

Idaho Livestock and Crop Revenues

Cattle and Calves

Revenue from cattle and calves is estimated at \$1.8 billion in 2021, up by over 13% from 2020. A large explanatory factor for this substantial increase is higher cattle prices, which are up by more than 11% relative to 2020. This represents a substantial recovery relative to 2020, when cattle markets experienced supply chain disruptions during the height of the COVID-19 crisis.

Milk

Stronger milk prices, especially in the last months of 2021, and higher production volumes relative to 2020 increased estimated milk revenues to \$3.1 billion from \$3.0 billion in 2020. Production volumes were up 1% in 2021 relative to 2020. Milk cow inventories in Idaho as of January 1, 2021, were 646,000, which is up 1.7% compared to 2020. Prices remained in a range of \$17–\$21/cwt throughout 2021 and were 1% higher on average than in 2020. This relatively tight price range differed from 2020, when prices fell to below \$15/cwt for several months during the main months of the COVID-19 crisis.

Other Livestock

Revenues for other livestock (e.g., trout, sheep, goats) were estimated at \$191 million, 3% greater than in 2020. However, this level of revenue is lower than the previous 10-year average value of \$219 million.

Barley

Idaho barley production in 2021 was down by an estimated 11.4 million bushels (20.7%) relative to 2020. However, prices were higher in most of 2021 and especially the last part of the year compared to 2020. These price increases were crucial for barley farmers, since harvested acres decreased by 10,000 acres and yields by 21 bushels versus 2020. With higher prices but lower production, barley revenues are estimated at \$246 million, which is 3.0% higher than the 2020 value.

Hay

As measured by sales, hay is Idaho's third-most-valuable crop, behind potatoes and wheat. Hay cash receipts for 2021 are projected to be \$554 million, a value that is up 21% from 2020. Approximately 45% of the hay produced in Idaho is fed on the farms where it was produced rather than sold. Thus, the total value of hay production is estimated at \$955 million in 2021. Idaho hay production in 2021 was an estimated 5,131 million tons, which is 139 million tons and 2.6% lower than that produced in 2020.

Potatoes

Potatoes remain Idaho's largest crop source of farm cash receipts, with 2021 revenues estimated to be \$1.0 billion in 2021, an 8% increase from estimated potato cash receipts for 2020. High temperatures during the growing season led to estimated potato yields of 420 cwt/ac, which are down 30 cwt/ac from 2020 yields. Harvested acreage was 15,000 greater than in 2020. Thus, total 2021 potato production is estimated to be 132 million cwt, a decline of 3 million cwt (2%) from 2020. Potato prices were lower than they were in 2020 for the beginning part of 2021 but have increased substantially (above \$10/cwt) after July 2021. The higher prices in the last months of 2021 were an important factor explaining the increase in potato cash receipts for 2021 relative to 2020.

Sugar Beets

Sugar beet yields and sugar content for 2021 were slightly below those in 2020 as the roots were negatively impacted by excessive heat during the 2021 growing season. Sugar beet yields in 2021 averaged 40.2 tons/ac, down 40.5 tons/ac from 2020. Sugar beet production for 2021 is projected to be 6.8 million tons. Harvested acres were 1,000 acres higher in 2021. Total sugar beet production was slightly below that from 2020. Idaho's projected 2021 average sugar beet price of \$58/ton is over 9% higher than in 2020. Sugar beet revenues are estimated to be \$396 million; 19% higher than in 2020.

Wheat

Wheat was Idaho's second-largest crop by revenue in 2021. Wheat revenues for 2021 are expected to be \$560 million, up \$16 million (a 3% increase) from 2020. Production was impacted greatly by the drought and high temperatures during the 2021 growing season. Wheat yields are estimated as over 29 bu/ac, lower than 2020 (down 30%). With harvested acreage down slightly, this implies a total production value of 76.5 million bu, which is 32% lower than the 112.5 million bu estimate for 2020. Despite the drought- and heat-related production shortfall, wheat prices in 2021 have been greater than those in 2020 for the full year, especially since August 2021. Average wheat prices for 2021 are up 27% from 2020's prices.

Idaho Net Farm Income (\$ millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Change ('20-'21)
REVENUES											
Crop Production	3,725	3,495	3,299	2,890	2,950	2,959	3,147	3,248	3,365	3,839	14%
Livestock Production	4,058	4,639	5,492	4,574	4,280	4,374	4,324	4,792	4,748	5,042	6%
Farm-Related Income	526	642	571	617	539	658	601	558	798	830	4%
Government Payments	127	129	83	86	130	162	157	165	823	488	-41%
Home Consumption	17	17	14	16	14	16	14	17	16	17	4%
Inventory Adjustment	134	(164)	(65)	237	20	(16)	107	(47)	82	17	-79%
TOTAL REVENUES	8,587	8,758	9,395	8,420	7,933	8,153	8,349	8,733	9,833	10,234	4%
EXPENSES											
Farm Origin Inputs	2,070	2,128	2,537	2,161	1,710	1,994	2,025	2,114	2,244	2,503	12%
Manufactured Inputs	1,333	1,302	1,313	1,179	1,067	1,173	1,135	1,019	1,244	1,393	12%
Other Inputs	1,321	1,272	1,335	1,237	1,281	1,425	1,271	1,227	1,470	1,565	6%
Contract Labor	46	59	70	51	78	67	59	74	76	79	3%
Property Taxes & Fees	155	137	167	142	132	135	128	142	146	156	7%
Capital Consumption	462	512	658	587	612	558	482	445	449	465	4%
Payments to Stakeholders	1,247	1,315	1,294	1,160	1,249	1,500	1,489	1,182	1,600	1,678	5%
TOTAL EXPENSES	6,634	6,726	7,374	6,517	6,129	6,851	6,588	6,203	7,230	7,839	8%
NET FARM INCOME	1,953	2,032	2,020	1,903	1,805	1,302	1,761	2,529	2,602	2,394	-8%
Year-to-Year Change	-13%	4%	-1%	-6%	-5%	-28%	35%	44%	3%	-8%	

SOURCES: 2012–20: Economic Research Service/USDA. 2021: Forecasted by G. Taylor, University of Idaho.

NOTE: Some data for 2020 are preliminary and all 2021 data are preliminary.

Idaho Cash Receipts from Farm Marketings (\$ millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Change ('20-'21)
LIVESTOCK											
Cattle and Calves	1,406	1,849	2,044	1,959	1,715	1,647	1,726	1,741	1,583	1,792	13%
Milk	2,422	2,573	3,198	2,352	2,356	2,511	2,373	2,854	2,979	3,059	3%
Other Livestock	230	217	251	263	210	215	225	196	186	191	3%
TOTAL LIVESTOCK	4,058	4,639	5,492	4,574	4,280	4,374	4,324	4,792	4,748	5,042	6%
CROPS											
Barley	286	326	295	267	268	237	216	249	238	246	3%
Hay	530	544	551	440	354	380	423	468	460	554	21%
Potatoes	950	932	923	871	869	905	930	954	930	1,001	8%
Sugar Beets	369	296	254	284	301	290	276	312	334	396	19%
Wheat	841	674	650	367	445	420	522	448	544	560	3%
Other Crops	1,035	1,049	922	928	981	964	996	1,067	1,097	1,082	-1%
TOTAL CROPS	3,725	3,495	3,299	2,890	2,950	2,959	3,147	3,248	3,365	3,839	14%
TOTAL CASH RECEIPTS	7,783	8,134	8,791	7,464	7,230	7,332	7,471	8,040	8,113	8,882	9%
Year-to-Year Change	7%	5%	8%	-15%	-3%	1%	2%	8%	1%	9%	

SOURCES: 2012–20: Economic Research Service/USDA. 2021: Forecasted by G. Taylor, University of Idaho.

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The authors—Xiaoxue “Rita” Du, University of Idaho Department of Agricultural Economics and Rural Sociology, Moscow; **Patrick Hatzenbuehler**, Extension Specialist, Crops Economics, University of Idaho Department of Agricultural Economics and Rural Sociology, Twin Falls; **Garth Taylor**, Economist, University of Idaho Department of Agricultural Economics and Rural Sociology, Moscow. The authors acknowledge the substantial contributions made by **Ben Eborn** of Eborn Agribusiness LLC (formerly an Extension Educator, University of Idaho).



The Financial Condition of Idaho Agriculture: 2021

Xiaoxue “Rita” Du, Patrick Hatzenbuehler, Garth Taylor

Despite the severe drought, cash receipts for every major crop and livestock commodity were higher in 2021 than in 2020.

For many of the livestock and crop industries, higher prices relative to 2020 (especially in the latter part of the year), explain the increased revenues. Cash receipts for livestock and crops in 2021 are estimated at \$8.8 billion. Cash receipts for milk, Idaho's leading agricultural commodity by revenue, were estimated as 3% higher than in 2020. Those for potatoes, Idaho's highest revenue crop, were estimated as 8% higher relative to 2020.

Livestock and crop cash receipts for 2021 were estimated as 9% higher relative to 2020. Net farm income for 2021 was estimated as \$2.39 billion, which is 8% lower than in 2020. This lower net income value relative to 2020 remains greater than the 10-year average and is the third-highest value in the past ten years. The decline in net income from 2021 to 2020 is largely due to lower federal government payments and higher operating expenses. Total expenses are estimated as up by 8% relative to 2020; at \$7.84 billion, this value is the highest in the past ten years.

Highlights:

- Exports from farms and food processors created a ripple effect throughout Idaho's economy, ultimately helping to make agribusiness one of Idaho's largest industry. About one of every six dollars in sales is directly or indirectly created by exports from Idaho's agribusiness.
- Idaho, the top potato producer, scored record-high potato revenues in 2012. In 2021, estimated potato cash receipts surpassed \$1.0 billion. Wheat and hay followed in second and third place with estimated 2021 cash receipts of \$560 million and \$554 million, respectively.
- In 2021, Idaho garnered its second-highest milk revenues, ranking third in the US for milk production. With estimated cash receipts for 2021 of \$3.06 billion, revenues from milk production are the highest of all agricultural commodities produced in Idaho, almost its highest tally in the past decade. Second to milk regarding cash receipts are those from cattle and calves, which in 2021 were \$1.79 billion.
- Idaho agriculture is driven largely by livestock. Cash receipts from milk, cattle and calves, and other livestock (e.g., trout) comprise over 56% of total agricultural cash receipts for 2021. Hay, silage, feed grains, and the by-products from sugar beet and potato processing are used as feed for Idaho livestock.
- Except for 2009—a year of disastrously poor milk prices—livestock cash receipts have surpassed crop cash receipts for every year since 2001. In 2021, livestock cash receipts are estimated to surpass crop cash receipts by more than \$1.2 billion.
- Idaho's net farm income for 2021 is estimated at \$2.39 billion, which is 8% below that of 2020, but is the third highest in the past ten years. While livestock and crop revenues were up in 2021 relative to 2020, there were lower government payments and higher expenses.
- Federal government payments to Idaho producers in fiscal year 2021 are estimated at \$488 million, a decrease of 41% from 2020. Coronavirus Food Assistance Program payments were \$337 million, 69% of the total federal government payments for 2021.

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 throughout the Idaho economy and contributes to the state's gross domestic product (GDP). Agribusiness export dollars ripple throughout Idaho's economy, creating (directly and indirectly):

- 17% of Idaho's total economic output
- 12% or 1 in every 8 jobs in the state
- 12.5% of Idaho GDP

Idaho Farm Cash Receipts

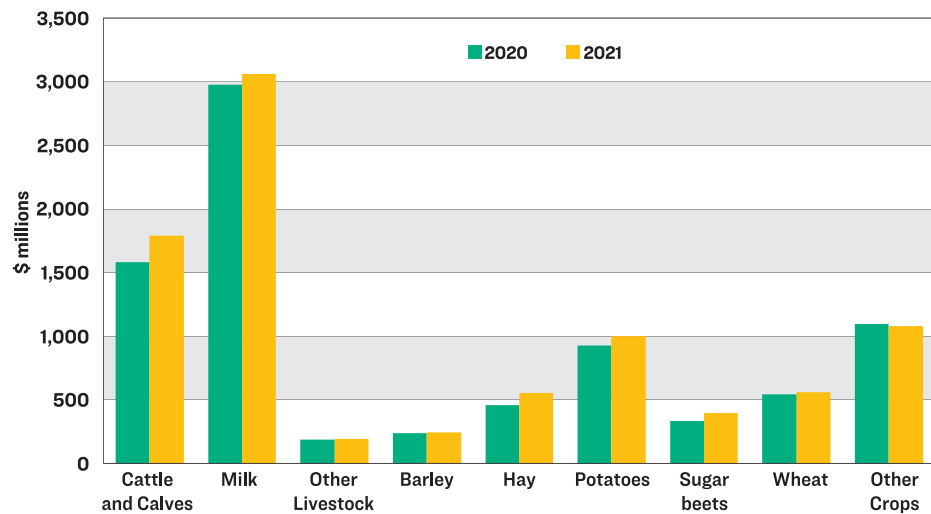
Idaho's 2021 farm cash receipts are estimated to be \$8.9 billion—a 9% increase from 2020's \$8.1 billion and exceeding the previous record high of \$8.8 billion from 2014.

Crop revenues in 2021 are estimated at \$3.8 billion, up 14% from 2020's \$3.4 billion and 17% greater than the 10-year average. Hay (up 21%), sugar beets (up 19%), and potatoes (up 8%) had the largest increases in cash receipts relative to 2020. Barley and wheat cash receipts were up 3%, while cash receipts from other crops declined by 1%. Revenue from crops (except sugar beets) is recorded on a calendar-year basis and, therefore, includes a portion of the production from the previous and current year.

Livestock revenues are estimated at \$5.0 billion, up 6% from 2020 and 9% greater than the previous 10-year average. Cash receipts from cattle and calves are estimated at \$1.8 billion (up 13%), while those from milk of \$3.1 billion and other livestock of \$0.2 billion each rose 3% relative to 2020.

In real dollars (inflation adjusted to 2021), estimated cash receipts are 44% greater than the 42-year (1980–2021) average. Extreme volatility in commodity prices over the past decade have increased agricultural revenue volatility to levels not seen since the 1970s and 1980s.

Idaho Farm Cash Receipts, 2020 and 2021



Sources: USDA National Agricultural Statistics Service and UI projections.

Idaho Net Farm Income

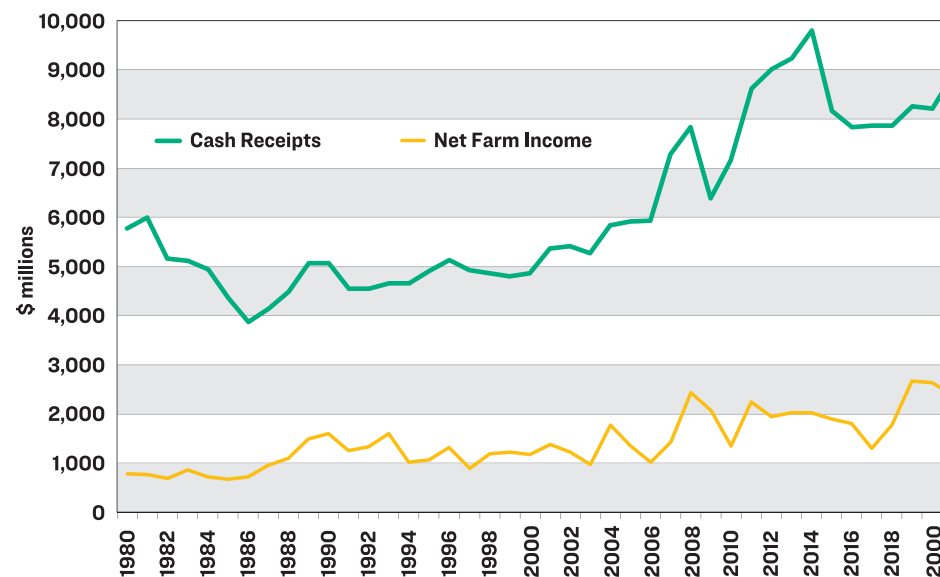
Net farm income, revenues minus costs, is the farmer's bottom line. Revenues include cash receipts from crop and livestock sales, inventory changes, the estimated value of home consumption, government payments, machine hire and custom work, forest product sales, and the imputed rental value of farm dwellings. 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 8% decrease in 2021 Idaho net farm income is the difference between a 4% increase in total revenues minus an 8% increase in total expenses. Estimated net farm income in 2021 is \$2.39 billion, which is 18% greater than the 10-year average. In contrast, the United States Department of Agriculture's US net farm income estimate for 2021 is \$116.8 billion, up 23% from 2020.

Historically, net farm income is much more volatile than gross cash receipts. In four of the past ten years, Idaho experienced double-digit swings in net farm income. The largest swings were observed between 2016 and 2019, but this volatility has moderated to some degree for 2020 and 2021. Real-dollar Idaho net farm income (inflation adjusted to 2021) was the third-highest value in the past ten years, but lower than in 2019 and 2020. Idaho real net farm income in 2021 is estimated at 47% above the previous 42-year average (1980–2021).

The overall increase in farm expenses in 2021 was attributed to 12% increases in farm origin (feed, seed, and replacement livestock purchases) and manufactured (fertilizer, chemicals, and fuel) inputs. All other inputs, including labor, property taxes and fees, capital consumption, and payments to stakeholders all increased by percentages ranging from 3% to 7% relative to 2020.

Idaho Farm Cash Receipts and Net Farm Income, 1980–2021



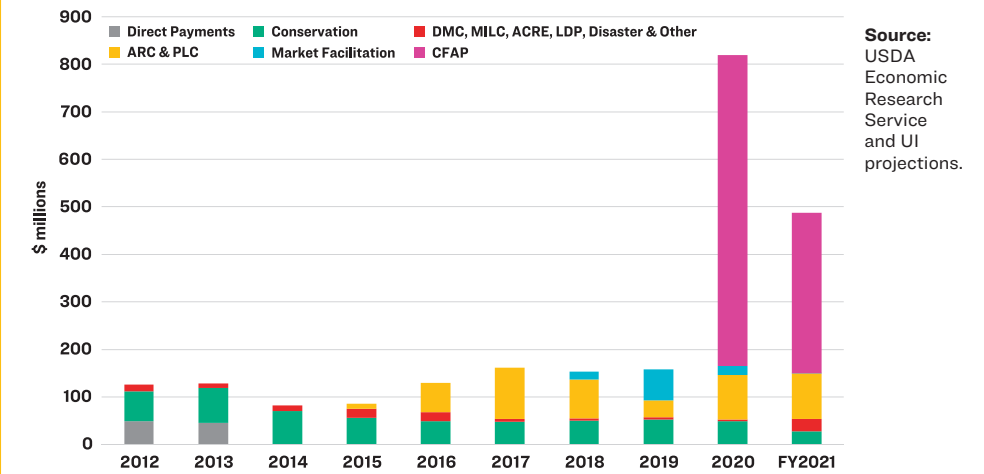
Sources: USDA Economic Research Service, Idaho office of the National Agricultural Statistics Service, and UI projections.

Note: In real dollars (2021 base).

Idaho Government Payments

Federal government payments to Idaho agriculture in fiscal year 2021 are estimated at \$488 million, which are 41% lower than in 2020 but 107% greater than the average over the previous ten years. In 2021, Coronavirus Food Assistance Program (CFAP) payments were an estimated \$337 million. Grain commodity program payments were estimated at \$96 million, while conservation programs accounted for \$29 million. Disaster program payments for 2021 were \$26 million, the highest value in the past ten years. Idaho is estimated to have received 0.7% of total 2021 payments to US agriculture.

Idaho Government Payments, 2012–21

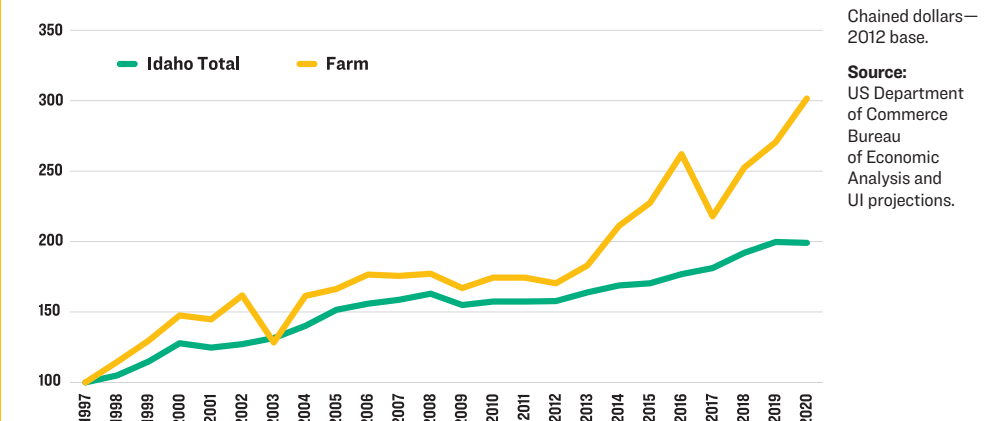


Source: USDA Economic Research Service and UI projections.

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 2020, Idaho's nominal GDP was approximately \$84 billion, of which 3.8% was generated by farming. Farm GDP in 2020 increased 2.8% from 2019 to \$3.2 billion. Over the past twenty-four years (1997–2020), 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.