

# 2014 South Dakota Ag Economic Contribution Study

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Prepared for: **SOUTH DAKOTA  
DEPARTMENT OF AGRICULTURE**

Prepared by:



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## Executive Summary

The results of this analysis show that agriculture is a critical component of South Dakota's overall economic well-being. South Dakota agriculture is connected to a large integrated set of industries – from the production of agricultural commodities to food and feed processing to agricultural input manufacturing and many other ag-support industries. The results of the analysis indicate that diminishment or removal of any one of them will likely cause significant negative impacts to the others.

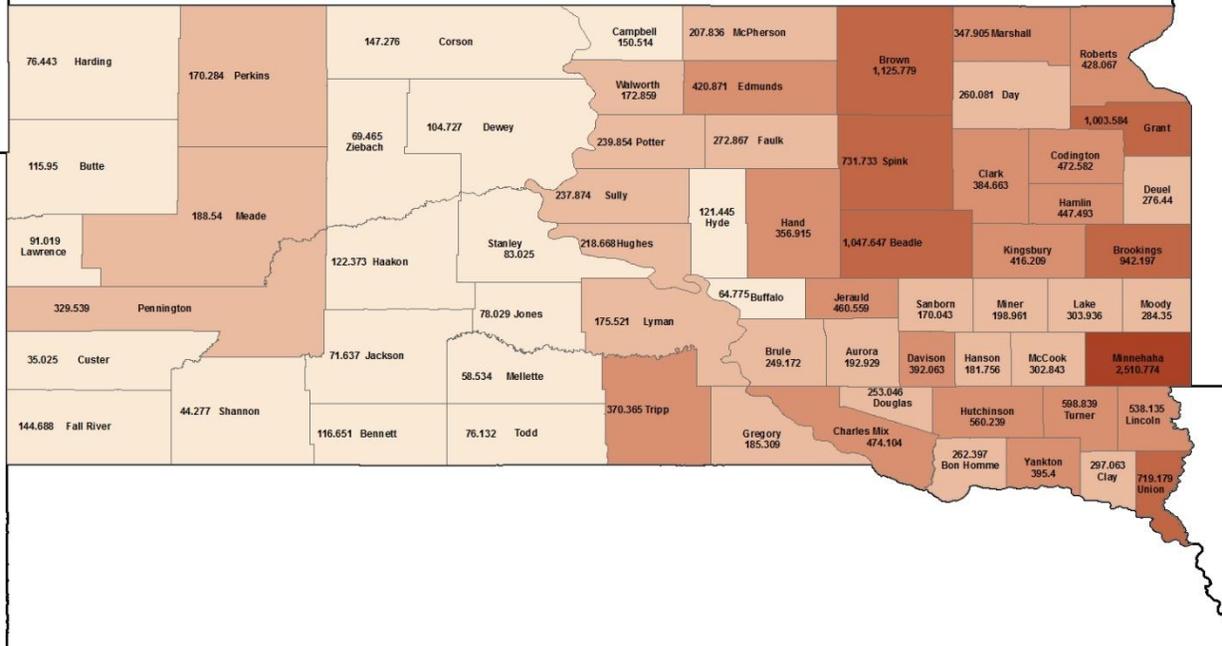
This study is based on a combination of datasets from the 2012 Census of Agriculture and the IMPLAN modeling system. The analysis also shows that South Dakota has an agricultural resource base that continues to grow with and support the state's economy at large, primarily due to its integration across all sectors of the economy. Given the vitality of South Dakota's agricultural industries, it is reasonable to assume that South Dakota's agricultural base has room for continued growth and will remain a key part of the state's economic well-being.

## Key Findings

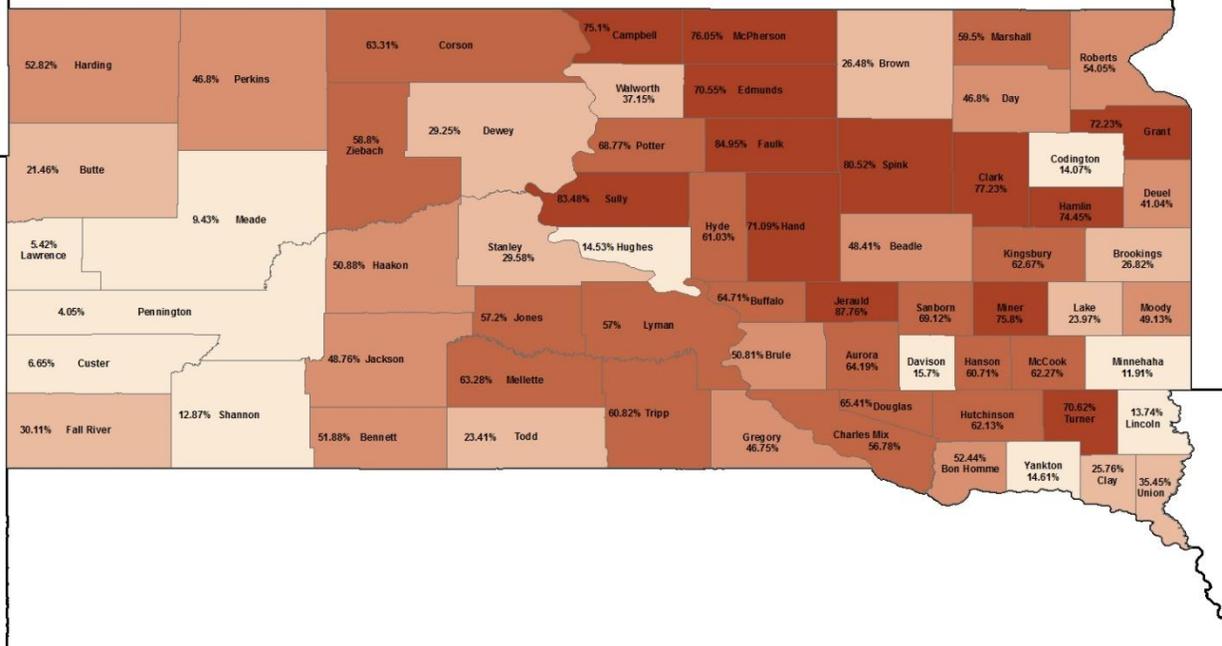
- In 2012, total production agriculture and ag-related industries accounted for **\$25.6 billion**, or more than **30 percent** of South Dakota's total.
- Farming provides the base for a variety of agri-food industries, including food processing and the manufacture of farm machinery, chemicals and fertilizer. Taking those jobs into account means that in 2012, production agriculture and ag-related industries accounted for **115,651**, or **1 in every 5** South Dakotans.
- Crop farming is a significant part of agriculture's economic contribution. Statewide output attributed to crop production and further processing is more than **\$13.3 billion** and is responsible for **70,104 jobs**.
- Livestock farming is also a significant part of agriculture's economic contribution. Statewide output attributed to livestock production and further processing is just under **\$8.6 billion** and is responsible for **30,303 jobs**.
- **56 percent** of South Dakota's counties derive **at least one half** of their total output from ag and ag-related industries.
- **51 percent** of South Dakota's counties derive **at least one third** of their total jobs from ag and ag-related industries.
- **39 percent** of South Dakota's counties derive **at least one fifth** of their total output from the livestock and meat processing industries.
- **39 percent** of South Dakota's counties derive **at least one fourth** of their total jobs the crop and crop processing industries.

Visual Displays

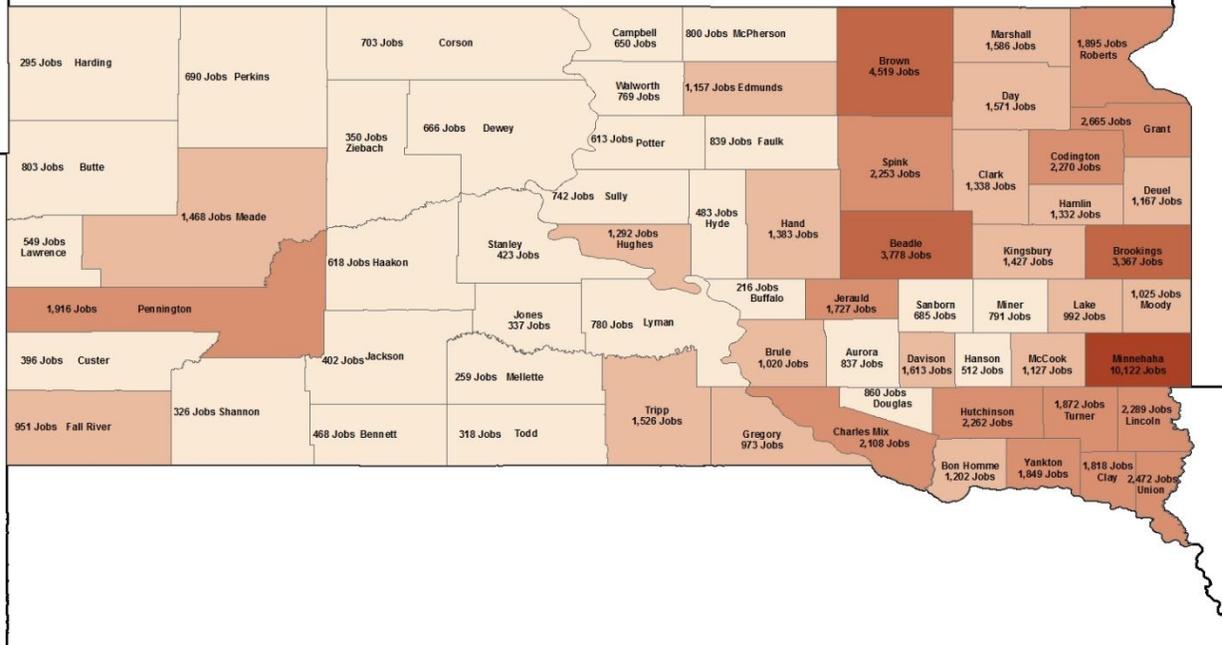
Output Derived from Total Ag (\$M)



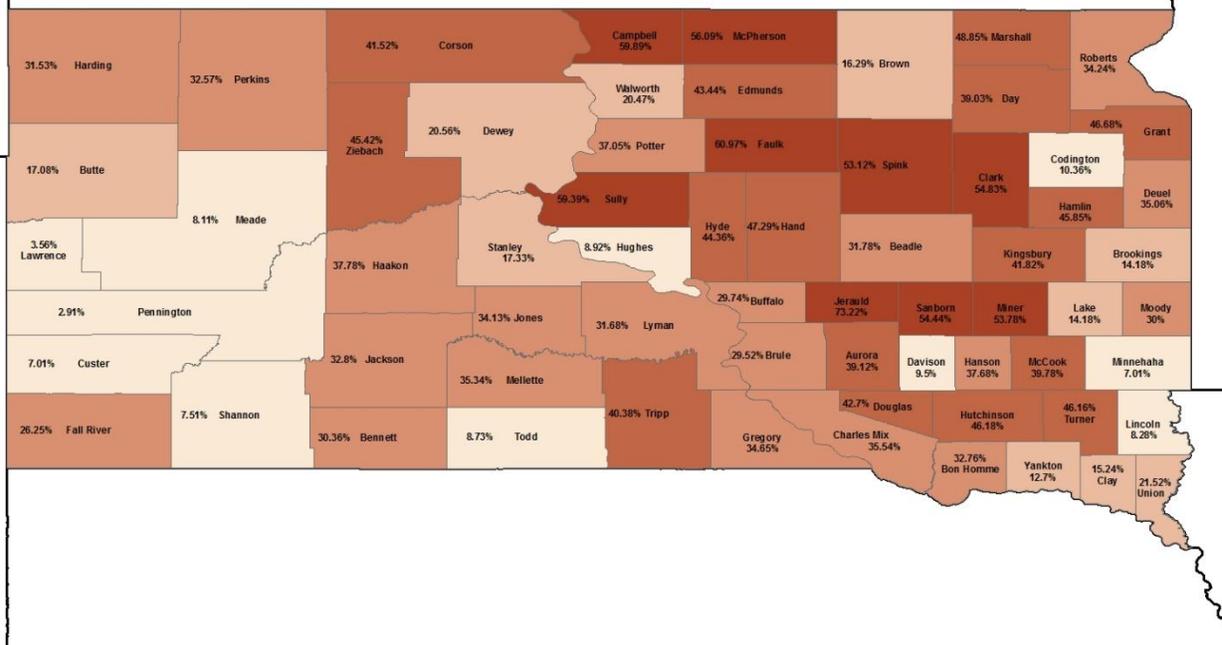
Percent of Output Derived from Total Ag



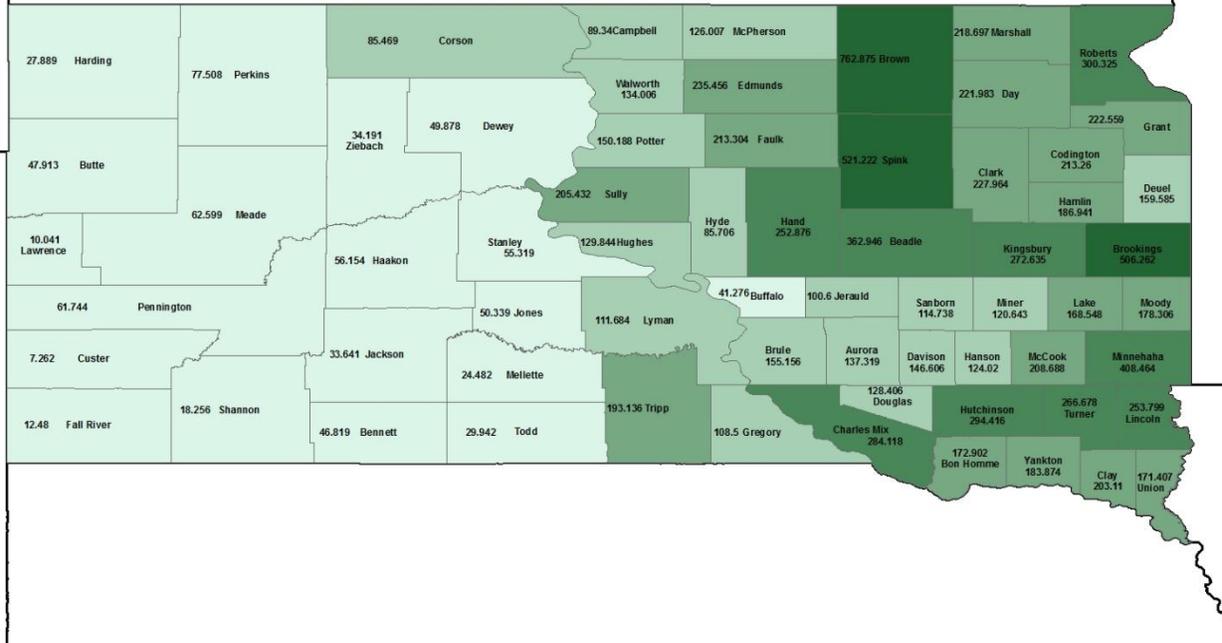
### Jobs Derived from Total Ag



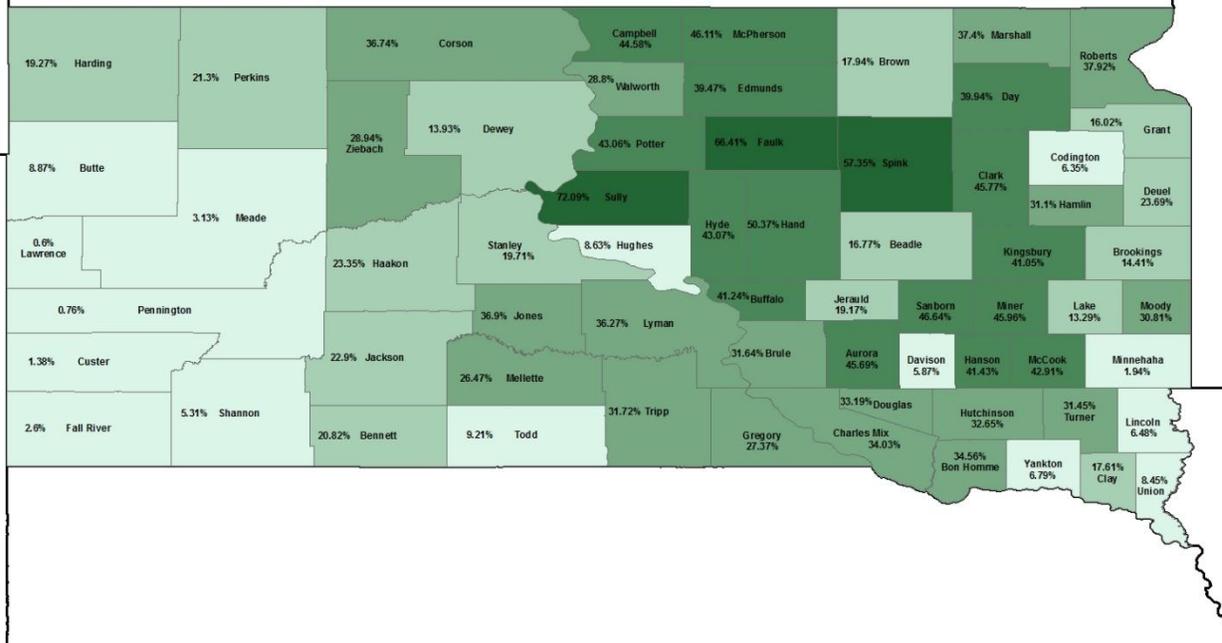
### Percent of Jobs Derived from Total Ag



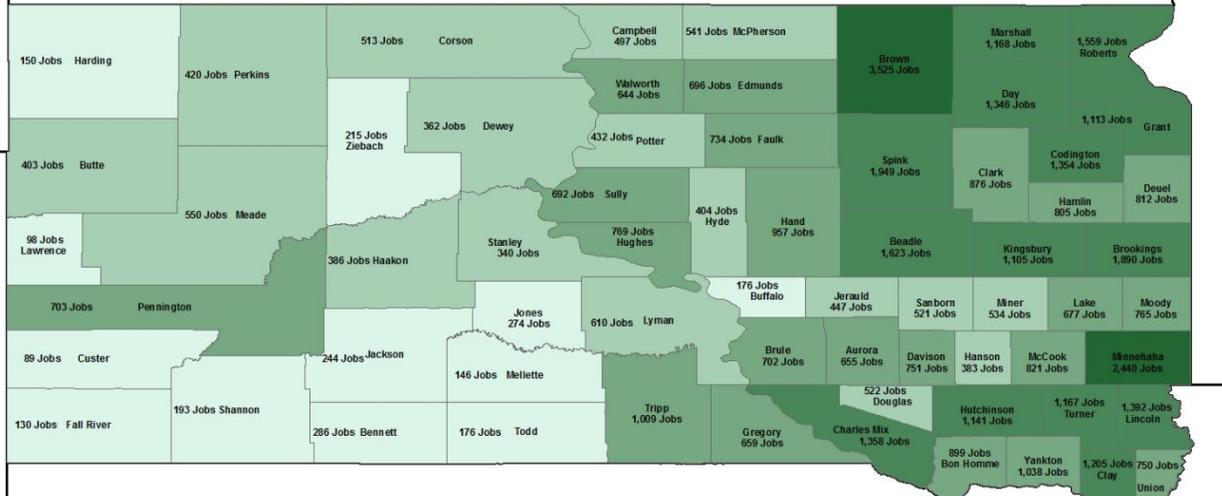
### Output Derived from Crops (\$M)



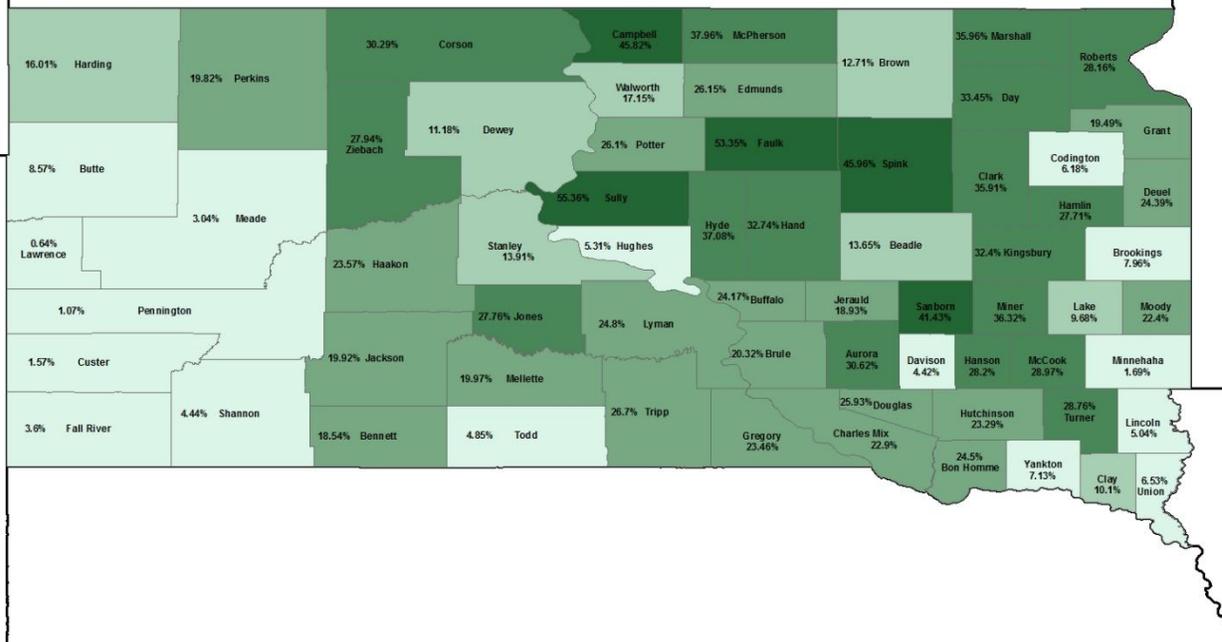
### Percent of Output Derived from Crops



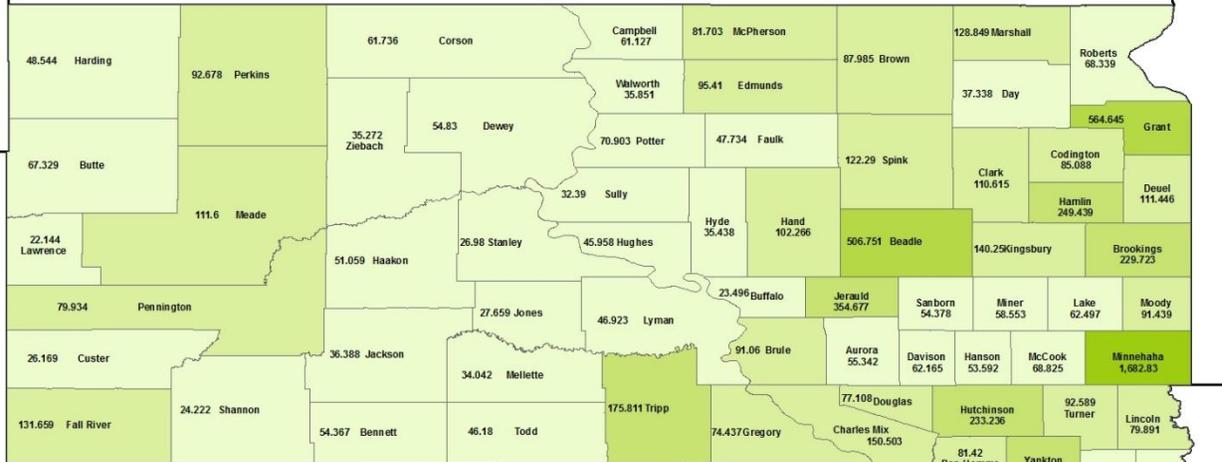
## Jobs Derived from Crops



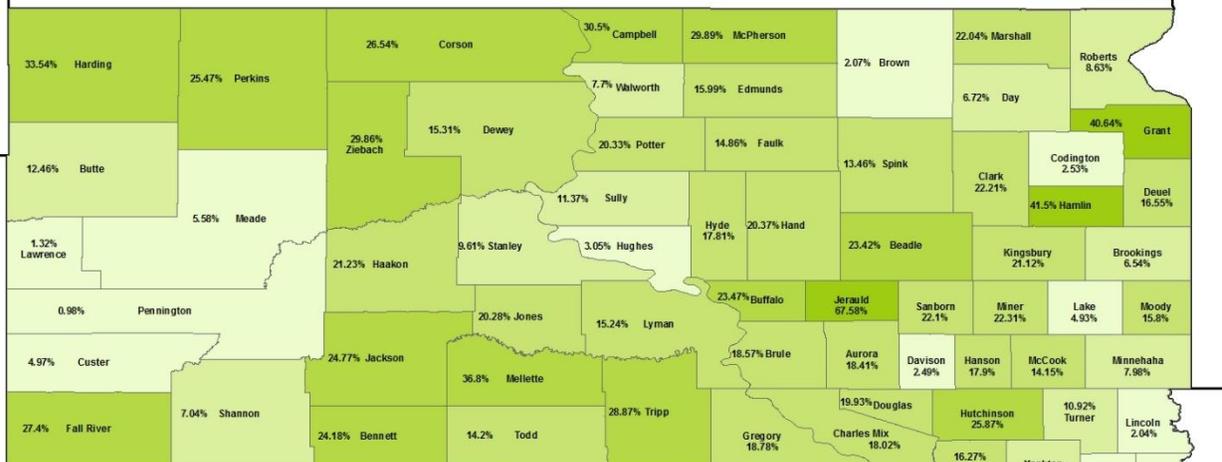
## Percent of Jobs Derived from Crops



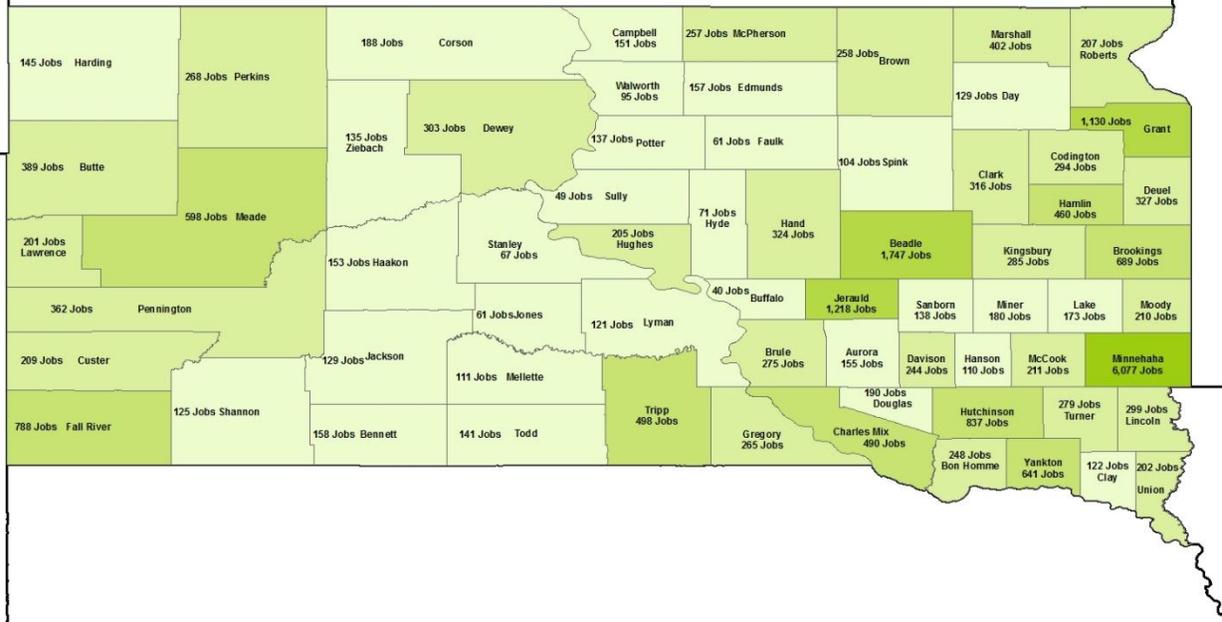
### Output Derived from Livestock (\$M)



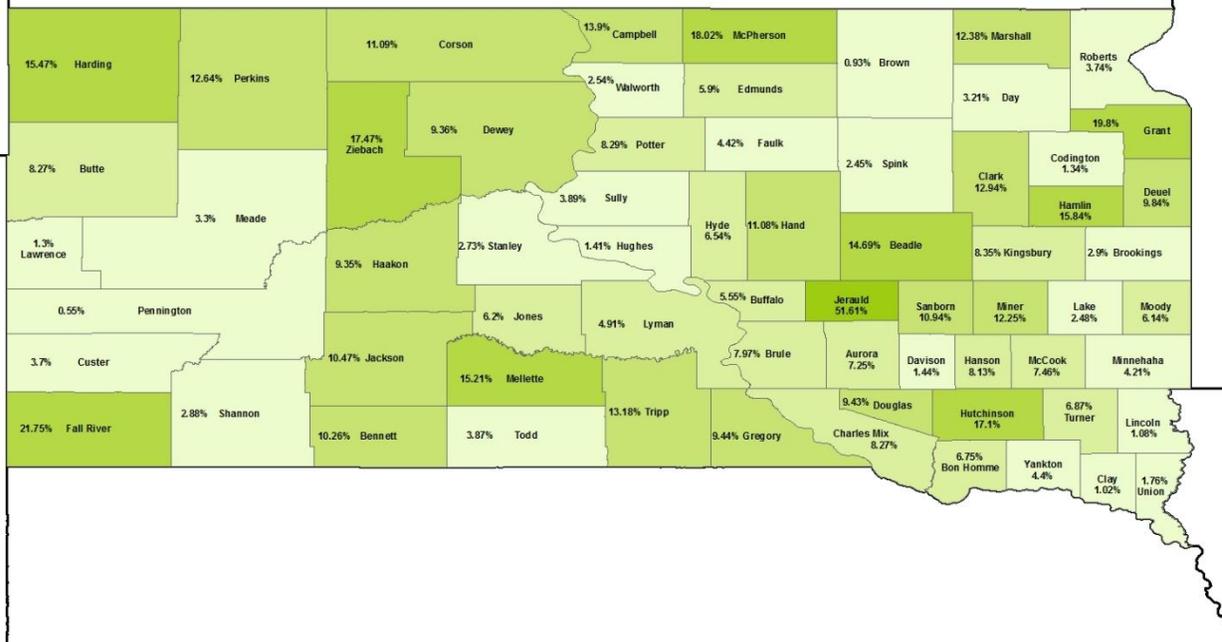
### Percent of Output Derived from Livestock



### Jobs Derived from Livestock



### Percent of Jobs Derived from Livestock



## Study Overview

This study is patterned after similar analyses done in Iowa in 2005 and 2009. This analysis used the same methodology and estimating procedures as these studies in Iowa. The study relies heavily on data from the 2012 Census of Agriculture and IMPLAN modeling system.

The intent of the study has been to develop an understanding of the current economic importance of South Dakota agriculture and what significance it plays in South Dakota's economy. For that reason, this study is called an economic contribution analysis.

## Methodology

Data from the 2012 Census of Agriculture were used to calibrate default IMPLAN data to more accurately reflect what the structure of the agriculture industry looks like in each of South Dakota's counties. IMPLAN uses the nearly 21,000 industries identified by the North American Industry Classification System (NAICS) and aggregates them into 440. Those 440 segments were further grouped into three ag and ag-related classifications: Crops, Livestock, and Other Ag. The rest of South Dakota's industries were aggregated into other key non-ag industries in South Dakota. In South Dakota the non-ag industries are defined as:

- Construction
- Entertainment
- Financial
- Government
- Households
- Information
- Manufacturing
- Mining
- Remainder
- Retail
- Services
- Transportation
- Utilities
- Wholesale

### Definitions for Industries Measured In This Study

**Agricultural production:** “Agricultural production” is the production of agricultural commodities and foodstuffs, such as corn, soybeans, cattle, hogs, poultry, etc. Traditionally, it has been used somewhat synonymously with “farming.”

**Agri-food sector:** The “Agri-food sector” includes individuals and businesses engaged in agricultural production (farming, etc.), agricultural input (fertilizer, ag chemicals, machinery, etc.) manufacturing and delivery, and food processing. This definition does not include food wholesaling, food retailing, or delivery from food processors to wholesalers and retailers.

**Jobs:** “Jobs” represents an estimate of the number of positions (jobs) currently filled in an area and/or industry. The estimates provided here originate with the databases of the IMPLAN input-output model. “Jobs” counts positions whether they are full-time or part time, so care must be used in making comparisons. “Jobs” does not count positions that are unfilled. All of the jobs in an area are generally referred to as “Total jobs.” Where “Jobs” are preceded by an industry name (such as “Agricultural production” or “Agri-food sector”) the number is an estimate of the number of jobs filled within that industry in the area specified.

**Personal income:** “Personal income” refers to income from all sources that accrues to individuals as payment for personal employment (earnings or labor income), payment for ownership interests or capital provision (dividends, interest, and rents), or as transfer payments (payments to individuals for which nothing is offered in return).

**Total output:** “Total output” refers to the total value of all of the output (production) of an area and/or industry. This is a gross number that does not make any deductions for the cost or origination of inputs that were used in the production process.

**Total value added:** “Total value added” refers to that portion of the value of total output that was actually created by the economic activity in an area and/or industry. Total value added for an area (industry) represents the value of the area’s (industry’s) total output minus the value of any inputs into the production process that were imported from other areas (industries). Value added is a measure of the actual value added to the economic system by the production process.