



Economic Impacts of U.S. and Texas Agricultural Exports to Canada and Mexico

CNAS Issue Brief 2019-01

July 8, 2019

Introduction

The United States-Mexico-Canada (USMCA) trade agreement was signed by the three countries on September 30, 2018 and awaits the ratification by the legislative branch in the United States and Canada as Mexico has already ratified the agreement. Once ratified, the USMCA will replace the North American Free Trade Agreement (NAFTA) initiated on January 1, 1994. USMCA is very similar to NAFTA on agricultural trade. Among the main changes/updates are elimination of Canada's milk classes 6 and 7, setting standards for agricultural biotechnology, commitment to reduce trade distorting policies, fair treatment for quality requirements for wheat, strengthening disciplines for science-based sanitary and phytosanitary measures, new procedural safeguards for recognition of new geographic indicators, market access for certain cheese names, and new protections for proprietary food formulas.

The United States is the largest exporter of farm products and those exports account for about 35 percent of farm income, up from 28 percent in 1996; hence the importance of agricultural trade for U.S. farm income. U.S. agricultural and food exports have increased from \$46.2 billion in 1994 to \$139.6 billion in 2018, a 202 percent increase. During the same period, U.S. agricultural and food exports to Canada and Mexico grew from \$10 billion to \$39.7 billion, a 297 percent increase, making Canada and Mexico the first and second largest markets for U.S. agricultural exports (See Appendix 1 for details of these exports). In terms of total trade Mexico and Canada have become the first and second agricultural trade partner for the United States with a total trade value of \$44.9 billion and \$43.8 billion in 2018, respectively.

Canada and Mexico are important markets for Texas agricultural exports as well. In 2018, Texas exports to Mexico totaled \$863.3 million of which \$344.1 million were animal products and \$519.2 were plant products. The top three Texas agricultural exports to Mexico were cotton, \$139.37 million, followed by beef and veal, and other horticultural products, \$138.7 and \$82.8 million respectively (Appendix 1). Texas agricultural exports to Canada totaled \$903.3 million of which \$234 million were animal products and \$669.3 were plant products. The top three Texas agricultural exports to Canada were other horticultural products, \$266.6 million, followed by beef and veal at \$97.7 and food preparations at \$69 million.

Economic Impacts

The economic impacts U.S. and Texas agricultural exports to Canada and Mexico were estimated using IMPLAN, an economic input/output model. Economic multipliers for each sector of the economy were used to estimate how agricultural export sales affects business activity, income and employment in other sectors of the economy that supply inputs and services to the agricultural industry.

IMPLAN estimates indicate that the total business activity supporting U.S. agricultural exports to Canada and Mexico was \$126.2 billion in 2018 (Table 1). This includes farm gate level business activity of \$39.7 billion and off-farm business activity of \$86.5 billion. Farm and related sector value added, or income, generated by agricultural exports is \$54.2 billion, while another \$32.3 billion is generated off-farm in input supply, transportation, energy, finance, real estate, health care, wholesale/retail trade, and eating and drinking places. U.S. agricultural exports to Canada and Mexico employs directly or indirectly 634,813 people. Employment used to produce U.S. agricultural products to be exported to Canada and Mexico is estimated to be 162,951 jobs. The balance of employment, or 471,862 jobs, is located in other sectors including other agriculture, 72,945 jobs; business services, 36,977 jobs; healthcare, 26,013 jobs;

transportation and warehousing, 25,572; retail, 24,415 jobs. The remaining jobs are spread among numerous sectors.

Moreover, IMPLAN estimates indicate that the total business activity supporting Texas agricultural exports to Canada and Mexico was \$3.7 billion in 2018 (Table 1). This includes farm gate level business activity of \$1.8 billion and off-farm business activity of \$2 billion. Farm and related sector value added, or income, generated by agricultural exports is \$1.3 billion, while another \$656 million is generated off-farm in input supply, transportation, energy, finance, real estate, health care, wholesale/retail trade, and eating and drinking places. Texas agricultural exports to Canada and Mexico employs directly or indirectly 22,972 people. Employment used to produce Texas agricultural products to be exported to Canada and Mexico is estimated to be 9,270 jobs. The balance of employment, or 13,702 jobs, is located in other sectors including other agriculture, 1,959 jobs; business services, 857 jobs; transportation and warehousing, 850 jobs; retail, 601; healthcare, 589 jobs. The remaining jobs are spread among numerous sectors.

Table 1. Estimates Impacts of 2018 U.S. and Texas Agricultural Exports to Canada and Mexico

Estimated Impacts of 2018 U.S. Exports to Canada			Estimated Impacts of 2018 Texas Exports to Canada		
Impact Type	Output	Employment	Impact Type	Output	Employment
	<i>Million \$</i>	<i>Jobs</i>		<i>Million \$</i>	<i>Jobs</i>
Direct Effect	\$20,683	97,755	Direct Effect	\$903	5,194
Indirect Effect	\$26,478	133,578	Indirect Effect	\$656	4,416
Induced Effect	\$17,218	105,089	Induced Effect	\$317	2,156
Total Effect	\$64,379	336,422	Total Effect	\$1,876	11,766
Estimated Impacts of 2018 U.S. Exports to Mexico			Estimated Impacts of 2018 Texas Exports to Mexico		
Impact Type	Output	Employment	Impact Type	Output	Employment
	<i>Million \$</i>	<i>Jobs</i>		<i>Million \$</i>	<i>Jobs</i>
Direct Effect	\$19,019	65,196	Direct Effect	\$863	4,075
Indirect Effect	\$27,742	141,283	Indirect Effect	\$668	4,819
Induced Effect	\$15,057	91,912	Induced Effect	\$339	2,312
Total Effect	\$61,818	298,391	Total Effect	\$1,871	11,206
Estimated Impacts of 2018 U.S. Exports to USMCA			Estimated Impacts of 2018 Texas Exports to USMCA		
Impact Type	Output	Employment	Impact Type	Output	Employment
	<i>Million \$</i>	<i>Jobs</i>		<i>Million \$</i>	<i>Jobs</i>
Direct Effect	\$39,702	162,951	Direct Effect	\$1,767	9,270
Indirect Effect	\$54,220	274,861	Indirect Effect	\$1,324	9,234
Induced Effect	\$32,275	197,001	Induced Effect	\$656	4,468
Total Effect	\$126,197	634,813	Total Effect	\$3,747	22,972

Summary

Agricultural exports to Canada and Mexico are very important for the United States and Texas. Total economic activity for U.S. agricultural exports to Canada and Mexico were \$126.2 billion in 2018 accounting for a total of 634,813 jobs. Total economic activity for Texas agricultural exports to Canada and Mexico were over \$3.7 billion, supporting 22,972 jobs.

For further information, please contact Luis Ribera, Extension Economist and Director, Center for North American Studies, Department of Agricultural Economics, Texas A&M University, College Station, Texas 77843-2124. Telephone: 979-845-3070; e-mail: lribera@tamu.edu. Contributing to this report were Flynn Adcock, International Program Coordinator, and Dan Hanselka, Extension Program Specialist.

Appendix 1. U.S. and Texas Agricultural Exports to Canada and Mexico, 2018.

	U.S. Exports to Canada - \$1,000	U.S. Exports to Mexico - \$1,000	Texas Exports to Canada - \$1,000	Texas Exports to Mexico - \$1,000
Beef & Veal	\$745,327	\$1,058,376	\$97,691	\$138,722
Pork	\$757,173	\$1,261,369	\$7,091	\$11,812
Hides & Skins	\$94,616	\$135,347	\$9,657	\$13,814
Beef Cattle	\$149,574	\$35,685	\$20,492	\$4,889
Other Livestock Products	\$447,325	\$548,355	\$26,924	\$33,005
Other Dairy	\$519,718	\$251,160	\$30,319	\$14,652
Butter	\$67,648	\$7,187	\$3,946	\$419
Dry milk	\$13,069	\$667,115	\$762	\$38,917
Cheese	\$51,408	\$387,447	\$2,999	\$22,602
Whey	\$47,294	\$92,470	\$2,759	\$5,394
Broiler Meat	\$269,332	\$496,094	\$19,884	\$36,626
Other Poultry Products	\$321,293	\$647,420	\$11,513	\$23,200
Vegetables, Fresh	\$1,880,322	\$143,371	\$33,080	\$2,522
Vegetables, Processed	\$1,155,788	\$533,365	\$20,334	\$9,383
Fruits, Fresh	\$1,513,433	\$618,573	\$13,880	\$5,673
Fruits, Processed	\$867,045	\$174,098	\$7,952	\$1,597
Pecans	\$71,275	\$166,336	\$8,182	\$19,095
Peanuts	\$170,264	\$97,412	\$15,114	\$8,647
Other Nuts	\$673,597	\$205,028	\$0	\$0
Rice	\$174,571	\$262,286	\$15,588	\$23,420
Wheat	\$20,750	\$668,631	\$617	\$19,870
Corn	\$308,374	\$3,072,221	\$4,042	\$40,267
Sorghum	\$1,127	\$36,459	\$192	\$6,203
Feeds & Other Feed Grains	\$86,559	\$314,309	\$3,068	\$11,142
Grain Products, Processed	\$1,108,748	\$688,831	\$39,974	\$24,834
Soybeans	\$268,980	\$1,722,677	\$256	\$1,638
Soybean Meal	\$353,385	\$671,423	\$336	\$638
Vegetable Oils	\$521,280	\$405,629	\$2,676	\$2,083
Other Oilseeds & Products	\$306,694	\$194,613	\$21,640	\$13,732
Cotton	\$747	\$371,655	\$280	\$139,297
Food Preparations	\$1,076,110	\$356,357	\$68,987	\$22,845
Beverages excl Beer/Wine	\$623,465	\$89,644	\$39,969	\$5,747
Beer	\$114,208	\$151,783	\$7,322	\$9,730
Wine	\$425,372	\$20,252	\$27,269	\$1,298
Sweeteners	\$531,270	\$724,761	\$34,058	\$46,463
Seeds, Field/Garden	\$373,629	\$245,083	\$23,952	\$15,712
Nursery & Greenhouse	\$216,871	\$70,713	\$13,903	\$4,533
Tobacco	\$17,296	\$90,711	\$0	\$0
Other Horticultural Products	\$4,338,270	\$1,334,589	\$266,626	\$82,816
Total Agricultural Exports	\$20,683,207	\$19,018,835	\$903,333	\$863,239
Total Animal Products	\$3,483,777	\$5,588,025	\$234,037	\$344,053
Total Plant Products	\$17,199,430	\$13,430,810	\$669,296	\$519,185

Sources: Global Ag Trade System, FAS/USDA, ERS/USDA, and Center for North American Studies