

ECONOMIC IMPACT OF AGRICULTURE

Hill County



January 2021

Hill County is a rural county located in the north central part of the state. Over 87% of land in Hill County is classified as farm land.

Overview (2017 Data)

Population	16,347
County Size (acres)	1,855,469
Land in Farms (%)	87.1
Number of Farms	698
Median Farm Size (acres)	1,020
Average Farm Size (acres)	2,315

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 nearly \$163 million while production expenses were \$122 million.

Government payments were 12.5% of farm revenues.

Market Value of Products Sold	\$130,750,000
Government Payments	\$20,360,000
Farm-Related Income	\$11,831,000
Total Farm Production Expenses	\$122,227,000
Net Cash Farm Income	\$40,174,000

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

Taxation

The market value of all property in Hill County was approximately \$2 billion in 2019. The taxable value assigned by the Montana Department of Revenue was \$41 million. Agricultural Property (as

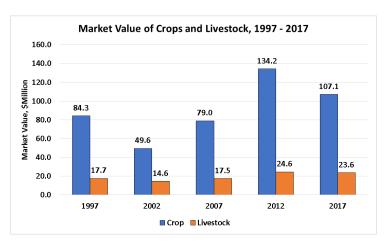
defined by Montana Department of Revenue as Class 3 property) comprised 20% of the county's taxable value.

Property Tax	2019	2014
Summary		
Market Value of All	\$1,824,996,185	\$1,081,125,441
Property		
Taxable Value of All	\$41,342,247	\$31,130,698
Property		
Taxable Value of	\$8,235,183	\$6,403,637
Agricultural Property		
Ag Taxable Value	19.92%	20.57%
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

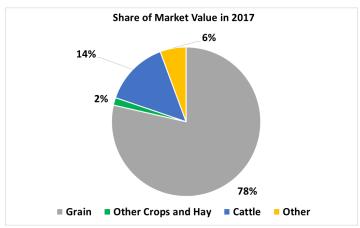
After adjusting for inflation, the market value of crops increased by 27%, while the market value of livestock increased by 33%, from 1997 to 2017.



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

Crops and Livestock

Grain (78%) and cattle (14%) comprised 92% 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 41% to 36%, while the percentage of larger farms, 500 acres or more, increased from 59% to 64% from 2012 to 2017.

	2017		2012	
	Number		Number	
Farm Size by Acres	of Farms	%	of Farms	%
1 to 9	25	4	29	4
10 to 49	40	6	41	5
50 to 179	75	11	141	18
180 to 499	114	16	118	15
500 to 999	88	13	93	12
1,000 or more	356	51	380	47
TOTAL	698	100	802	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 62% to 59%, while the proportion of total sales from the largest farms with sales of \$100,000 or more increased from 38% to 41% from 2012 to 2017.

	2017		2012	
Farm Size by	Number		Number	
Sales	of Farms	%	of Farms	%
Less than 2,500	222	32	297	37
2,500 to 4,999	16	2	26	3
5,000 to 9,999	23	3	30	4
10,000 to 24,999	40	6	37	5
25,000 to 49,999	57	8	52	6
50,000 to 99,999	52	7	58	7
100,000 or more	288	41	302	38
TOTAL	698	100	802	100

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

Tillage and Land Use

The percentage of farms using no till, reduced tillage or cover crops 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	317	45	292	36
Reduced tillage	80	11	83	10
Intensive tillage	61	9	88	11
Cover crops	33	5	35	4
TOTAL FARMS	698		802	

Source: Census of Agriculture: Table 41 Land Use Practices

Producer Profile

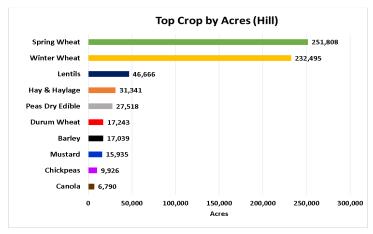
The county producer population was younger than the Montana producer population. Thirty-nine percent of county producers were under 55 years of age, while 27% were over 65 years of age. Thirty-four percent of the Montana producer population were under 55, while 36% were over 65 years of age. Sixty-three percent of producers in the county were males, while 60% of Montana producers were males. Farming was the primary occupation for 50% 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	27	2	570	1
25 to 34	129	11	3,285	7
35 to 44	128	11	5,179	11
45 to 54	179	15	7,309	15
55 to 64	366	31	13,838	29
65 to 74	228	19	11,469	24
75 and older	94	8	5,587	12
Sex	-		-	
Male	751	63	28,563	60
Female	439	37	18,673	40
Primary Occupation				
Yes	599	50	23,847	50
No	591	50	24,314	50
TOTAL PRODUCERS	1,190	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 spring and winter wheat, lentils, hay and haylage, peas dry edible, durum wheat, barley mustard, chickpeas, and canola.



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

Top Livestock

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

Livestock	Number of Head
Cattle	16,826
Chickens-Broilers	3,440
Sheep	419

Source: Census of Agriculture: Tables 11 (Cattle),

13 (Sheep) and 19 (Poultry)

Employment Impact

Agricultural production employed 1,736 workers, or 22% of the county's labor force. According to IMPLAN, economic impact model, 993 of the workers were directly employed in production agriculture. An additional 551 workers were employed in businesses supporting agricultural production, such as feed and fertilizer dealers, and another 192 workers were employed in other related businesses, such as grocery and drugs stores. For every 10 jobs on farms and ranches, 8 additional jobs are generated in the county.

Impact Type	Labor Force	Impact Multipliers
County Labor Force	7,790	
Direct Impact	993	
Indirect Impact	551	0.55
Induced Impact	192	0.19
Total Impact	1,736	0.75
Agriculture's Share (%)	22	

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

Value Added Impacts

Farms and ranches generated \$59.9 million of value-added, or 8% of the county's total gross domestic product of \$712 million in 2017. According to IMPLAN, \$19.7 million was directly contributed by farmers and ranchers. An additional \$28.9 million was generated by businesses supporting agricultural production and \$11.2 million was generated by other related businesses. Each dollar of value-added in agriculture by a farmer or rancher contributes an additional \$2.04 of value-added in other sectors of the county's economy. This significant contribution to the local economy is because Havre is an economic hub for northern Montana.

Impact Type	Value-Added (\$1 million)	Impact Multipliers
County GDP*	712.0	
Direct Impact**	19.7	
Indirect Impact**	28.9	1.47
Induced Impact**	11.2	0.57
Total Impact**	59.9	2.04
Agriculture's Share (%)	8	

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.p
 https://www.nass.usda.gov/Publications/AgCensus/2017/Full-Report/Volume 1, Chapter 1 State Level/Montana/mtv1.p
- Dept. of Revenue "Montana Taxes by County in 2014" https://mtrevenue.gov/wp-content/uploads/2018/01/2014-Taxes-by-County.pdf

- Dept. of Revenue "Montana Taxes by County in 2018" https://mtrevenue.gov/wp-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 https://fred.stlouisfed.org/release/tables?rid=397&eid=1062609&od=2017-01-01#
- St. Louis Federal Reserve Bank (2020). Producer price index for all commodities, St. Louis Federal Reserve Bank, retrieved from https://fred.stlouisfed.org/series/PPIACO
- Bureau of Labor Statistics (2017), Montana labor force, retrieved from https://bls.gov/lau/#cntyaa

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