governed by URAA. Under the market access commitments of this agreement, the United States established a TRQ on imports of peanut butter/paste, with most allocated to Canada and Argentina. The Canadian portion of the TRQ is set at 14,500 metric tons. Under NAFTA, there are no quantitative restrictions on U.S. imports from Mexico of peanut butter/paste manufactured from Mexican-grown peanuts. However, the agreement's rules of origin stipulate that peanuts products imported from Mexico must be made from Mexican-grown peanuts in order to qualify for NAFTA benefits.

Mexico. Prior to 1994, Mexico had no tariff or quantitative restrictions on peanuts, but it did maintain a 20percent tariff on peanut butter. Under NAFTA, Mexico is phasing out its tariff on U.S. peanut butter over the 9-year period that ends on January 1, 2003.

Canada. Canada has no restrictions or tariffs on peanut imports. However, prior to CFTA, it levied tariffs of 44.10 Canadian dollars per metric ton on peanut butter and 7.5 percent on peanut oil. Under CFTA and NAFTA, Canada gradually eliminated these tariffs for the United States over the 9-year period that concluded on January 1, 1998. Under NAFTA, Canada immediately eliminated its tariffs on peanut oil and peanut butter from Mexico on January 1, 1994.

Peanut Trade under CFTA and NAFTA

During 1994-2000, U.S. exports of peanuts and products to Canada and Mexico totaled over 900,000 metric tons on an in-shell basis, with a value of \$642 million. Raw peanuts accounted for the vast majority of these exports in both the Canadian and the Mexican cases. Of the 861,000 metric tons of raw peanuts shipped to these countries during this period, Canada purchased 70 percent. Although U.S. exports of peanut products to Canada and Mexico have increased under NAFTA, they accounted for only 5 percent of the volume and 10 percent of the value of U.S. peanut and peanut product shipments to these two countries during 1994-2000. Peanut butter and paste shipments totaled nearly 39,000 metric tons on an in-shell basis (\$39 million) over the 7-year period and accounted for 81 percent of total U.S. peanut product exports (62 percent of value).

U.S. imports of peanuts and peanut products from Mexico and Canada have increased under NAFTA. During 1994-2000, this trade totaled 249,000 metric tons on an in-shell basis, with a value of \$188 million. Thus, over the 7-year period since NAFTA's implementation, the United States has had a trade surplus of nearly 660,000 metric tons of peanuts and peanut products, with a net gain of \$455 million from peanut trade. Peanut products, primarily peanut butter and paste, make up the majority of U.S. imports in this category from Canada and Mexico. The United States imported a total of 212,000 metric tons of peanut butter and paste from Canada and Mexico during 1994-2000, accounting for 85 percent of total U.S. imports of such products.

In the first year of NAFTA (1994), U.S. peanut exports to Mexico (shelled and in-shell) equaled 26,004 metric tons, a 76-percent increase above the previous year's level. Exports remained at approximately this level during Mexico's recession-marred year of 1995. During 1996-99, exports held fairly steady, with an annual average of 38,580 metric tons. In 2000, this trade established a new record of 53,161 metric tons, with a value of \$33 million.

The TRQ that the United States established for Mexican peanuts enabled Mexico to export substantial quantities of raw peanuts to the United States for the first time. In 1994, these exports totaled 2,543 metric tons, compared with the initial TRQ of 3,377 metric tons. Despite the expanding TRQ, this trade has experienced both increases and decreases from one year to the next. For example, exports dropped to 4,442 metric tons in 1999, a decrease of 21 percent compared with the previous year's level, as Mexico increased its shipments of peanut butter and paste. In 2000, Mexican raw peanut exports to the United States established a new record of 6,512 metric tons, with a value of \$4 million.

In July 1998, Mexico began to ship peanut butter/paste to the United States. (A small amount also was exported in 1994.) There are no quantitative limits on this trade, except that the product must be manufactured from peanuts grown in Mexico. In 2000, Mexico shipped 2,487 metric tons of peanut butter/paste to the United States, representing 13 percent of total U.S. imports. According to USDA's Foreign Agricultural Service, these imports are expected to grow in the future, as peanut butter/paste produced in Mexico enjoys a price advantage over U.S. product made with higher priced peanuts grown under the U.S. peanut program. Still, these imports are expected to supply only a small portion of U.S. consumption.²

Shelled or in-shell peanuts represent the majority of U.S. peanut exports to Canada. Since Canada produces no peanuts, imports are necessary to fill domestic demand. Between 1989 and 1992, U.S. peanut exports (shelled and in-shell) to Canada increased from 46,521 to 77,811 metric tons. During 1994-2000, these shipments averaged 86,141 metric tons per year on an in-shell basis.

During the first 9 years of CFTA and NAFTA, U.S. exports of peanut butter/paste to Canada increased from 127 metric tons in 1989 to 4,308 metric tons in 1997. Since then, exports have declined steadily, falling to 1,806 metric tons in 2000. Corresponding U.S. imports from Canada averaged 14,320 metric tons per year during 1995-2000, slightly less than the lower-tariff level specified by the U.S. TRQ.

Trade Issues

There have been no major disputes involving peanuts. However, a Section 22 action on peanut butter was considered in 1994, prior to implementation of the Uruguay Round TRQ and its application to Canada.

 ² U.S. Department of Agriculture, Foreign Agricultural Service,
"Oilseeds: World Markets and Trade," February 2001,
http://www.fas.usda.gov/oilseeds/circular/2002/01-02
febcov.htm>.

NAFTA's Impact on Peanut Trade

Although NAFTA has had a direct impact on U.S.-Mexico peanut trade, other factors such as the peso devaluation and loss of access to credit by Mexican importers probably had a greater influence during the early years of the agreement. Since the implementation of NAFTA, U.S. peanut exports to Mexico have increased, but since Mexico had no tariff or other import restrictions on this trade prior to 1994, the increase cannot be directly attributed to the agreement.

Undoubtedly, NAFTA has increased U.S. peanut imports from Mexico up to the TRQ levels. In 2000, these imports were almost 5 times the level of total U.S. peanut imports in 1993. Attributing the entire increase to NAFTA would suggest that these imports are nearly 500 percent greater in volume (in comparison to a very low base) than what would have occurred without the agreement. The bulk of this growth took place in the first 2 years of the agreement, when Mexican exports expanded to fill the amount permitted under the TRQ. The TRQ increases 3 percent per year, so future gains will be limited to that rate until the over-quota tariff falls enough to make Mexican peanuts competitive with domestic production.

CFTA and NAFTA have not affected U.S.-Canada peanut trade. The U.S. peanut program allows the export of surplus peanuts but requires that any peanut products exported from the United States must be manufactured from quota peanuts. Canada produces no peanuts, and its peanut butter/paste exports to the United States generally do not exceed the lower-tariff level associated with the URAA-specified TRQ.

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