

ECONOMIC IMPACT OF AGRICULTURE



Musselshell County

January 2021

Musselshell County is a rural county located in the central part of the state. Over 92% of land in Musselshell County is classified as farm land.

Overview (2017 Data)

Population	4,651
County Size (acres)	1,196,133
Land in Farms (%)	92.2
Number of Farms	346
Median Farm Size (acres)	220
Average Farm Size (acres)	3,189

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 \$41 million while production expenses were nearly \$34 million. Government payments were 5.4% of farm revenues.

Market Value of Products Sold	\$37,284,000
Government Payments	\$2,231,000
Farm-Related Income	\$1,764,000
Total Farm Production Expenses	\$33,954,000
Net Cash Farm Income	\$7,326,000

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

Taxation

The market value of all property in Musselshell County was approximately \$589 million in 2019. The

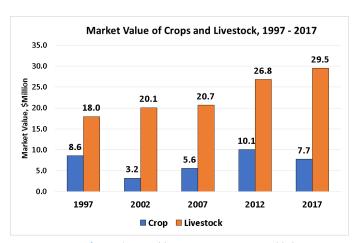
taxable value assigned by the Montana Department of Revenue was \$13 million. Agricultural Property (as defined by Montana Department of Revenue as Class 3 property) comprised 12.5% of the county's taxable value.

Property Tax	2019	2014
Summary		
Market Value of All	\$589,317,564	\$458,383,205
Property		
Taxable Value of All	\$13,010,630	\$9,948,213
Property		
Taxable Value of	\$1,624,212	\$1,574,517
Agricultural Property		
Ag Taxable Value	12.5%	15.8%
as % 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

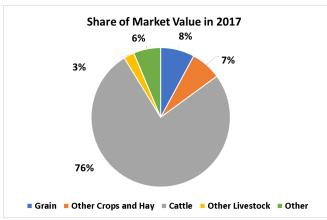
After adjusting for inflation, the market value of crops decreased by 10%, while the market value of livestock increased by 65%, from 1997 to 2017.



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

Crops and Livestock

Cattle (76%) and grain (8%) comprised 84% 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 57% to 59%, while the percentage of larger farms, 500 acres or more, decreased from 43% to 41% from 2012 to 2017.

	2017		2012	
	Number		Number	
Farm Size by Acres	of Farms	%	of Farms	%
1 to 9	11	3	5	1
10 to 49	39	11	43	12
50 to 179	106	31	107	30
180 to 499	47	14	47	13
500 to 999	24	7	36	10
1,000 or more	119	34	118	33
TOTAL	346	100	356	100

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

Farm Size by Sales

The percentage of the smallest farms with less than \$100,000 in sales decreased from 82% to 79%, while the percentage of the largest farms with sales of \$100,000 or more increased from 18% to 21% from 2012 to 2017.

	2017		2012	
Farm Size by	Number		Number	
Sales	of Farms	%	of Farms	%
Less than 2,500	165	48	178	50
2,500 to 4,999	17	5	30	8
5,000 to 9,999	20	6	18	5
10,000 to 24,999	23	7	23	6
25,000 to 49,999	28	8	26	7
50,000 to 99,999	22	6	16	4
100,000 or more	71	21	65	18
TOTAL	346	100	356	100

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

Tillage and Land Use

The percentage of farms using reduced tillage increased, while the percentage of farms using intensive tillage or cover crops decreased from 2012 to 2017.

	2017		2012	
	Number		Number	
Tillage	of Farms	%	of Farms	%
No tillage	31	9	33	9
Reduced tillage	17	5	11	3
Intensive tillage	34	10	48	13
Cover crops	7	2	12	3
TOTAL FARMS	346		356	

Source: Census of Agriculture: Table 41 Land Use Practices

Producer Profile

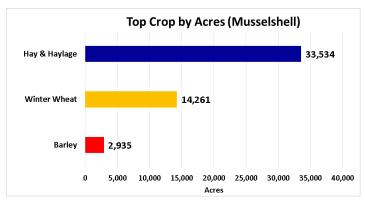
The county producer population was older than the Montana producer population. Twenty-eight percent of county producers were under 55 years of age, while 40% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Fifty-four percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 54% of county producers, while farming was the primary occupation for 50% of Montana producers.

	County		State	
Characteristics	Number of Producers	%	Number of Producers	%
Age				
18 – 25	4	1	570	1
25 to 34	21	3	3,285	7
35 to 44	61	10	5,179	11
45 to 54	88	14	7,309	15
55 to 64	204	32	13,838	29
65 to 74	167	26	11,469	24
75 and older	89	14	5,587	12
Sex				
Male	343	54	28,563	60
Female	293	46	18,673	40
Primary Occupation				
Yes	344	54	23,847	50
No	292	46	24,314	50
TOTAL PRODUCERS	636	100	48,161	100

Source: <u>Census of Agriculture</u>: Table 45 Selected Operation and Producer Characteristics

Top Crop by Acres

The top crop was hay & haylage, winter wheat, and barley.



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

Top Livestock

The top livestock were cattle, sheep, and poultry (chickens and turkeys).

Livestock	Number of Head
Cattle	38,861
Sheep	4,619
Chicken-Layers	980
Chickens-Broilers	151
Hogs	37
Turkeys	32

Source: <u>Census of Agriculture</u>: Tables 11 (Cattle), 13 (Sheep) and 19 (Poultry)

Employment Impact

Agricultural production employed 567 workers, or 25% of the county's labor force. According to IMPLAN, economic impact model, 419 of the workers were directly employed in production agriculture. An additional 147 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 1 worker was 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	2,287	
Direct Impact	419	
Indirect Impact	147	0.35
Induced Impact	1	0.00
Total Impact	567	0.35
Agriculture's Share (%)	25	

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

Value Added Impacts

Farms and ranches generated \$20.2 million of value-added, or 7% of the county's total gross domestic product of \$278 million in 2017. According to IMPLAN, \$13.8 million was directly contributed by farmers and ranchers. An additional \$6.4 million was generated by businesses supporting agricultural production and other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an additional \$0.47 of value-added in other sectors of the county's economy.

Impact Type	Value-Added (\$1 million)	Impact Multipliers
County GDP*	278.0	
Direct Impact**	13.8	
Indirect Impact**	6.4	0.47
Induced Impact**	0.0	0.00
Total Impact**	20.2	0.47
Agriculture's Share (%)	7	

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

References

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Report produced by MSU Extension:

- George Haynes, MSU Extension, Professor and Specialist
- Joel Schumacher, MSU Extension, Associate Specialist
- Jeff Peterson, Economic Impact Analyst, Impacts Montana

Contact Us:

MSU Extension Economics P.O. Box 172800 Bozeman, MT 5971 406-994-3511



For more information: www.montana.edu/agimpact