



Economic Contribution of Export Trade of Grain and Grain Products

State of Minnesota

Exports of grain and grain products added \$3,175 million in value to the Minnesota economy in 2018, according to an IHS Markit Agribusiness Consulting study commissioned by the U.S. Grains Council.

Economic Contribution Results

- In 2018, Minnesota grain and grain product exports were valued at \$1,740 million – 28% of the overall Minnesota grain and grain products production value.
- The economic “ripple effects” of these grain and grain products exports supported:
 - \$3,175 million in economic output,
 - \$1,095 million in gross state product (GSP), and
 - 12,746 jobs in the state economy.
- For every \$1 million in exports of malt and other barley, sorghum, corn, ethanol, residual milling products, and the corn equivalent of meat exports, 7 jobs and \$0.6 million of GSP are supported within Minnesota.

State of Minnesota			
2018 Economic Contribution ¹ Provided by Select Grain and Grain Products Exports			
Commodity	Jobs	Gross State Product (\$ millions)	Output (\$ millions)
Malting Barley	3	0.3	0.7
Other Barley	2	0.1	0.4
Malt (Barley Equiv.)	32	0.3	7.2
Corn	9,123	756.4	2,046.7
Sorghum	0	0.0	0.0
Ethanol	869	90.9	351.3
Residual Milling Feed Products	884	92.5	357.5
Corn Equivalent of Meat	1,834	152.1	411.4
Total	12,746	1,094.9	3,175.2

¹ Economic contribution is the summation of direct, indirect and induced impacts as defined on page 2.

Note: Numbers may not add due to rounding.

Source: U.S. Grains Council, IMPLAN and IHS Markit Agribusiness Consulting

Economic Contribution of Export Trade of Grain and Grain Products for

Minnesota (Continued)

About the Study

This study investigated the economic contribution from the export of malt and other barley, sorghum, corn, ethanol and its co-products including distiller's dried grains with solubles (DDGS), corn gluten feed, and corn gluten meal (described as "residual milling feed products"), as well as corn equivalents of meat exports.

Export markets are one outlet for U.S. grain production, and they impact the entire farming value chain. Access to export markets supports jobs and economic activity in sectors including construction and maintenance, restaurants, hospitals, and retail stores, in addition to the transportation apparatus and industry that is in place to handle the outflows of grain products.

Minnesota State Overview (2018)			
Product	Export Value (\$ millions)	Value of Production (\$ millions)	Percent of Grain Production Exported
Malting Barley	0.4	20.8	2
Other Barley	0.2	0.7	29
Malt (Barley Equiv.)	4.1	-	-
Corn	1,167.0	4,711.3	25
Sorghum	0.0	0.0	0
Ethanol	165.6	1,136.9	15
Residual Milling Feed Products	168.5	436.4	0
Corn Equivalent of Meat*	234.6	5,348.0	-
Total*	1,740.4	11,654.1	28

*Meat production is actual meat production value, not corn equivalent. Not Included in % of production exported

Note: Numbers may not add due to rounding.

Source: NASS USDA, ERS USDA, U.S. Grains Council, and IHS Markit Agribusiness Consulting

Economic Impacts

This study analyzed the economic contribution of grain and grain product exports by aggregating three separate impacts: direct, indirect, and induced impacts. Direct impacts are the benefits farmers directly receive in the form of additional sales to fill export demand. Indirect impacts are realized by businesses supporting farms, like fertilizer suppliers or transportation companies. Induced impacts are those created from the spending of labor income and profits and would include, for example, farm employees purchasing groceries. For this study, these impacts are aggregated to provide a holistic view of how grain and grain products exports support the Minnesota state economy.

Economic Variable Definitions

- Jobs are the total number of jobs supported by the economic activity.
- Gross State Product (GSP) is very similar to GDP and is the total value added by each step in the supply chain. The GSP can be thought of as the summation of labor income, profit, taxes and indirect business taxes.
- Output can be defined as the summation of the business revenues that are associated with the exports of grain and grain products.

