

# Idaho Livestock and Crop Revenues

## Cattle and Calves

Revenue from cattle and calves is estimated at \$1.8 billion, up 5% from 2016. Strong export markets have supported higher than expected beef prices even when the U.S. beef cow herd grew by 3% in 2017. The January 1 inventory of Idaho beef cows was 503,000 in 2017, down 1% from 2016.

## Milk

Stronger milk prices through 2017, exceeding \$18 per cwt in several months, resulted in milk revenues increasing to an estimated \$2.5 billion, up 7% over 2016. Idaho ranks third in the nation for milk production, with an output of 14.7 billion pounds in 2017. Production was down slightly from 2016, but prices averaged 7% higher. The January 1, 2017, milk cow inventory was 600,000 head, up 13,000 from 2016.

## Barley

With the continued weak barley market, Idaho barley production in 2017 decreased an estimated 22% from 2016, and the average barley price is projected to be 7% lower. Barley revenues in 2017 are estimated to be \$265 million, a decrease of 1% from 2016. The state's average yield is estimated to be 95 bushels per acre, down 12 bushels per acre from 2016.

## Dry Beans

Dry bean revenues are estimated at \$83 million for 2017, 33% higher than in 2016. This huge increase was due to an increase of 45,000 acres harvested. Yields averaged 16.5 cwt per acre, about 270 pounds less than 2016 and prices increased 3% per cwt.

## Hay

As measured by sales, hay is Idaho's third-most-valuable crop. Cash receipts are projected to be \$357 million, down 1% from 2016. Approximately 45% of the hay produced in Idaho is fed on the farms where it was produced rather than being sold; the total value of hay production is estimated at \$650 million in 2016. Idaho hay production was 5.1 million tons, unchanged from 2016. A good hay year coupled with large stocks from previous years and weak export demand drove Idaho's hay prices down 4%. The average price was \$133 per ton, down \$5 per ton from 2016.

## Potatoes

Potatoes remain Idaho's largest crop source of farm cash receipts, with 2017 revenues estimated to be \$955 million in 2017, 13% higher than 2016. Potato production is estimated to be 127 million cwt, down 9% from 2016. Yields averaged 410 cwt per acre in 2017, down 20 cwt per acre from the record high yields of 2016. After 5 years of below-breakeven prices, the average price is estimated to be up 13%, to \$7.66 per cwt.

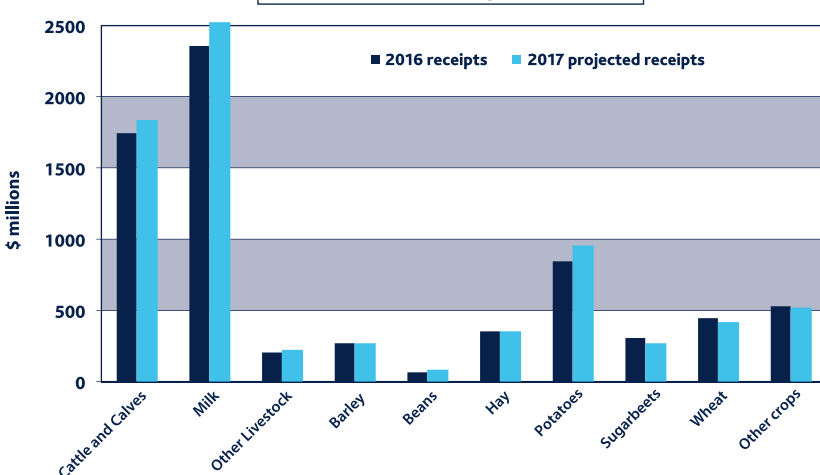
## Sugarbeets

Yield, acres, and sugar content were all off slightly from the 2016 highs, and, when combined with lower sugar prices, 2017 sugarbeet revenues were estimated to be \$271 million, down 10% from 2016. Sugarbeet yields averaged 41 tons per acre and production is projected to be 6.9 million tons, up 2.5% from 2016. Growers harvested 3,000 fewer acres than in 2016. Idaho's projected 2017 average beet price of \$39.50 per ton is 8% lower than in 2016.

## Wheat

Although wheat was Idaho's second largest crop by revenue in 2017, revenues are expected to be \$415 million, down 7% from 2016. The quality issues that plagued 2016 crop were absent from the outstanding statewide quality of the 2017 crop. Production dropped to 90.7 million bushels, down 12% from 2016. Huge domestic and world stocks held wheat prices low, virtually unchanged from 2016's dismal prices.

Idaho Farm Cash Receipts, 2016-2017



Sources:  
USDA National Agricultural Statistics Service and UI projections.

## Idaho Net Farm Income

(\$ millions)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change ('15-'16)
<b>REVENUES</b>											
Crop Production	2,871	2,630	2,691	3,292	3,725	3,496	3,262	2,815	2,810	2,863	2%
Livestock Production	3,386	2,563	3,250	4,004	4,058	4,651	5,487	4,562	4,300	4,585	7%
Farm-related Income	430	674	452	603	526	642	571	617	539	579	7%
Government Payments	151	140	164	113	127	129	83	86	158	89	-44%
Home Consumption	11	10	12	12	17	17	14	16	14	14	2%
Inventory Adjustment	17	100	(87)	147	134	(167)	(62)	236	(14)	28	
<b>TOTAL REVENUES</b>	<b>6,427</b>	<b>6,853</b>	<b>6,093</b>	<b>6,477</b>	<b>8,163</b>	<b>8,582</b>	<b>8,770</b>	<b>9,374</b>	<b>8,355</b>	<b>7,919</b>	<b>-5%</b>
<b>EXPENSES</b>											
Farm Origin Inputs	1,416	1,461	1,418	1,926	2,070	2,129	2,538	2,163	1,717	1,698	-1%
Manufactured Inputs	1,061	935	947	1,202	1,333	1,302	1,313	1,179	1,067	1,069	0%
Other Inputs	1,179	1,263	1,150	1,106	1,321	1,272	1,335	1,237	1,281	1,321	3%
Contract Labor	48	56	30	36	46	59	70	51	78	79	1%
Property Taxes & Fees	134	126	126	133	155	137	167	142	132	141	7%
Capital Consumption	253	243	253	278	461	508	653	583	615	611	-1%
Payments to Stakeholders	1,209	1,284	1,264	1,240	1,247	1,315	1,295	1,160	1,251	1,318	5%
<b>TOTAL EXPENSES</b>	<b>5,301</b>	<b>5,367</b>	<b>5,188</b>	<b>5,922</b>	<b>6,634</b>	<b>6,722</b>	<b>7,371</b>	<b>6,516</b>	<b>6,140</b>	<b>6,238</b>	<b>2%</b>
<b>NET FARM INCOME</b>	<b>1,564</b>	<b>750</b>	<b>1,294</b>	<b>2,250</b>	<b>1,954</b>	<b>2,047</b>	<b>1,985</b>	<b>1,816</b>	<b>1,667</b>	<b>1,920</b>	<b>15%</b>
<b>Year-to-Year Change</b>	<b>68%</b>	<b>-52%</b>	<b>72%</b>	<b>74%</b>	<b>-13%</b>	<b>5%</b>	<b>-3%</b>	<b>-9%</b>	<b>-8%</b>	<b>15%</b>	

SOURCES:

2008-2016: Economic Research Service/USDA

2017: Forecasted by G. Taylor and B. Eborn, University of Idaho

NOTE: Some data for 2016 are preliminary and all 2017 data are preliminary.

## Idaho Cash Receipts from Farm Marketings

(\$ millions)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Change ('16-'17)
<b>LIVESTOCK</b>											
Cattle and Calves	1,144	973	1,191	1,377	1,406	1,863	2,044	1,959	1,743	1,834	5%
Milk	2,101	1,431	1,899	2,433	2,422	2,573	3,198	2,352	2,356	2,526	7%
Other Livestock	141	159	160	194	230	215	246	251	201	226	13%
<b>TOTAL LIVESTOCK</b>	<b>3,386</b>	<b>2,563</b>	<b>3,250</b>	<b>4,004</b>	<b>4,058</b>	<b>4,651</b>	<b>5,487</b>	<b>4,562</b>	<b>4,300</b>	<b>4,585</b>	<b>7%</b>
<b>CROPS</b>											
Barley	239	224	201	213	286	326	295	267	269	265	-1%
Beans	54	57	60	80	95	78	63	93	62	83	33%
Hay	609	345	337	569	530	544	551	440	354	357	1%
Potatoes	755	781	815	901	950	930	919	871	844	955	13%
Sugarbeets	192	185	269	332	369	296	254	284	302	271	-10%
Wheat	512	547	557	681	841	674	647	367	447	415	-7%
Other Crops	511	491	453	516	654	649	534	493	532	516	-3%
<b>TOTAL CROPS</b>	<b>2,871</b>	<b>2,630</b>	<b>2,691</b>	<b>3,292</b>	<b>3,725</b>	<b>3,496</b>	<b>3,262</b>	<b>2,815</b>	<b>2,810</b>	<b>2,863</b>	<b>2%</b>
<b>TOTAL CASH RECEIPTS</b>	<b>6,257</b>	<b>5,193</b>	<b>5,941</b>	<b>7,296</b>	<b>7,783</b>	<b>8,147</b>	<b>8,750</b>	<b>7,376</b>	<b>7,110</b>	<b>7,448</b>	<b>5%</b>
<b>Year-to-Year Change</b>	<b>9%</b>	<b>-17%</b>	<b>14%</b>	<b>23%</b>	<b>7%</b>	<b>5%</b>	<b>7%</b>	<b>-16%</b>	<b>-4%</b>	<b>5%</b>	

SOURCES:

2008-2016: Idaho Agricultural Statistics Service

2017: Forecasted by G. Taylor and B. Eborn, University of Idaho

NOTE: Some data for 2016 are preliminary and all 2017 data are preliminary.

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# The Financial Condition of Idaho Agriculture: 2017

Ben Eborn and Garth Taylor

After three consecutive years of decline, 2017 Idaho net farm income is projected to increase.

After two consecutive years of decline, cash receipts from sales of crops and livestock are projected to be \$7.4 billion in 2017, an increase of 5% over 2016. Two of Idaho's major commodities—potatoes and cattle and calves—increased by 13% and 5%, respectively. Milk cash receipts, Idaho's foremost agricultural commodity, increased by an estimated 7%.

Idaho's 2017 net farm income is projected to be close to \$2 billion, a jump of 15% over 2016. Total revenues are expected to increase by 5%, to \$8.2 billion and expenses are projected to increase by 2%, to \$6.2 billion.

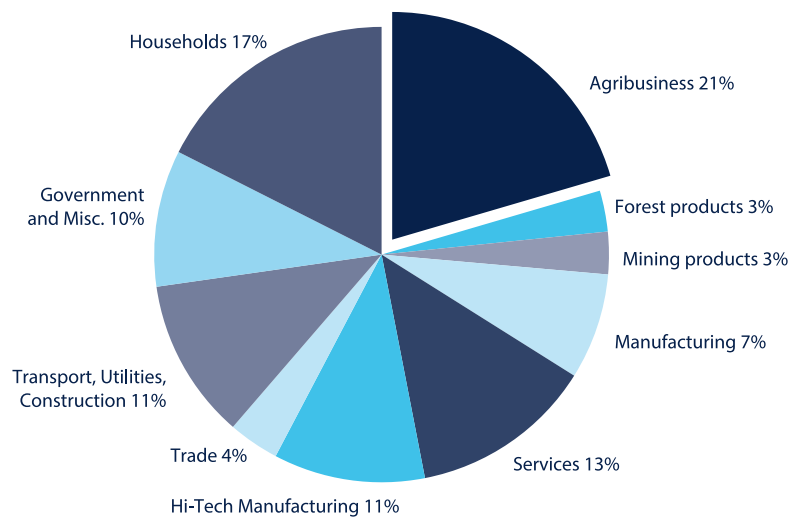
## Highlights:

- Exports from farms and food processors ripple throughout Idaho's economy to make agribusiness Idaho's largest industry. One of every five dollars in sales is directly or indirectly created by agribusiness.
- Idaho ranks first in U.S. potato production. With 2017 projected cash receipts of \$955 million, potatoes are Idaho's largest crop sales. Wheat and hay follow with projected cash receipts of \$415 million and \$357 million, respectively.
- Idaho ranks third in the U.S. for milk production. With \$2.5 billion in cash receipts, milk is the top source of cash receipts from Idaho's agricultural production. Second to milk are cash receipts from cattle and calves, projected to be \$1.8 billion.
- Idaho agriculture is driven largely by livestock. Over 61% of Idaho cash receipts are livestock products: milk, beef, and other (trout, sheep, etc.). Hay, silage, feed grains, and even the by-products of beet pulp and potato waste are livestock feed.
- Idaho's net farm income continued to be volatile in 2017, with a forecast of 15% higher than 2016. The 2017 increase follows three years of decline. Only 4 of the last 15 years have seen less than double-digit, year-to-year changes in net farm income.
- Except for 2009—a year of disastrously poor milk prices—livestock cash receipts have surpassed crop cash receipts every year since 2001. In 2016, livestock cash receipts are estimated to be 61% of total cash receipts, which surpasses crop cash receipts by \$1.7 billion.
- Federal government payments in fiscal year 2017 are estimated at \$89 million, a decrease of 44% over 2016. Grain commodity programs constitute 60% of government payments while conservation programs accounted for 37% and disaster programs accounted for the 3%.

## Contribution of Agribusiness to Idaho's Economy

Agribusiness is a vertically integrated industry comprising food production and processing. In providing food to national and international markets, agribusiness creates business sales, GDP, and jobs throughout the Idaho economy. Agribusiness export dollars ripple throughout Idaho's economy, creating (directly and indirectly) \$27 billion in sales (21% of total economic output), close to 126,000 Idaho jobs (14% of state employment), and more than \$10 billion of state GDP (16% of GDP). Agribusiness is Idaho's largest (export-driven) base industry as ranked by base sales, third largest by base GDP, and fourth largest by base jobs.

Direct and Indirect Sales, by Industry, for the Idaho Economy, 2013



Source: G. Taylor, B. Eborn, and P. Watson. Contribution of Agribusiness to Idaho's Economy, 2013. University of Idaho Extension Bulletin 900. Published in 2015.

## Idaho Farm Cash Receipts

Idaho's 2017 farm cash receipts are estimated to be \$7.4 billion—5% above 2016's \$7.1 billion, breaking the second consecutive year of decline, but 15% lower than the record high of \$8.8 billion set in 2014.

2017 crop revenues are estimated at \$2.9 billion, up 2% from 2016's \$2.8 billion and 6% below the 10-year average. Beans (up 33%) and potatoes (up 13%) recorded the largest increases in receipts over 2016. Other major crops posted declines: wheat (down 7%), sugarbeets (down 10%), and barley (down 1%). Revenue from crops (except sugarbeets) is recorded on a calendar-year basis and therefore includes a portion of the previous year's and the current year's production.

Livestock revenues are estimated at \$4.6 billion, up 7% from 2016 and 12% higher than the 10-year average. Cash receipts from milk are expected to be \$2.5 billion, up 7% from last year's \$2.4 billion. Cash receipts from cattle and calves are projected to be \$1.8 billion, 5% higher than 2016.

In real dollars (inflation adjusted to 2012), estimated cash receipts are 36% higher than the 38-year (1980 to 2017) average. Extreme volatility in commodity prices over the past eight years has increased agricultural revenue volatility to levels not seen since the 1970s and 1980s. In the past 10 years (2008–2017) real cash receipts have grown at an average annual rate of 0.18%. In the previous two decades (1983–2002) real cash receipts grew at an average annual rate of 0.41%.

## Idaho Net Farm Income

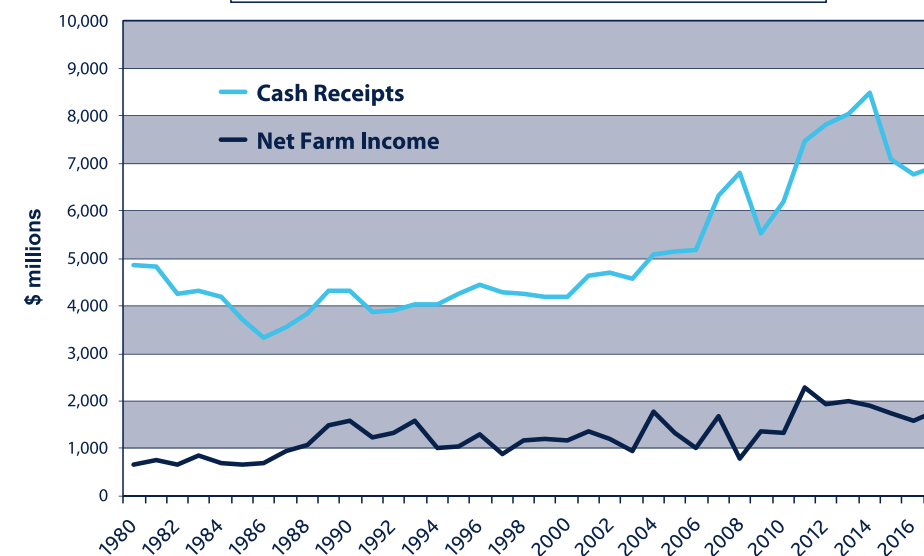
Net farm income is the farmer's bottom line, or revenues minus costs. Revenues include cash receipts from crop and livestock sales, inventory changes, the estimated value of home consumption, government payments, machine hire and custom work, forest product sales, and the imputed rental value of farm dwellings. Farm expenses include farm-origin inputs (purchased livestock, feed, and seed), manufactured inputs (fertilizers, fuel, and electricity), and "other inputs," including repairs and maintenance, machine hire and custom work, marketing, storage, transportation, and contract labor.

The projected 15% increase in 2017 Idaho net farm income resulted from an estimated 5% increase in revenues coupled with an estimated 2% increase in expenses. Estimated net farm income in 2017 is close to \$2 billion, 11% above the 10-year average. In contrast, USDA's 2017 U.S. net farm income is estimated at \$63 billion, up only 3% from 2016, and 2016's U.S. net farm income was down 24% from 2015.

Historically, net farm income is much more volatile than gross cash receipts. In six of the past 10 years, Idaho experienced double-digit swings in net farm income. Net farm income plummeted by 52% from 2008 to 2009, then increased by 72% from 2009 to 2010 and by 74% from 2010 to 2011. The 15% increase in 2017 came on the heels of an 8% decrease in 2016 and a 9% decrease in 2015. Real-dollar Idaho net farm income (inflation adjusted to 2012) set a 48-year record (1970–2017) in 2011. Idaho real net farm income for 2017 is estimated to be 45% above the 48-year average.

The overall decrease in farm expenses in 2017 was attributed to a 1% decrease in farm-origin inputs (feed, seed, and replacement livestock purchases) and manufactured inputs (fertilizer, chemicals, and fuel) were unchanged. Other expenses were up 3%, including machine hire and custom work, marketing, storage, transportation, repairs, and maintenance. Contract labor was up 1%. Farmers continued to benefit from historically low interest rates and low energy prices in 2017.

Idaho Farm Cash Receipts and Net Farm Income, 1980-2017.



Sources: USDA Economic Research Service, Idaho office of the National Agricultural Statistics Service, and UI projections.

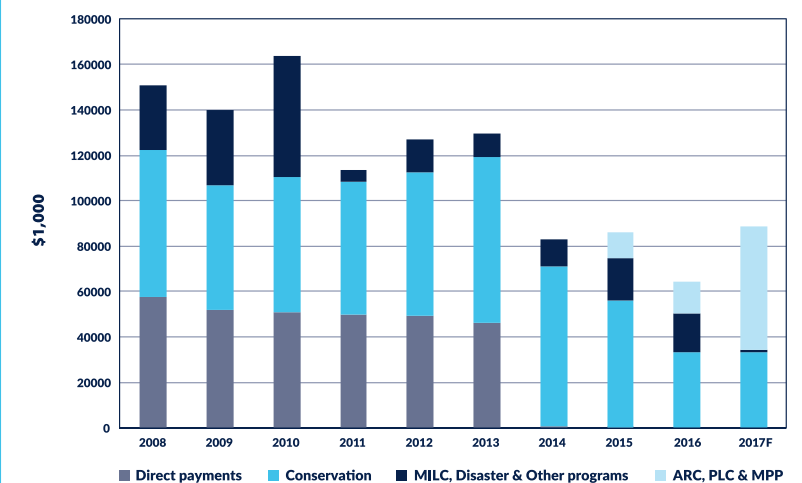
Note: In real dollars (2012 base).

## Government Payments

Federal government payments to Idaho agriculture in fiscal year 2017 are estimated at \$89 million, a decrease of 44% from 2016 and 28% less than the average of the past 10 years.

In 2017, direct payments contributed 17.7% to total U.S. net farm income. In contrast, government payments contributed only 4.6% to Idaho's net farm income, down from a high of 16% in 2005. Idaho received less than 1% of total 2016 payments to U.S. agriculture.

Idaho Government Payments, 2008-2017

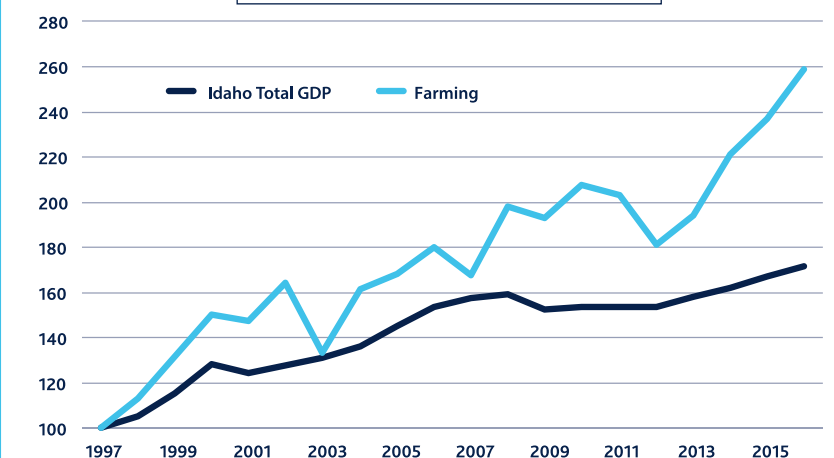


Source: USDA Economic Research Service and UI projections.

## Idaho Agriculture's Gross Domestic Product

Gross domestic product (GDP) measures value added. It equals the value of output minus the value of intermediate goods and services used in production. GDP grows when farms and businesses become more efficient: increasing output while reducing use of intermediate inputs. In 2016, Idaho's nominal GDP exceeded \$67 billion, of which 4.5% was generated by farming. Farm GDP in 2016 dropped by 12% over 2015, to \$2.5 billion, the second consecutive year of decline. Over the past 19 years (1997 to 2016) inflation-adjusted (2009 dollars) Idaho GDP has grown by 172%, while Idaho farm GDP increased 259%.

Idaho Total and Farming GDP Index (1997=100)



Source: U.S. Department of Commerce Bureau of Economic Analysis.