# Economic Impacts of U.S. and Texas Agricultural Exports to Japan 

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## Introduction

On September 26, 2019, President Trump announced that the United States and Japan have reached an agreement on early achievements from negotiations in the areas of market access for certain agricultural and industrial goods, as well as on digital trade. In this agreement Japan will eliminate or lower tariffs for certain U.S. agricultural products. For other agricultural goods, Japan will provide preferential U.S.-specific quotas. Once this agreement is implemented, over 90 percent of U.S. food and agricultural products imported into Japan will either be duty free or receive preferential tariff access. Japan will lower tariffs on about $\$ 2.9$ billion on beef and pork, eliminate tariffs on $\$ 1.3$ billion of goods, including almonds, certain fruits and nuts, and sweet corn. An additional $\$ 3$ billion will have tariffs eliminated in stages, including wines, cheeses and whey, among others.

The United States is the world's 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 to Japan totaled $\$ 12.9$ billion in 2018, of which $\$ 4.3$ billion were animal products and $\$ 8.7$ billion were plant products (See Appendix 1 for details of these exports). In terms of exports, Japan recently became the third agricultural export market for the United States. The top four U.S. exports to Japan were corn at $\$ 2.8$ billion; beef and veal, $\$ 2.1$ billion; pork, $\$ 1.6$ billion; and soybeans, $\$ 927.3$ million.

Japan is an important market for Texas agricultural exports as well. In 2018, Texas exports to Japan totaled $\$ 598.3$ million of which $\$ 324.7$ million were animal products and $\$ 276.7$ million were plant products. The top four Texas agricultural exports to Japan were beef and veal, $\$ 275.5$ million, followed by corn, $\$ 69.7$ million; processed plant products; $\$ 54.0$ million; and processed grain products, $\$ 31.3$ million (Appendix 1).

## Economic Impacts

The economic impacts of U.S. and Texas agricultural exports to Japan 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 Japan was $\$ 41.6$ billion in 2018 (Table 1). The total effect includes the production of exported agricultural products valued at $\$ 12.9$ billion and supporting business output of $\$ 28.7$ billion. Of the supporting output, the indirect effect of $\$ 18.9$ billion is for purchases of inputs required to support the production of the exported products, including other agricultural sectors, transportation, wholesale, business services, real

[^0]estate, and financial services. An additional $\$ 9.8$ billion of induced output is generated by household and related expenditures of income in sectors such as financial services, real estate, and business services as well as health care, retail trade, and eating and drinking places. U.S. agricultural exports to Japan employ, directly and indirectly, 195,832 people. Employment used to produce U.S. agricultural products exported to Japan is estimated to be 37,616 jobs. The balance of employment, or 158,215 jobs, is located in other sectors including other agriculture, 57,188 jobs; business services, 17,723 jobs; retail and restaurants, 15,729; healthcare, 9,226 jobs; transportation and warehousing, 8,374 ; wholesale trade, 8,132 jobs; financial services, 7,338 jobs; and real estate, 6,426 jobs. The remaining jobs are spread among numerous sectors.

Moreover, IMPLAN estimates indicate that the total business activity supporting Texas agricultural exports to Japan was $\$ 1.26$ billion in 2018 (Table 1). This includes direct business activity of $\$ 598.3$ million and supporting business activity of $\$ 661.2$ million. Of these supporting sectors, $\$ 486.3$ million of indirect output is required to support the exports, including other agricultural sectors, transportation, wholesale, business services, real estate, and financial services. An additional $\$ 174.9$ million in induced output is generated by household and related expenditures of income in sectors such as financial services, real estate, and business services as well as health care, retail trade, and eating and drinking places. Texas agricultural exports to Japan directly and indirectly employ 6,371 people. Employment used to produce Texas agricultural products to be exported to Japan is estimated to be 1,838 jobs. The balance of employment, or 4,533 jobs, is located in other sectors including other agriculture, 2,125 jobs; business services, 472 jobs; retail and restaurants, 391 ; transportation and warehousing, 242 jobs; wholesale trade, 228; financial services, 198; and health care, 189.

Table 1. Estimated Economic Impacts of 2018 U.S. and Texas Agricultural Exports to Japan

| Estimated Impacts of 2018 US Exports to Japan | Estimated Impacts of 2018 TX Exports to Japan |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| ImpactType | Output | Employment | ImpactType | Output | Employment |
| Million $\$$ | Jobs |  |  | Million $\$$ | Jobs |
| Direct Effect | $\$ 12,930$ | 37,616 | Direct Effect | $\$ 598$ | 1,838 |
| Indirect Effect | $\$ 18,922$ | 99,315 | Indirect Effect | $\$ 486$ | 3,365 |
| Induced Effect | $\$ 9,792$ | 58,901 | Induced Effect | $\$ 175$ | 1,168 |
| Total Effect | $\$ 41,644$ | 195,832 | Total Effect | $\$ 1,259$ | 6,371 |

## Summary

Agricultural exports to Japan are very important for both the United States and Texas. Total economic activity for U.S. agricultural exports to Japan were $\$ 41.6$ billion in 2018 accounting for a total of 195,832 jobs. Total economic activity for Texas agricultural exports to Japan were $\$ 1.3$ billion, supporting 6,371 jobs.

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

|  | U.S. Exports to Japan <br> $\mathbf{( \$ 1 , 0 0 0 )}$ | Texas Exports to Japan <br> $\mathbf{( \$ 1 , 0 0 0 )}$ |
| :--- | ---: | ---: |
|  |  |  |
| Beef and veal | $\$ 2,102,169$ | $\$ 275,534$ |
| Pork | $\$ 1,629,881$ | $\$ 15,263$ |
| Hides and skins | $\$ 16,066$ | $\$ 1,640$ |
| Other livestock products | $\$ 185,061$ | $\$ 11,139$ |
| Cheese | $\$ 149,371$ | $\$ 8,714$ |
| Butter | $\$ 3,635$ | $\$ 212$ |
| Dry milk | $\$ 54,001$ | $\$ 3,150$ |
| Fluid Milk Manuf | $\$ 63,103$ | $\$ 3,681$ |
| Broiler meat | $\$ 30,281$ | $\$ 2,236$ |
| Other poultry products | $\$ 88,433$ | $\$ 3,169$ |
| Vegetables, fresh | $\$ 108,483$ | $\$ 1,909$ |
| Vegetables, processed | $\$ 579,149$ | $\$ 10,189$ |
| Fruits, fresh | $\$ 317,826$ | $\$ 2,915$ |
| Fruits, processed | $\$ 177,088$ | $\$ 1,624$ |
| Other Tree nuts | $\$ 429,753$ | $\$ 0$ |
| Peanuts | $\$ 31,649$ | $\$ 3,958$ |
| Pecans | $\$ 5,249$ | $\$ 679$ |
| Rice | $\$ 232,114$ | $\$ 14,045$ |
| Wheat | $\$ 717,011$ | $\$ 23,454$ |
| Corn | $\$ 2,813,033$ | $\$ 69,709$ |
| Sorghum | $\$ 67,763$ | $\$ 17,600$ |
| Feeds and other feed grains | $\$ 20,528$ | $\$ 761$ |
| Grain products - processed | $\$ 86,522$ | $\$ 31,313$ |
| Soybeans | $\$ 927,280$ | $\$ 1,218$ |
| Soybean meal | $\$ 147,104$ | $\$ 193$ |
| Vegetable oils | $\$ 43,687$ | $\$ 224$ |
| Other oilseeds and products | $\$ 224,861$ | $\$ 15,866$ |
| Cotton | $\$ 53,443$ | $\$ 23,867$ |
| Tobacco | $\$ 951$ | $\$ 0$ |
| Other plant products (Mostly Manuf) | $\$ 842,442$ | $\$ 54,007$ |
| Total Agricultural Products |  | $\$ 598,267$ |
| Total Animal Products | $\$ 12,929,937$ | $\$ 324,737$ |
| Total Plant Products | $\$ 8,696,001$ | $\$ 276,700$ |
|  |  |  |
|  |  |  |

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


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