

Idaho Livestock and Crop Revenues

Cattle and Calves

Following record high beef prices in 2015, cattle and calf prices fell considerably in 2016 and throughout the year averaged 37% lower. The January 1 U.S. inventory of beef cattle was up 3.5% from 2015. The January 1 inventory of Idaho beef cows was 513,000 in 2016, up 11% from 2015. Revenue from cattle and calves is estimated at \$1.7 billion, down 11% from 2015.

Milk

Idaho ranks third in the nation for milk production, with an output of 14.7 billion pounds in 2016. Production was up 4% from 2015, and prices averaged 5% lower. Weak milk prices through 2016 caused milk revenues to drop to an estimated \$2.3 billion, down \$26 million from 2015. The January 1, 2016 milk cow inventory was 587,000, up 8,000 from 2015.

Barley

Idaho barley production in 2016 increased an estimated 10% from 2015, and the average barley price is projected to be 2% higher. Barley revenues in 2016 are estimated to be \$304 million, an increase of 16% from 2015. The state's average yield is estimated to be 107 bushels per acre, up 10 bushels per acre from 2015.

Dry Beans

Dry bean revenues are estimated at \$68 million for 2016, 9% lower than in 2015. Average yields of 2,000 pounds per acre are 200 pound more than in 2015, and growers harvested 20,000 more acres.

Hay

As measured by sales, hay is Idaho's third-most-valuable crop. Cash receipts are projected to be \$403 million, down 8% from 2015. Taking into account that 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 \$733 million in 2016. Idaho hay production was 5.4 million tons, up 11% over 2015. A good hay year coupled with large stocks from previous years and weak Idaho export demand drove Idaho's hay prices down 20%. The average price was \$139 per ton, down \$34 per ton from 2015.

Potatoes

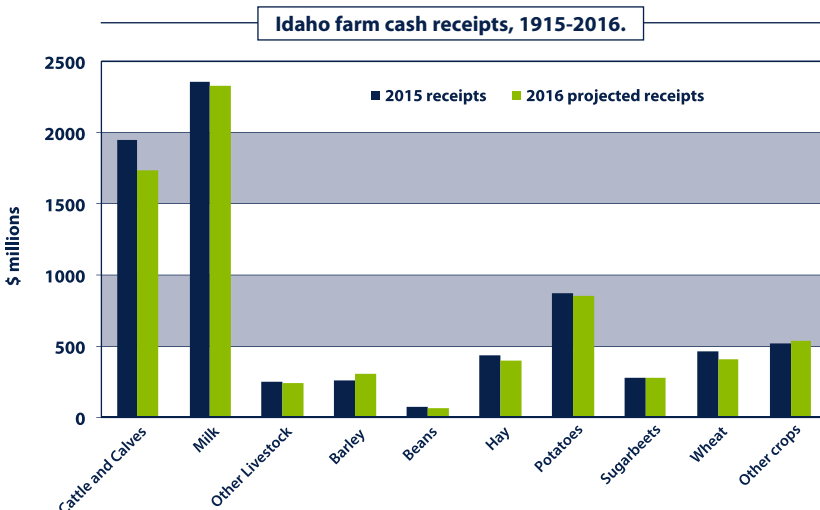
Potatoes remain Idaho's largest crop source of farm cash receipts, with 2016 revenues estimated to be \$851 million in 2016, 2% lower than in 2015. Potato production is estimated to be 139 million cwt, up 7% from 2015. Record yields averaged 430 cwt per acre in 2016, up 25 cwt per acre from the previous year, and the average price is estimated to be down 4%, to \$6.80 per cwt.

Sugarbeets

Record yields and sugar content pushed sugarbeet revenues to an estimated \$284 million, up 2% from 2015. Sugarbeet yields averaged 39.2 ton per acre and production is projected to be 6.7 million tons, up 1% from 2015. Growers harvested 2,000 fewer acres than in 2015. Idaho's projected 2016 average beet price of \$42.67 per ton is 6% lower than in 2015.

Wheat

Wheat quality issues and tremendous yields depressed 2016 wheat prices to 10-year lows. Although wheat was Idaho's second largest crop by revenue in 2016, revenues are expected to be \$412 million, down 11% from 2015. Projected at 102 million bushels, 2016 production was up 14% from 2015. Wheat prices fell 24%, with the average price estimated to be \$4.33 per bushel in 2016.



Sources: USDA National Agricultural Statistics Service and UI projections.

Idaho Net Farm Income

(\$ millions)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Change ('14-'15)
REVENUES											
Crop Production	2,438	2,872	2,630	2,691	3,292	3,725	3,496	3,281	2,912	2,858	-2%
Livestock Production	3,282	3,371	2,539	3,245	3,996	4,058	4,651	5,487	4,552	4,311	-5%
Farm-related Income	560	430	674	452	603	522	642	572	617	597	-3%
Government Payments	121	151	140	164	113	127	129	83	86	64	-25%
Home Consumption	6	11	10	12	12	17	17	14	16	17	4%
Inventory Adjustment	21	17	100	(87)	147	133	(166)	(62)	172	72	-58%
TOTAL REVENUES	6,427	6,853	6,093	6,477	8,163	8,582	8,770	9,374	8,355	7,919	-5%
EXPENSES											
Farm Origin Inputs	1,378	1,416	1,460	1,418	1,926	2,070	2,129	2,537	2,161	2,028	-6%
Manufactured Inputs	873	1,061	935	947	1,202	1,333	1,302	1,313	1,179	1,082	-8%
Other Inputs	1,046	1,179	1,263	1,150	1,106	1,320	1,272	1,335	1,237	1,257	2%
Contract Labor	50	48	56	30	36	46	59	70	51	49	-3%
Property Taxes & Fees	144	134	126	126	133	155	137	167	142	157	10%
Capital Consumption	397	251	241	253	278	461	509	650	581	570	-2%
Payments to Stakeholders	1,008	1,209	1,284	1,264	1,240	1,247	1,315	1,294	1,160	1,178	2%
TOTAL EXPENSES	4,897	5,299	5,364	5,188	5,922	6,632	6,722	7,366	6,511	6,321	-3%
NET FARM INCOME	1,530	1,554	728	1,289	2,242	1,950	2,047	2,008	1,844	1,598	-13%
Year-to-Year Change	68%	2%	-53%	77%	74%	-13%	5%	-2%	-8%	-13%	

SOURCES:

2007–2015: Economic Research Service/USDA

2016: Forecasted by G. Taylor and B. Eborn, University of Idaho

NOTE: Some data for 2015 are preliminary and all 2016 data are preliminary.

Idaho Cash Receipts from Farm Marketings

(\$ millions)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Change ('15-'16)
LIVESTOCK											
Cattle and Calves	1,102	1,144	973	1,191	1,377	1,406	1,863	2,044	1,951	1,738	-11%
Milk	2,050	2,101	1,431	1,899	2,433	2,422	2,573	3,198	2,352	2,325	-1%
Other Livestock	129	126	136	155	186	230	215	246	249	248	-1%
TOTAL LIVESTOCK	3,282	3,371	2,539	3,245	3,996	4,058	4,651	5,487	4,552	4,311	-5%
CROPS											
Barley	144	239	224	201	213	286	326	295	262	304	16%
Beans	40	54	57	60	80	95	78	63	75	68	-9%
Hay	403	609	345	337	569	530	544	551	440	403	-8%
Potatoes	714	755	781	815	901	950	930	919	873	851	-2%
Sugarbeets	212	192	185	269	332	369	296	254	280	284	2%
Wheat	486	512	547	557	681	841	674	647	464	412	-11%
Other Crops	440	512	491	453	516	654	648	553	519	536	3%
TOTAL CROPS	2,438	2,872	2,630	2,691	3,292	3,725	3,496	3,281	2,912	2,858	-2%
TOTAL CASH RECEIPTS	5,720	6,243	5,169	5,937	7,288	7,783	8,147	8,768	7,464	7,169	-4%
Year-to-Year Change	25%	9%	-17%	15%	23%	7%	5%	8%	-15%	-4%	

SOURCES:

2007–2015: Idaho Agricultural Statistics Service

2016: Forecasted by G. Taylor and B. Eborn, University of Idaho

NOTE: Some data for 2015 are preliminary and all 2016 data are preliminary.

The authors—Ben Eborn, Extension Economist, and Garth Taylor, Economist, UI Department of Agricultural Economics and Rural Sociology, Moscow.

University of Idaho
College of Agricultural and Life Sciences

University of Idaho
Extension

Published by University of Idaho Extension, Moscow, ID

ANNUAL FINANCIAL CONDITION REPORT NO. 14

DECEMBER 2016

The Financial Condition of Idaho Agriculture: 2016

Ben Eborn and Garth Taylor

Idaho records three consecutive years of decline in net farm income.

Cash receipts from sales of crops and livestock are projected to be \$7.2 billion in 2016, a decline of 4% from 2015. Two of Idaho's major commodities—wheat and cattle and calves—recorded double-digit percentage declines in cash receipts. Cash receipts from sales of milk, Idaho's foremost agricultural commodity, fell by an estimated 1%.

Idaho's 2016 net farm income is projected to be \$1.6 billion, down 13% from 2015. Total revenues are expected to decrease by 5%, to \$7.9 billion, while expenses are projected to decline 3%, to \$6.3 billion.

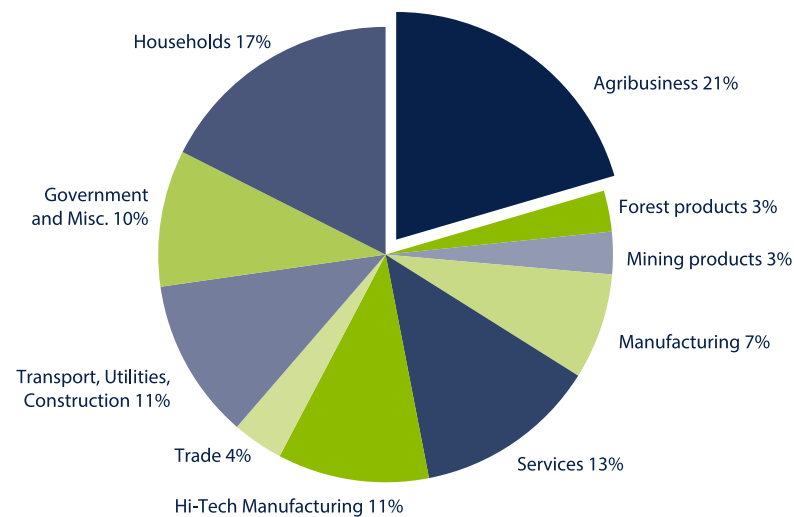
Highlights:

- 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 projected cash receipts of \$851 million, potatoes are Idaho's highest-value crop. Wheat and hay follow potatoes in projected cash receipts—\$412 million and \$403 million, respectively.
- Idaho's milk production ranks third in the nation. With \$2.3 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 \$1.7 billion.
- As measured by both net farm income and cash receipts, Idaho is the third largest agricultural state in the West, after California and Washington.
- Idaho's net farm income continued to be volatile in 2016, with a forecast of 13% lower than in 2015. This drop follows an 8% drop in 2015. Only four of the last 15 years have seen less than double-digit, year-to-year changes in net farm income.
- With the exception of 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 60% of total cash receipts which surpasses crop cash receipts by \$1.5 billion.
- Federal government payments in fiscal year 2016 are estimated at \$64 million, a decrease of 25% from 2015. Conservation programs dominated government payments.

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 base (export-driven) 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 2016 farm cash receipts are estimated to be \$7.2 billion—4% below last year's \$7.5 billion making 2016 the second consecutive year of decline (down 19%) from the record high of \$8.8 billion set in 2014.

2016 crop revenues are estimated at \$2.86 billion, down 2% from 2015's \$2.91 billion and 5% below the 10-year average. Barley (up 16%) and sugarbeets (up 2%) are the only two major crops that recorded increased receipts over 2015. Other major crops posted declines: wheat (down 11%), hay (down 8%), dry beans (down 9%), and potatoes (down 2%). 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 \$4.3 billion, down 5% from 2015 but still 9% higher than the 10-year average. Cash receipts from cattle and calves are projected to be \$1.7 billion, 11% lower than in 2015. Cash receipts from milk are expected to be \$2.3 billion, down 1% from last year's \$2.4 billion.

In real dollars (inflation adjusted to 2012), estimated cash receipts are 35% higher than the 37-year (1980 to 2016) 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 (2007–16) real cash receipts have grown at an average annual rate of 0.74%. In the previous two decades (1983–02) real cash receipts grew at an average annual rate of only 0.41%.

Idaho Net Farm Income

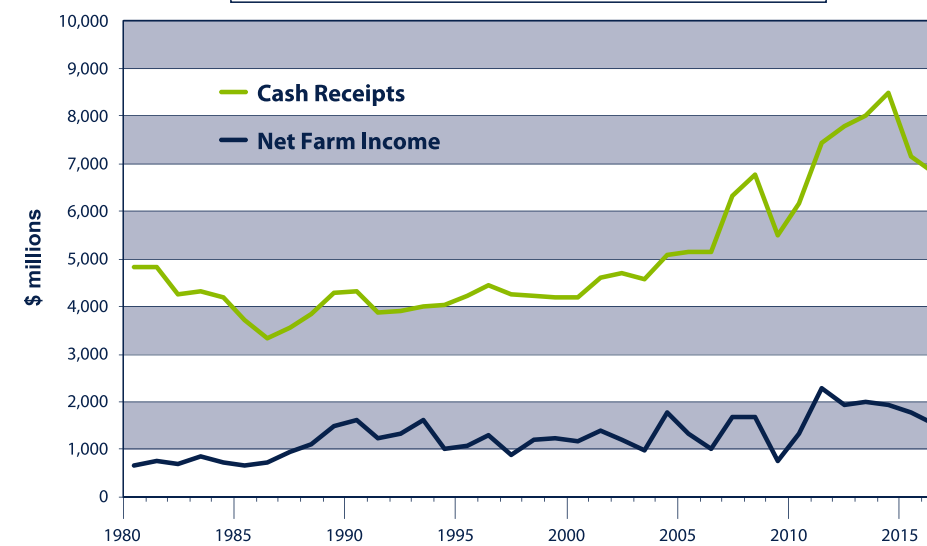
Net farm income is the farmer's bottom line, or revenues minus costs. Revenues include cash receipts from crop and livestock marketings, inventory changes, the estimated value of home consumption, government payments, machine hire and custom work, forest product sales, and the imputed rental value of 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 13% decrease in 2016 Idaho net farm income resulted from an estimated 5% decrease in revenues coupled with an estimated 3% decrease in expenses. Estimated net farm income in 2016 is \$1.6 billion, 5% below the 10-year average. In contrast, USDA's 2016 U.S. net farm income is estimated at \$67 billion, down 17% from 2015, and 2015's U.S. net farm income was down 13% from 2014.

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 53% from 2008 to 2009, then increased by 77% from 2009 to 2010 and by 74% from 2010 to 2011. The 12% decrease in 2016 came on the heels of a 8% decrease in 2015 and a 2% decrease in 2013. Real-dollar (inflation adjusted to 2012) Idaho net farm income set a 47-year record (1970–16) in 2011. Idaho real net farm income for 2016 is estimated to be 25% above the 47-year average.

The overall decrease in farm expenses in 2016 was attributed to a 6% decrease in farm-origin inputs (feed, seed, and replacement livestock purchases) and an 8% decrease in manufactured inputs (fertilizer, chemicals, and fuel). Other expenses were up 2%, including machine hire and custom work, marketing, storage, transportation, repairs, and maintenance. Contract labor was down 3%. Farmers continued to benefit from historically low interest rates in 2016.

Idaho farm cash receipts and net farm income, 1980-2016.



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

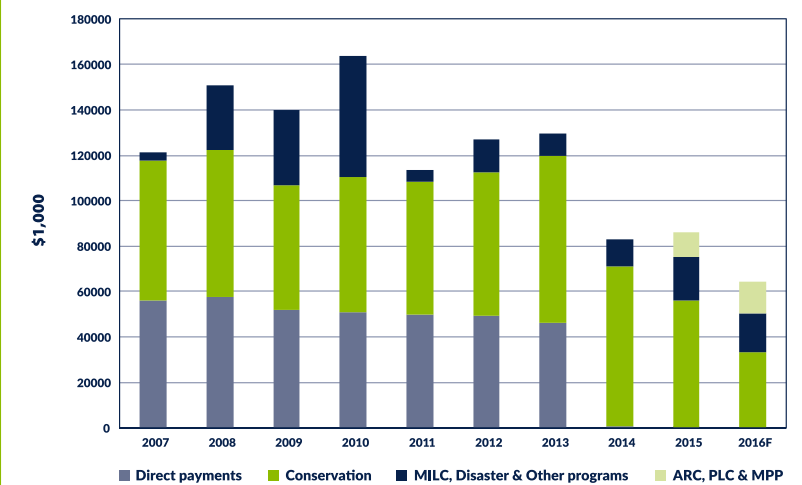
Note: In real dollars (2012 base).

Government Payments

Federal government payments to Idaho agriculture in fiscal year 2016 are estimated at \$64 million, a decrease of 25% from 2015 and 46% less than the average of the past 10 years.

In 2016, direct payments contributed 19.2% to U.S. net farm income. In contrast, government payments contributed only 4% 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, 2007-2016



Source: USDA Economic Research Service and UI projections.

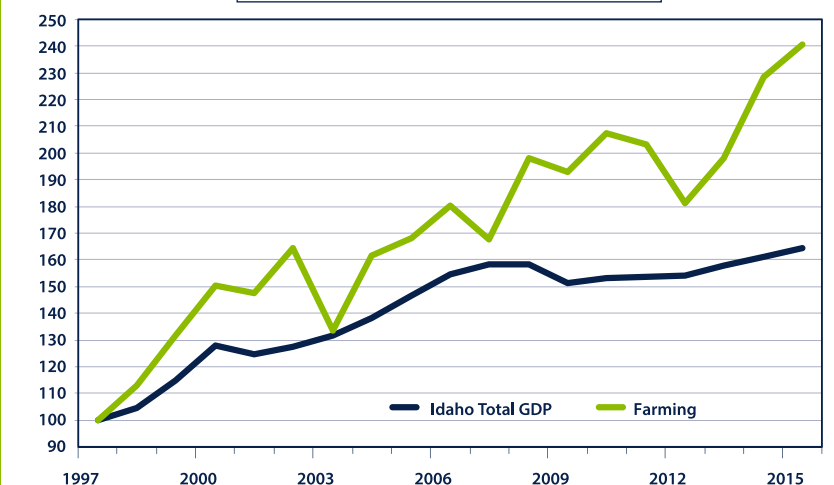
Note: In real dollars (2012 base).

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 reduce their use of intermediate inputs to produce the same output.

In 2015 Idaho's nominal GDP exceeded \$65 billion, of which 5% was farming. Farming GDP in 2015 dropped by 13% from 2014, to \$3.2 billion. Over the past 18 years (1997–2015) Idaho GDP has grown by 164% and Idaho farm GDP has shot up 240%.

Idaho total and farming GDP Index (1997=100)



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