

Idaho Livestock and Crop Revenues

Cattle and Calves

Revenue from cattle and calves is estimated at \$1.6 billion in 2020, down 6% from 2019. Disruption in the supply chain, packing plants, and export markets caused by COVID-19 put downward pressure on cattle prices most of the year. The January 1 inventory of Idaho beef cows was 495,000 head in 2020, down 2% from 2019.

Milk

Record production and stronger milk prices through 2020 increased milk revenues to an estimated \$2.9 billion, up 2% from 2019. Idaho ranks third in the nation for milk production, with a record output of 16.3 billion pounds in 2020. Production was up 4% from 2019. The January 1, 2020, milk cow inventory was 635,000 head. Milk prices fell to \$14 per cwt, forcing some dairy producers to dump milk before dramatic price jumps to over \$20 per cwt quelled the need. Prices averaged 2% lower.

Barley

Idaho barley production estimates in 2020 nearly matched those of 2019, although the average barley price is projected to be 3% lower. Barley revenues in 2020 are estimated to be \$274 million, an increase of 10% from 2019. State average yield is estimated to be 110 bu/acre, up 6 bu/acre from 2019.

Hay

As measured by sales, hay is Idaho's third-most-valuable crop. Cash receipts are projected to be \$427 million, down 9% from 2019.

Approximately 45% of the hay produced in Idaho is fed on the farms where it was produced rather than sold; the total value of hay production is estimated at \$777 million in 2020. Idaho hay production was estimated at 5.1 million tons, down 0.5% from 2019. The average price was \$153 per ton, down \$6 per ton from 2019.

Potatoes

Potatoes remain Idaho's largest crop source of farm cash receipts, with 2020 revenues estimated to be \$1.1 billion, 13% higher than 2019. Potato production is estimated to be 137 million cwt, up 7% from 2019. Excellent growing and harvesting conditions in 2020 led to yields that averaged 455 cwt/acre, more than the record-high 450 cwt/acre set in 2018. COVID-19 created violent price swings: a few weeks after potatoes were dumped, prices rocketed. However, Idaho average prices were estimated to be up 6%, to \$8.80 per cwt.

Sugarbeets

After a rough spring, sugarbeet yields and sugar content finished strong. Some farmers reported yields close to a phenomenal 50 tons/acre with great sugar content. Sugarbeet revenues are estimated to be \$366 million, up 29% from 2019. Sugarbeet yields averaged 40.2 tons/acre, with production projected at 6.9 million tons, 7% more than 2019. Growers harvested 7,000 more acres than they did in 2019. Idaho's projected 2020 average beet price of \$53/ton is 9% higher than in 2019.

Wheat

Wheat was Idaho's second-largest crop by revenue in 2020; revenues are expected to be \$525 million, up 17% from 2019. Production was 112.5 million bushels, up 14% from 2019. Lower US stocks and steady exports were not enough to increase prices and the 2020 average price was down 3% from 2019.

Idaho Net Farm Income (\$ millions)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Change ('19-'20)
REVENUES											
Crop Production	3,292	3,725	3,495	3,299	2,890	2,950	2,959	3,152	3,238	3,714	15%
Livestock Production	4,004	4,058	4,639	5,492	4,574	4,280	4,374	4,324	4,792	4,762	-1%
Farm-Related Income	603	526	642	571	617	539	658	601	558	564	1%
Government Payments	113	127	129	83	86	130	162	157	165	646	291%
Home Consumption	12	17	17	14	16	14	16	14	17	17	3%
Inventory Adjustment	147	134	(164)	(65)	237	20	(16)	107	(17)	(75)	332%
TOTAL REVENUES	8,171	8,587	8,758	9,395	8,420	7,934	8,153	8,354	8,753	9,628	10%
EXPENSES											
Farm Origin Inputs	1,926	2,070	2,128	2,537	2,161	1,710	1,994	2,024	2,113	2,081	-2%
Manufactured Inputs	1,202	1,333	1,302	1,313	1,179	1,067	1,173	1,135	1,019	1,006	-1%
Other Inputs	1,106	1,321	1,272	1,335	1,237	1,281	1,425	1,271	1,227	1,231	0%
Contract Labor	36	46	59	70	51	78	67	59	74	75	1%
Property Taxes & Fees	133	155	137	167	142	132	135	128	142	152	7%
Capital Consumption	278	462	512	658	587	612	558	482	446	438	-2%
Payments to Stakeholders	1,240	1,247	1,315	1,294	1,160	1,249	1,500	1,489	1,182	1,118	-5%
TOTAL EXPENSES	5,922	6,634	6,726	7,374	6,517	6,129	6,851	6,587	6,203	6,101	-2%
NET FARM INCOME	2,250	1,953	2,032	2,020	1,903	1,805	1,302	1,767	2,550	3,527	38%
Year-to-Year Change	74%	-13%	4%	-1%	-6%	-5%	-28%	36%	44%	38%	

SOURCES: 2011–19: Economic Research Service/USDA. 2020: Forecasted by G. Taylor and B. Eborn, University of Idaho. NOTE: Some data for 2019 are preliminary and all 2020 data are preliminary.

Idaho Cash Receipts from Farm Marketings (\$ millions)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Change ('19-'20)
LIVESTOCK											
Cattle and Calves	1,377	1,406	1,849	2,044	1,959	1,715	1,647	1,726	1,736	1,632	-6%
Milk	2,433	2,422	2,573	3,198	2,352	2,356	2,511	2,373	2,854	2,917	2%
Other Livestock	194	230	217	251	263	210	215	225	202	214	6%
TOTAL LIVESTOCK	4,004	4,058	4,639	5,492	4,574	4,280	4,374	4,324	4,792	4,762	-1%
CROPS											
Barley	213	286	326	295	267	268	237	216	249	274	10%
Hay	569	530	544	551	440	354	380	423	468	427	-9%
Potatoes	901	950	932	923	871	869	905	930	954	1,079	13%
Sugarbeets	332	369	296	254	284	301	290	276	285	366	29%
Wheat	681	841	674	650	367	445	420	522	448	525	17%
Other Crops	809	1,035	1,049	922	928	981	964	1,001	1,084	1,042	-4%
TOTAL CROPS	3,292	3,725	3,495	3,299	2,890	2,950	2,959	3,152	3,238	3,714	15%
TOTAL CASH RECEIPTS	7,296	7,783	8,134	8,791	7,464	7,230	7,332	7,476	8,030	8,476	6%
Year-to-Year Change	23%	7%	5%	8%	-15%	-3%	1%	2%	7%	6%	

SOURCES: 2011–19: Idaho Agricultural Statistics Service. 2020: Forecasted by G. Taylor and B. Eborn, University of Idaho. NOTE: Some data for 2019 are preliminary and all 2020 data are preliminary.

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The Financial Condition of Idaho Agriculture: 2020

Ben Eborn and Garth Taylor

For the second consecutive year, 2020 Idaho net farm income is projected to set a record high.

Cash receipts of crops and livestock in 2020 are projected to be \$8.5 billion, the second highest on record, just 4% below the 2014 record high. Milk cash receipts, Idaho's leading agricultural commodity, increased by an estimated 2%. Cash receipts for Idaho's largest crop, potatoes, increased by 13% and cash receipts for cattle and calves decreased by 6%.

Idaho's 2020 net farm income is projected to be \$3.5 billion, a 38% jump over 2019. Total revenues are projected to increase 10% to \$9.6 billion and total expenses are projected to be down 2%. If realized, 2020 net farm income will be a record high, \$978 million above last year's record of \$2.6 billion. In 2020, government payments topped 18% of Idaho net farm income, up from 6% in 2019. Government payments may be close to 40% of US net farm income. 2020 Idaho net income would be a record high even without government payments.

Highlights:

- Exports from farms and food processors ripple throughout Idaho's economy, making agribusiness Idaho's largest industry. One of every five dollars in sales is directly or indirectly created by exports from agribusinesses.
- Idaho ranks first in US potato production. With 2020 projected cash receipts of \$1.1 billion, potatoes top the list in Idaho crop sales. Wheat and hay follow with projected cash receipts of \$525 million and \$427 million, respectively.
- Idaho ranks third in the United States for milk production. With \$2.9 billion, milk is the top source of Idaho's cash receipts. Second to milk are cash receipts from cattle and calves, projected to be \$1.6 billion.
- Idaho agriculture is driven largely by livestock. Over 56% of Idaho cash receipts are livestock products: milk, beef, and other (trout, sheep, etc.). Hay, silage, feed grains, and the by-products of beet pulp and potato waste feed Idaho livestock.
- Idaho's net farm income continues to be volatile. Net farm income for 2020 is forecasted to be 38% higher than 2019. The 2020 increase follows a 44% increase in 2019 and a 36% increase in 2018 which followed four years of declines. Only four of the last fifteen 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 2020, livestock cash receipts are estimated to surpass crop cash receipts by \$1.0 billion.
- Federal government payments in 2020 are estimated at \$646 million, an increase of 291% from 2019. Coronavirus Food Assistance Program payments were an estimated \$490 million; however, Idaho would have had record net farm income in 2020 even without 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 and jobs in the Idaho economy and contributes to the state's GDP. Agribusiness export dollars ripple throughout Idaho's economy, creating (directly and indirectly)

- \$26 billion in sales, 18% of Idaho's total economic output
- 123,000 Idaho jobs, 1 in every 8 jobs in the state
- \$10 billion in value added, 13% of Idaho's GDP

Idaho Farm Cash Receipts

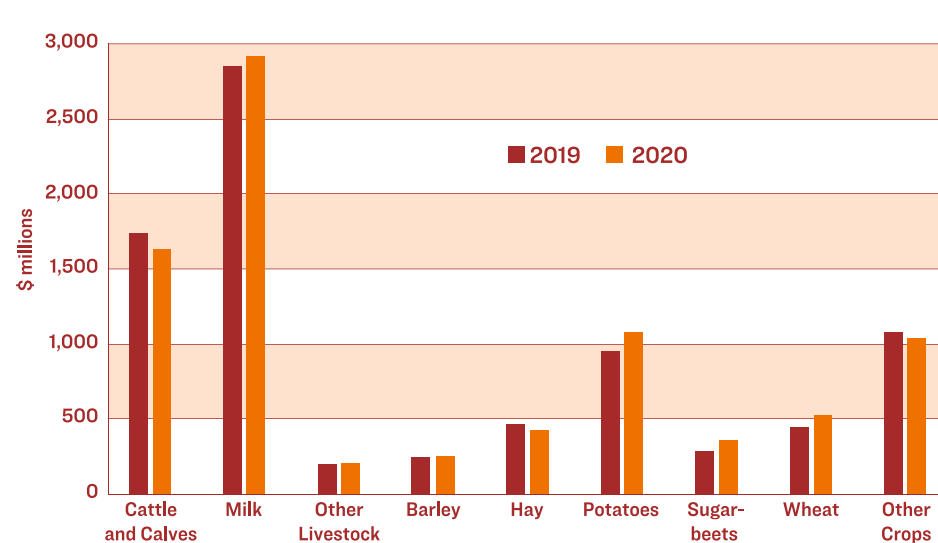
Idaho's 2020 farm cash receipts are estimated to be \$8.5 billion—a 6% increase from 2019's \$8.0 billion, just 4% short of the record high of \$8.8 billion set in 2014.

2020 crop revenues are estimated at \$3.7 billion, up 15% from 2019's \$3.3 billion and 14% above the 10-year average. Sugarbeets (up 29%), wheat (up 17%), potatoes (up 13%), and barley (up 10%) recorded the largest increases in receipts over 2019. Hay receipts decreased 9% while other crops posted a 4% decrease. 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 \$4.8 billion, down 1% from 2019 and 5% higher than the 10-year average. Cash receipts from milk are expected to be \$2.9 billion, up 2% from last year. Cash receipts from cattle and calves are projected to be \$1.6 billion, 6% lower than 2019.

In real dollars (inflation adjusted to 2020), estimated cash receipts are 43% higher than the 41-year (1980–2020) average. Extreme volatility in commodity prices over the past ten years has increased agricultural revenue volatility to levels not seen since the 1970s and 1980s.

Idaho Farm Cash Receipts, 2019 & 2020



Sources: USDA National Agricultural Statistics Service and UI projections.

Idaho Net Farm Income

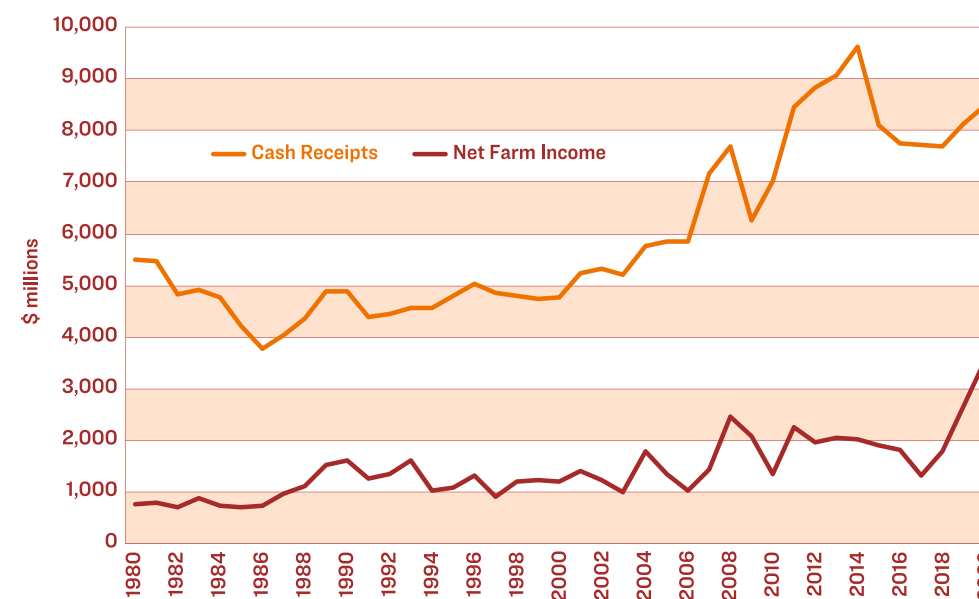
Net farm income, revenues minus costs, is the farmer's bottom line. Revenues include cash receipts from crop and livestock sales, inventory changes, the estimated value of home consumption, government payments, machine hire and custom work, forest product sales, and the imputed rental value of farm dwellings. 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 38% increase in 2020 Idaho net farm income is the difference between an estimated 10% increase in total revenues minus an estimated 2% decrease in total expenses. Estimated net farm income in 2020 is \$3.5 billion, 67% above the 10-year average. In contrast, United States Department of Agriculture's 2020 US net farm income is estimated at \$120 billion, up 43% from 2019.

Historically, net farm income is much more volatile than gross cash receipts. In six of the past ten years, Idaho experienced double-digit swings in net farm income. The 38% increase in 2020 followed a 44% increase in 2019 and a 36% increase in 2018. Real-dollar Idaho net farm income (inflation adjusted to 2020) set a new record in 2020, surpassing the previous real net farm income record set in 2007. Idaho real net farm income for 2020 is estimated to be 120% above the 41-year average (1980–2020).

The overall decrease in farm expenses in 2020 was attributed to a 2% decrease for farm-origin inputs (feed, seed, and replacement livestock purchases) and a 1% decrease in manufactured inputs (fertilizer, chemicals, and fuel). Other expenses were up less than 1%, including machine hire and custom work, marketing, storage, transportation, repairs, and maintenance. Contract labor was up 1.4%. Interest expenses were down 26% in 2020.

Idaho Farm Cash Receipts and Net Farm Income, 1980–2020



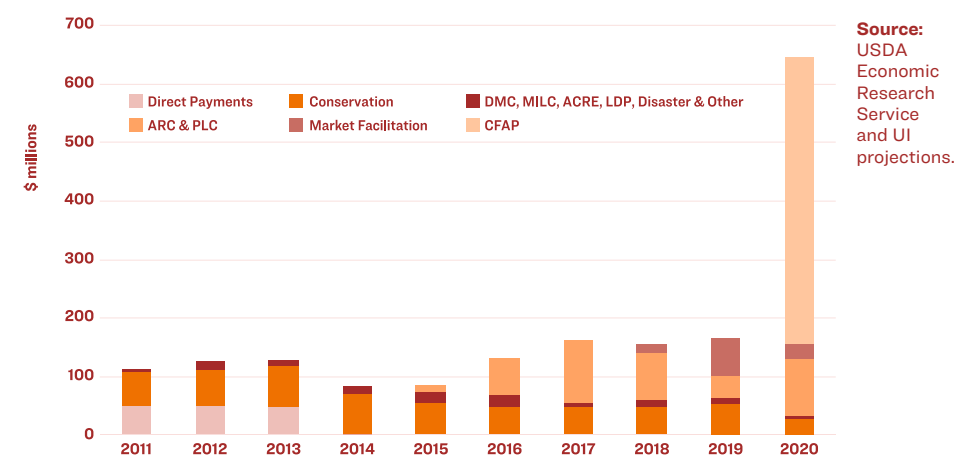
Sources: USDA Economic Research Service, Idaho office of the National Agricultural Statistics Service, and UI projections.

Note: In real dollars (2020 base).

Idaho Government Payments

Federal government payments to Idaho agriculture in fiscal year 2020 are estimated at \$646 million, an increase of 291% from 2019 and 400% more than the average of the previous ten years. In 2020, Coronavirus Food Assistance Program (CFAP) payments were an estimated \$490 million and Market Facilitation Program payments were approximately \$26 million. Grain commodity program payments were approximately \$95 million while conservation programs accounted for \$28 million and disaster programs accounted for \$7 million. Direct payments are forecasted to be 39% of total US net farm income in 2020. In contrast, government payments contributed 18% to Idaho's net farm income, up from 6% in 2019. Idaho received 1.4% of total 2020 payments to US agriculture.

Idaho Government Payments, 2011–20



Source: USDA Economic Research Service and UI projections.

Idaho Agriculture's Gross Domestic Product

Gross domestic product (GDP) measures value added, 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 2019, Idaho's nominal GDP exceeded \$83 billion, of which 4.3% was generated by farming. Farm GDP in 2019 increased 18% from 2018, to \$3.6 billion. Over the past 23 years (1997–2019) inflation-adjusted (2012 dollars) Idaho GDP has grown over 100%, while Idaho farm GDP increased over 200%.

Idaho Total and Farming GDP Index (1997=100)



Chained dollars—2012 base.

Source: US Department of Commerce Bureau of Economic Analysis and UI projections.