

ECONOMIC IMPACT OF AGRICULTURE



Judith Basin County

January 2021

Judith Basin County is a rural sparsely populated county located in the central part of the state. Over 71% of land in Judith Basin County is classified as farm land.

Overview (2017 Data)

Population	1,952
County Size (acres)	1,196,600
Land in Farms (%)	71.9
Number of Farms	357
Median Farm Size (acres)	1,191
Average Farm Size (acres)	2,409

Source: [Census of Agriculture](#): Table 1: County Summary Highlights: 2017

Farm Revenue

Farm revenue (which includes the market value of products sold, government payments, and farm-related income) were \$98 million while production expenses were \$75 million. Government payments were 3.8% of farm revenues.

Market Value of Products Sold	\$88,901,000
Government Payments	\$3,687,000
Farm-Related Income	\$5,505,000
Total Farm Production Expenses	\$75,435,000
Net Cash Farm Income	\$22,658,000

Source: [Census of Agriculture](#): Tables 2, 3, 4, 5 and 6: 2017

Taxation

The market value of all property in Judith Basin County was approximately \$539 million in 2019. The taxable value assigned by the Montana Department

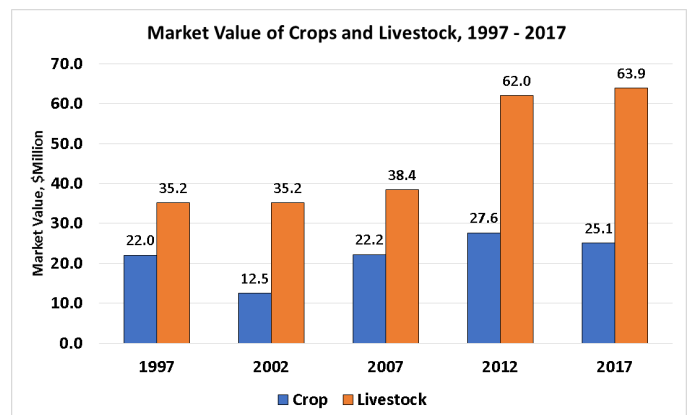
of Revenue was \$18 million. Agricultural Property (as defined by Montana Department of Revenue as Class 3 property) comprised 15% of the county's taxable value.

Property Tax Summary	2019	2014
Market Value of All Property	\$539,445,278	\$447,272,101
Taxable Value of All Property	\$18,526,011	\$13,266,019
Taxable Value of Agricultural Property	\$2,870,139	\$2,685,734
Ag Taxable Value as % of All Property	15.49%	20.25%

Source: Montana Dept. of Rev. Montana Taxes by County in [2018](#) and Montana Taxes by County in [2014](#)

Market Value of Crops and Livestock

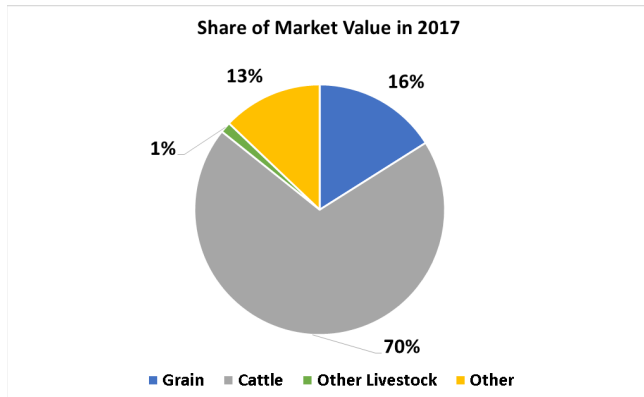
After adjusting for inflation, the market value of crops increased by 14%, while the market value of livestock increased by 81%, from 1997 to 2017.



Sources: [Census of Agriculture](#): Table 1: County Summary Highlights: 2017 and [St. Louis Fed Producer Price Index](#)

Crops and Livestock

Cattle (70%) and grain (16%) comprised 86% of total crop and livestock sales in 2017.



Source: [Census of Agriculture](#): Table 2: County Summary Highlights: 2017

Farm Size by Acres

The percentage of smaller farms, less than 500 acres, increased from 35% to 38%, while the percentage of larger farms, 500 acres or more, decreased from 65% to 62% from 2012 to 2017.

Farm Size by Acres	2017		2012	
	Number of Farms	%	Number of Farms	%
1 to 9	19	5	19	6
10 to 49	30	8	22	7
50 to 179	56	16	38	12
180 to 499	31	9	33	10
500 to 999	30	8	33	10
1,000 or more	191	54	179	55
TOTAL	357	100	324	100

Source: [Census of Agriculture](#): Table 1: County Summary Highlights: 2017

Farm Size by Sales

The proportion of total sales from the smallest farms with less than \$100,000 in sales decreased from 57% to 53%, while the proportion of total sales from the largest farms with sales of \$100,000 or more increased from 43% to 47% from 2012 to 2017.

Farm Size by Sales	2017		2012	
	Number of Farms	%	Number of Farms	%
Less than 2,500	56	16	55	17
2,500 to 4,999	22	6	4	1
5,000 to 9,999	8	2	18	6
10,000 to 24,999	24	7	41	13
25,000 to 49,999	38	11	21	6
50,000 to 99,999	41	11	47	15
100,000 or more	168	47	138	43
TOTAL	357	100	324	100

Source: [Census of Agriculture](#): Table 1: County Summary Highlights: 2017

Tillage and Land Use

The percentage of farms using no till or reduced tillage increased, while the percentage of farms using intensive tillage decreased from 2012 to 2017.

Tillage	2017		2012	
	Number of Farms	%	Number of Farms	%
No tillage	81	23	60	19
Reduced tillage	30	8	21	6
Intensive tillage	43	12	91	28
Cover crops	13	4	12	4
TOTAL FARMS	357		324	

Source: [Census of Agriculture](#): Table 41 Land Use Practices

Producer Profile

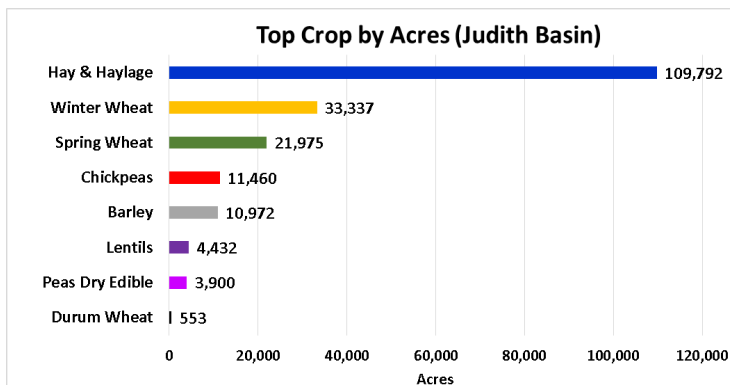
The county producer population was younger than the Montana producer population. Forty-two percent of county producers were under 55 years of age, while 25% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Sixty-two percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 60% of county producers, while farming was the primary occupation for 50% of Montana producers.

Characteristics	County		State	
	Number of Producers	%	Number of Producers	%
Age				
18 – 25	10	2	570	1
25 to 34	61	9	3,285	7
35 to 44	98	15	5,179	11
45 to 54	108	17	7,309	15
55 to 64	209	32	13,838	29
65 to 74	98	15	11,469	24
75 and older	66	10	5,587	12
Sex				
Male	404	62	28,563	60
Female	250	38	18,673	40
Primary Occupation				
Yes	390	60	23,847	50
No	264	40	24,314	50
TOTAL PRODUCERS	654	100	48,161	100

Source: [Census of Agriculture](#): Table 45 Selected Operation and Producer Characteristics

Top Crops by Acres

The top crops were hay and haylage, winter and spring wheat, chickpeas, barley, lentils, peas dry edible, and durum wheat.



Source: [Census of Agriculture](#): Table 45 Selected Operation and Producer Characteristics

Top Livestock

The top livestock were cattle, sheep, poultry (chickens-layers), and hogs.

Livestock	Number of Head
Cattle	72,091
Sheep	8,055
Chickens-Layers	594
Hogs	118

Source: [Census of Agriculture](#): Tables 11 (Cattle), 13 (Sheep) and 19 (Poultry)

Employment Impact

Agricultural production employed 827 workers, or 90% of the county's labor force. According to IMPLAN, economic impact model, 485 of the workers were directly employed in production agriculture. An additional 234 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 109 workers were employed in other related businesses, such as grocery and drugs stores. For every 10 jobs on farms and ranches, 7 additional jobs are generated in the county.

Impact Type	Labor Force	Impact Multipliers
County Labor Force	923	
Direct Impact	485	
Indirect Impact	234	0.48
Induced Impact	109	0.22
Total Impact	827	0.71
Agriculture's Share (%)	90	

Source: [Bureau of Labor Statistics](#), www.bls.gov/#cntyaa and IMPLAN Estimates

Value Added Impacts

Farms and ranches generated \$55.2 million of value-added, or 41% of the county's total gross domestic product of \$134 million in 2017. According to IMPLAN, \$31.8 million was directly contributed by farmers and ranchers. An additional \$17 million was generated by businesses supporting agricultural production and \$6.4 million was generated by other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an additional \$0.73 of value-added in other sectors of the county's economy.

Impact Type	Value-Added (\$1 million)	Impact Multipliers
County GDP*	134.0	
Direct Impact**	31.8	
Indirect Impact**	17.0	0.53
Induced Impact**	6.4	0.20
Total Impact**	55.2	0.73
Agriculture's Share (%)	41	

Sources: * [St. Louis Federal Reserve Bank](#), ** IMPLAN Estimates

References

- 2017 Census of Agriculture, National Agricultural Statistics Service, Montana, State and County Data, Volume 1, Geographic Area Series, part 26 https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_1_State_Level/Montana/mtv1.pdf
- Dept. of Revenue “Montana Taxes by County in 2014” <https://mtrevenue.gov/wp-content/uploads/2018/01/2014-Taxes-by-County.pdf>

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- St. Louis Federal Reserve Bank (2017). Current dollar gross domestic product by county for Montana, retrieved from <https://fred.stlouisfed.org/release/tables?rid=397&eid=1062609&od=2017-01-01#>
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