ECONOMIC IMPACT OF AGRICULTURE

Liberty County

January 2021

Liberty County is a rural sparsely populated county located in the northern portion of the golden triangle region bordering Canada. Over 99% of land in Liberty County is classified as farm land.

Overview

(2017 Data)

Population	2,430
County Size (acres)	915,189
Land in Farms (%)	99
Number of Farms	246
Median Farm Size (acres)	2,807
Average Farm Size (acres)	3,714
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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 farmrelated income) were over \$104 million dollars while production expenses were \$75 million. Government payments comprised 10% of all revenues for 2017.

Market Value of Products Sold	\$88,292,000
Government Payments	\$10,873,000
Farm-Related Income	\$5,106,000
Total Farm Production Expenses	\$74,225,000
Net Cash Farm Income	\$30,016,000

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

Taxation

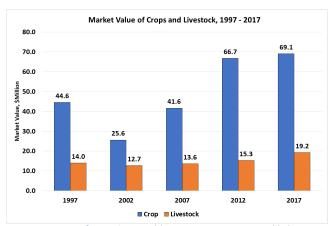
The market value of all property in Liberty County was approximately \$454 million in 2019. The taxable value assigned by the Montana Department of Revenue was \$9 million. Agricultural Property (as defined by Montana Department of Revenue as Class 3 property) comprised 44% of the county's taxable value.

Property Tax	2019	2014
Summary		
Market Value of All	\$454,229,823	\$295,813,938
Property		
Taxable Value of All	\$9,474,199	\$7,226,901
Property		
Taxable Value of	\$4,173,611	\$3,024,825
Agricultural Property		
Ag Taxable Value	44.%	42%
as % of All Property		

Source: Montana Dept. of Rev. Montana Taxes by County in 2018 and Montana Taxes by County in 2014

Market Value of Crops and Livestock

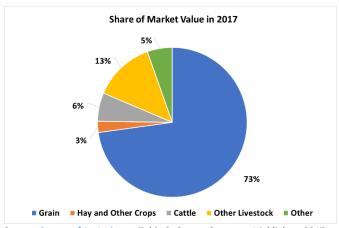
After adjusting for inflation, the market value of crops increased by 55%, while the market value of livestock increased by 37%, from 1997 to 2017.



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

Crops and Livestock

Grain (73%) and other livestock (13%) 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, decreased from 19% to 15%, while the percentage of larger farms, 500 acres or more, increased from 81% to 85% from 2012 to 2017.

	2017		2012	
	Number		Number	
Farm Size by Acres	of Farms	%	of Farms	%
1 to 9	1	0	6	2
10 to 49	4	2	6	2
50 to 179	9	4	14	5
180 to 499	23	9	33	11
500 to 999	23	9	43	14
1,000 or more	186	76	202	66
TOTAL	246	100	304	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 48% to 35%, while the proportion of total sales from the largest farms with sales of \$100,000 or more increased from 52% to 65% from 2012 to 2017.

	2017		2012	
Farm Size by	Number		Number	
Sales	of Farms	%	of Farms	%
Less than 2,500	40	16	81	27
2,500 to 4,999	2	1	4	1
5,000 to 9,999	4	2	4	1
10,000 to 24,999	11	4	9	3
25,000 to 49,999	15	6	13	4
50,000 to 99,999	15	6	36	12
100,000 or more	159	65	157	52
TOTAL	246	100	304	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.

	2017		2012	
	Number		Number	
Tillage	of Farms	%	of Farms	%
No tillage	158	64	171	56
Reduced tillage	29	12	24	8
Intensive tillage	13	5	29	10
Cover crops	6	2	19	6
TOTAL FARMS	246	_	304	

Source: Census of Agriculture: Table 41 Land Use Practices

Producer Profile

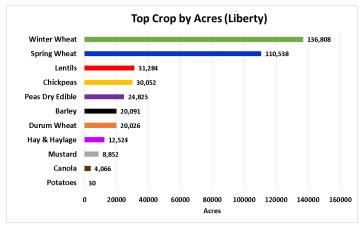
The county producer population was younger than the Montana producer population. Thirty-seven percent of county producers were under 55 years of age, while 34% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Sixty-four percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 70% 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	0	0	570	1
25 to 34	48	11	3,285	7
35 to 44	39	9	5,179	11
45 to 54	68	16	7,309	15
55 to 64	121	29	13,838	29
65 to 74	95	22	11,469	24
75 and older	50	12	5,587	12
Sex				
Male	271	64	28,563	60
Female	152	36	18,673	40
Primary Occupation		_		_
Yes	298	70	23,847	50
No	125	30	24,314	50
TOTAL PRODUCERS	423	100	48,161	100

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

Top Crops by Acres

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



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

Top Livestock

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

Livestock	Number of Head
Chicken-Layers	107,810
Chicken-Broilers	21,000
Hogs	19,624
Cattle	10,245
Turkeys	1,575

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

Employment Impact

Agricultural production employed 887 workers, or 90.6% of the county's labor force. According to IMPLAN, economic impact model, 455 of the workers were directly employed in production agriculture. An additional 355 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 77 workers were employed in other related businesses, such as grocery and drugs stores. For every 10 jobs on farms and ranches, 10 additional jobs are generated in the county.

Impact	Labor	Impact
Туре	Force	Multipliers
County Labor Force	979	
Direct Impact	455	
Indirect Impact	355	0.78
Induced Impact	77	0.17
Total Impact	887	0.95
Agriculture's Share (%)	91	

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

Value Added Impacts

Farms and ranches generated \$41 million of value-added, or 37% of the county's total gross domestic product of \$112 million in 2017.

According to IMPLAN, \$16.5 million was directly contributed by farmers and ranchers. An additional \$18.8 million was generated by businesses supporting agricultural production and \$5.6 million was generated by other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an

additional \$1.48 of value-added in other sectors of the county's economy.

Impact Type	Value-Added (\$1 million)	Impact Multipliers
County GDP*	112.0	
Direct Impact**	16.5	
Indirect Impact**	18.8	1.14
Induced Impact**	5.6	0.34
Total Impact**	41.0	1.48
Agriculture's Share (%)	37	

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-

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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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- Bureau of Labor Statistics (2017), Montana labor force, retrieved from https://bls.gov/lau/#cntyaa

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