ECONOMIC IMPACT OF AGRICULTURE

MONTANA STATE UNIVERSITY EXTENSION

Fergus County



January 2021

Fergus County is a rural county located almost directly in the center of the state. Over 78% of land in Fergus County is classified as farm land.

Overview (2017 Data)	
Population	11,113
County Size (acres)	2,777,171
Land in Farms (%)	78.8
Number of Farms	845
Median Farm Size (acres)	806
Average Farm Size (acres)	2,589
Source: <u>Census of Agriculture</u> : Table 1: Count Highlights: 2017	ty Summary

Farm Revenue

Farm revenue (which includes the market value of products sold, government payments, and farm-related income) were nearly \$155 million while production expenses were \$131 million. Government payments were 7.9% of farm revenues.

Market Value of Products Sold	\$133,624,000
Government Payments	\$12,281,000
Farm-Related Income	\$8,925,000
Total Farm Production Expenses	\$131,283,000
Net Cash Farm Income	\$23,546,000
	1.6 2017

Source: Census of Agriculture: Tables 2, 3, 4, 5 and 6: 2017

Taxation

The market value of all property in Fergus County was approximately \$1.6 billon million in 2019. The taxable value assigned by the Montana Department

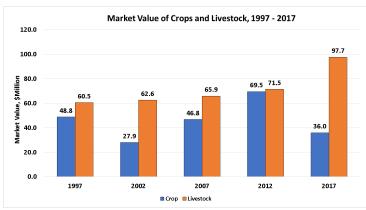
of Revenue was \$39 million. Agricultural Property (as defined by Montana Department of Revenue as Class 3 property) comprised 13% of the county's taxable value.

Property Tax	2019	2014
Summary		
Market Value of All	\$1,619,461,314	\$1,910,899,964
Property		
Taxable Value of All	\$39,401,516	\$25,758,907
Property		
Taxable Value of	\$5,142,811	\$5,423,345
Agricultural Property		
Ag Taxable Value as	13.05%	21.05%
% of All Property		

Source: Montana Dept. of Rev. Montana Taxes by County in $\underline{2018}$ and Montana Taxes by County in $\underline{2014}$

Market Value of Crops and Livestock

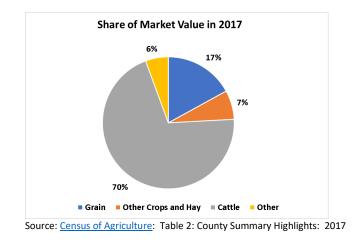
After adjusting for inflation, the market value of crops decreased by 26%, while the market value of livestock increased by 61%, from 1997 to 2017.



Sources: <u>Census of Agriculture</u>: Table 1: County Summary Highlights: 2017 and <u>St. Louis Fed Producer Price Index</u>

Crops and Livestock

Cattle (70%) and grain (17%) comprised nearly 87% of total crop and livestock sales in 2017.



Farm Size by Acres

The percentage of smaller farms, less than 500 acres, decreased from 47% to 43%, while the percentage of larger farms, 500 acres or more, increased from 53% to 57% from 2012 to 2017.

	2017		2012	
	Number		Number	
Farm Size by Acres	of Farms	%	of Farms	%
1 to 9	41	5	54	7
10 to 49	116	14	105	13
50 to 179	134	16	116	15
180 to 499	74	9	89	11
500 to 999	72	9	75	9
1,000 or more	408	48	351	44
TOTAL	845	100	790	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 61% to 59%, while the proportion of total sales from the largest farms with sales of \$100,000 or more increased from 39% to 41% from 2012 to 2017.

	2017		2012	
Farm Size by	Number		Number	
Sales	of Farms	%	of Farms	%
Less than 2,500	196	23	193	24
2,500 to 4,999	40	5	48	6
5,000 to 9,999	65	8	41	5
10,000 to 24,999	66	8	59	7
25,000 to 49,999	59	7	61	8
50,000 to 99,999	72	9	77	10
100,000 or more	347	41	311	39
TOTAL	845	100	790	100

Source: Census of Agriculture: Table 1: County Summary Highlights: 2017

Tillage and Land Use

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

	2017		2012	
	Number		Number	
Tillage	of Farms	%	of Farms	%
No tillage	187	22	170	22
Reduced tillage	81	10	84	11
Intensive tillage	74	9	134	17
Cover crops	53	6	32	4
TOTAL FARMS	845		790	

Source: Census of Agriculture: Table 41 Land Use Practices

Producer Profile

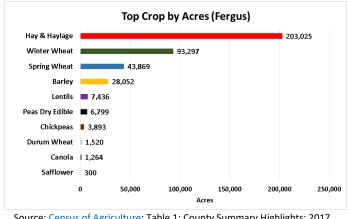
The county producer population was somewhat younger than the Montana producer population. Thirty-nine percent of county producers were under 55 years of age, while 32% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Sixty-three percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 56% of county producers, while farming was the primary occupation for 50% of Montana producers.

	County		State	
	Number of		Number of	
Characteristics	Producers	%	Producers	%
Age				
18 – 25	16	1	570	1
25 to 34	162	11	3,285	7
35 to 44	177	12	5,179	11
45 to 54	231	15	7,309	15
55 to 64	429	28	13,838	29
65 to 74	320	21	11,469	24
75 and older	164	11	5,587	12
Sex	Sex			
Male	959	63	28,563	60
Female	562	37	18,673	40
Primary Occupation				
Yes	857	56	23,847	50
No	664	44	24,314	50
TOTAL PRODUCERS	1,521	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, barley, lentils, peas dry edible, chickpeas, durum wheat, canola and safflower.



Source: Census of Agriculture: Table 1: County Summary Highlights: 2017

Top Livestock

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

Livestock	Number of Head
Cattle	119,336
Sheep	2,990
Chickens-Layers	1,592
Chickens-Broilers	693
Hogs	195
Source: Census of Agriculture	: Tables 11 (Cattle), 13 (Sheep)

and 19 (Poultry)

Employment Impact

Agricultural production employed 1,488 workers, or 26% of the county's labor force. According to IMPLAN, economic impact model, 1,062 of the workers were directly employed in production agriculture. An additional 326 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 100 workers were employed in other related businesses, such as grocery and drugs stores. For every 10 jobs on farms and ranches, 4 additional jobs are generated in the county.

Impact Type	Labor Force	Impact Multipliers
County Labor Force	5,759	
Direct Impact	1,062	
Indirect Impact	326	0.31
Induced Impact	100	0.09
Total Impact	1,488	0.40
Agriculture's Share (%)	26	

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

Value Added Impacts

Farms and ranches generated \$73.7 million of valueadded, or 17% of the county's total gross domestic product of \$432 million in 2017. According to IMPLAN, \$46.7 million was directly contributed by farmers and ranchers. An additional \$21 million was generated by businesses supporting agricultural production and \$6 million was generated by other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an additional \$0.58 of value-added in other sectors of the county's economy.

Impact Type	Value-Added (\$1 million)	Impact Multipliers
County GDP*	432.00	
Direct Impact**	46.7	
Indirect Impact**	21.0	0.45
Induced Impact**	6.0	0.13
Total Impact**	73.7	0.58
Agriculture's Share (%)	17	

Sources: * St. Louis Federal Reserve Bank, ** IMPLAN Estimates

References

- Dept. of Revenue "Montana Taxes by County in 2014" <u>https://mtrevenue.gov/wp-</u> content/uploads/2018/01/2014-Taxes-by-County.pdf

- Dept. of Revenue "Montana Taxes by County in 2018" <u>https://mtrevenue.gov/wp-</u> content/uploads/2020/02/2018-Taxes-by-County.pdf
- St. Louis Federal Reserve Bank (2017). Current dollar gross domestic product by county for Montana, retrieved from <u>https://fred.stlouisfed.org/release/tables?rid=397&</u> <u>eid=1062609&od=2017-01-01#</u>
- St. Louis Federal Reserve Bank (2020). Producer price index for all commodities, St. Louis Federal Reserve Bank, retrieved from <u>https://fred.stlouisfed.org/series/PPIACO</u>
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