Economic Contribution of Idaho Agribusiness 2023



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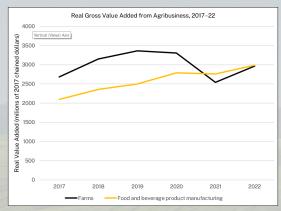
Contents

Gross Contribution of Idaho Agribusiness, 2022 4
Base Contribution of Idaho Agribusiness, 2022 5
Definitions6
Contribution of Agribusiness to Idaho's Economic Base
Agribusiness in Idaho vs. Neighboring States 11
National Rankings: Crop and Livestock Production12
National Rankings: Gross Production and Market Value of Agricultural Products Sold
Idaho Agricultural Exports14
Agricultural Commodities: Gross Receipts and Production15
Agricultural Commodities: Production
Gross Economic Contribution: Idaho Crops17
Gross Economic Contribution: Idaho Livestock 18
Gross Economic Contribution: Idaho Agricultural Processing
Indirect Contribution of Agribusiness to Idaho Jobs20
Indirect Contribution of Agribusiness to Value Added21
Idaho's Top Agribusiness Counties22

Gross Contribution of Idaho Agribusiness, 2022

In Idaho in 2022, agribusiness alone (not including linked sectors) contributed

- \$27.4 billion in sales;
- 73,470 Idaho jobs;
- \$9.0 billion in value added.¹



Source: Author calculations using IMPLAN data.

Source: US Bureau of Economic Analysis Regional Data, GDP (gross domestic product) by State and Industry data, 2017–22.

Value added is the sum of employee compensation, proprietary income, returns to capital, and indirect business taxes, and is a measure of a sector's contribution to gross state product (GSP).

Base Contribution of Idaho Agribusiness, 2022

In addition to these direct contributions to the Idaho economy, agribusiness exports generate economic activity in other sectors of the Idaho economy. Accounting for these linkages between agribusiness and other sectors, Idaho agribusiness and the economic activity it generates in other sectors accounted for

- \$37.5 billion in sales, or 17% of Idaho's total economic output;
- 126,800 Idaho jobs, or approximately 1 in every 9 jobs in the state;
- \$14.5 billion in value added, or 12.8% of total Idaho GSP.

Source: Author calculations using IMPLAN (economic impact analysis for planning) data.

Definitions

Agribusiness is the vertically integrated industrial complex comprising all production agriculture – crop farming and livestock production – and the processing of agricultural products.

The total economic contribution of agribusiness to the Idaho economy can be described in two ways, using *gross values* and *base values*.

Gross values are the government-reported measures of economic activity in agribusines — output (sales), jobs, and value added. Measuring gross values is an accounting task.

Base values include the agribusiness sector's export activity and the economic activity it spawns within other sectors and the state economy. The base sales contribution of the agribusiness sector, for example, is calculated as the sector's sales outside the state times the sector's multiplier. In gross analysis, the sale of a tire to a wheat producer credits the state economy's retail trade sector; in base analysis, it credits agribusiness.

In base analysis, the total economic contribution of agribusiness is made up of *direct* and *indirect contributions*:

Direct contributions are the jobs, value added, and output attributable to the out-of-state export of crop and livestock products.

Indirect contributions are generated when agribusiness firms purchase materials and services from other Idaho businesses to produce their exports.

Direct and indirect contributions are reported in terms of sales, jobs, wages, and value added:

Sales represent the output of the agribusiness sector.

Jobs represent wage-earning and salaried employees, including self-employed works, in agribusiness.

Wages are payments to workers, including benefits.

Value added is proprietary income and wages plus indirect taxes and other property-type income such as payments for rents, royalties, and dividends. Value added and GSP are equivalent measures in total but are estimated using different methods and data sources.

Sources:

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- Taylor, G., B. Eborn, P. Watson, and A. Rodriguez. 2012. <u>Contribution</u> <u>of Agribusiness to Idaho's Economy</u>, 2010. (CIS 1186). Moscow, ID: University of Idaho Extension. 4 p.
- Watson, P., S. Cooke, D. Kay, and G. Alward. 2015. "A Method for Improving Economic Contribution Studies for Regional Analysis." *Journal of Regional Analysis and Policy*, 45(1): 1-15.

Contribution of Agribusiness to Idaho's Economic Base

Sales Contribution of the Agribusiness Sector in Idaho, 2022*

	Direct Sales (Domestic and International		
	Exports)	Indirect Sales	Total
Crop production	\$3.3 billion	\$2.5 billion	\$5.7 billion
Livestock and dairy production	\$4.0 billion	\$3.6 billion	\$7.6 billion
Agricultural processing	\$12.4 billion	\$11.8 billion	\$24.2 billion
Total	\$19.6 billion	\$17.9 billion	\$37.5 billion

Value Added Contribution of the Agribusiness Sector in Idaho, 2022*

	Direct Value Added	Indirect Value Added	Total
Crop production	\$1.9 billion	\$1.3 billion	\$3.2 billion
Livestock and dairy production	\$1.4 billion	\$1.7 billion	\$3.1 billion
Agricultural processing	\$2.8 billion	\$5.4 billion	\$8.1 billion
Total	\$6.1 billion	\$8.4 billion	\$14.5 billion

*Individual values may not sum to total due to rounding.

Agribusiness contributed

- \$37.5 billion in total sales, which means that agribusiness was responsible for generating 17% of the state's total sales in 2022;
- \$14.5 billion in value added, or 12.8% of total Idaho GSP;
- 126,800 jobs, which is approximately 1 in every 9 jobs in the state;
- \$7.1 billion in wages, which is approximately \$1 of every \$10 of wages paid in the state of Idaho.





Agribusiness in Idaho versus Neighboring States

The agribusiness sector accounts for a greater share of the state economy in Idaho than in all of its neighboring states and the United States as a whole.²

Even without including the indirect effects, in 2022 agribusiness contributes 7% to Idaho GSP. In comparison to neighboring states, this is

- 4.3 times greater than in Washington;
- 3.0 times greater than in Oregon;
- · 14.0 times greater than in Nevada;
- · 4.2 times greater than in Utah;
- 3.6 times greater than in Wyoming;
- · 2.0 times greater than in Montana;
- 3.6 times greater than in the United States as a whole.

Source: Author calculations using US Bureau of Economic Analysis Regional Data, GDP by State and Industry data, 2022.

²Based on calculations of the percent contribution of the agribusiness sector to each state's GSP.

National Rankings: Crop and Livestock Production

Idaho has been the top producer of potatoes, barley, peppermint oil, and trout among all US states, based on 2022 production levels. Idaho ranks among the top eight states in the production of twenty-one crop and livestock commodities, including the following:

No. 1 in Potatoes	No. 4 in Lentils
No. 1 in Barley	No. 4 in Wheat (Winter)
No. 1 in Trout	No. 4 in Dry Peas
No. 1 in Peppermint Oil	No. 5 in Wheat (Spring)
No. 1 in Alfalfa	No. 5 in Dry Beans
No. 2 in Hops	No. 6 in Wheat (All)
No. 3 in Sugar Beets	No. 6 in Wool
No. 3 in Cheese	No. 7 in Sheep and Lambs
No. 3 in Milk	No. 7 in Haylage
No. 3 in Milk Cows	No. 8 in Corn (Silage)
No. 4 in Onions	

Source: National Agricultural Statistics Service (NASS), 2023 Idaho Annual Statistical Bulletin.

National Rankings: Gross Production and Market Value of Agricultural Products Sold

According to 2017 Census of Agriculture, Idaho ranked

- No. 21 in value of crops sold, including nursery and greenhouse;
- No. 17 in value of livestock, poultry and their products;
- No. 20 in total value of agricultural products sold;

and hosted 24,996 farms on 11,691,912 acres (22.1% of Idaho's total 52,891,860 acres).

In 2022, Idaho cash receipts from all agricultural commodities totaled approximately \$11.7 billion, with around \$7.1 billion from animals and their products and \$4.6 billion from crops.

Source: US Bureau of Economic Analysis, CAINC45 Farm Income and Expenses, 2022.

Idaho Agricultural Exports

Idaho ranked twenty-first nationally in total international agricultural exports in 2022, with a value of \$2.9 billion. Plant product exports accounted for \$1.75 billion of total Idaho agricultural exports and animal product exports accounted for \$1.2 billion.

Idaho ranked in the top six in the nation for international exports of four major commodities:

- No. 3 in dairy, with international exports valued at \$714 million
- No. 3 in fresh vegetables, with international exports valued at \$187 million
- No. 3 in processed vegetables, with international exports valued at \$321 million
- No. 6 in wheat, with international exports valued at \$385 million

Source: United States Department of Agriculture Economic Research Service (USDA ERS), US Agricultural Exports, Commodity Detail by State: 2022.



Agricultural Commodities: Gross Receipts and Production

Nominal Cash Receipts for Idaho's Crop and Livestock Commodities, 2014–22

Idaho Commodity Cash Receipts (\$1,000)	2017	2018	2019	2020	2021	2022
All commodities	\$7,332,409	\$7,470,650	\$8,038,390	\$8,074,191	\$8,686,761	\$11,287,553
Animals and products	\$4,373,646	\$4,324,027	\$4,791,671	\$4,744,454	\$4,967,950	\$6,858,897
Meat animals	\$1,657,593	\$1,741,773	\$1,758,182	\$1,602,811	\$1,717,705	\$2,279,970
Cattle and calves	\$1,646,985	\$1,725,717	\$1,741,240	\$1,582,521	\$1,696,436	\$2,253,224
Hogs	\$10,608	\$16,056	\$16,942	\$20,290	\$21,269	\$26,746
Dairy products, Milk	\$2,511,372	\$2,372,898	\$2,854,251	\$2,978,592	\$3,062,312	\$4,281,252
Poultry and eggs	\$61,052	\$86,196	\$61,983	\$76,510	\$74,356	\$170,531
Miscellaneous animals and products	\$143,629	\$123,160	\$117,255	\$86,541	\$113,578	\$127,143
Crops	\$2,958,763	\$3,146,623	\$3,246,719	\$3,329,737	\$3,718,810	\$4,428,656
Food grains	\$420,142	\$522,436	\$447,552	\$543,392	\$625,725	\$632,756
Wheat	\$420,142	\$522,436	\$447,552	\$543,392	\$625,725	\$632,756
Feed crops	\$698,534	\$742,240	\$837,128	\$832,479	\$922,714	\$1,328,774
Corn	\$80,127	\$101,703	\$117,761	\$130,426	\$128,270	\$146,588
Oil crops	\$13,609	\$16,114	\$8,103	\$9,475	\$8,966	\$9,284
Vegetables and melons	\$1,076,174	\$1,100,405	\$1,102,864	\$1,062,688	\$1,181,049	\$1,380,546
Fruits and nuts	\$14,779	NA	NA	NA	NA	NA
All other crops	\$735,526	\$765,428	\$851,072	\$881,703	\$980,357	\$1,077,296

Source: USDA ERS, Cash Receipts by Commodity.

Agricultural Commodities: Production

Production and Rank of Idaho Crop and Livestock Commodities, 2022

Item	Unit	2022 Idaho Rank	Idaho Production	Percentage of US Total	Leading State
		Field Crop	IS		
Peppermint oil	1,000 pounds	1	1,365	40.8	Idaho
Barley	1,000 bushels	1	59,940	34.2	Idaho
Potatoes	1,000 cwt	1	120,745	30.3	Idaho
Hay, alfalfa	1,000 tons	1	4,558	9.5	Idaho
Hops	1,000 pounds	2	16,073	15.9	Washington
Sugar Beets	1,000 tons	3	6,477	19.9	Minnesota
Onion, dry	1,000 cwt	4	6,767	10.5	California
Wheat, winter	1,000 cwt	4	63,900	5.8	Kansas
Hay, all	1.000 tons	4	5,328	4.7	Texas
Dry edible peas	1,000 cwt	4	456	3.0	Montana
Lentils	1,000 cwt	4	80	1.5	Montana
Wheat, spring	1,000 bushels	5	29,160	6.0	North Dakota
Wheat, all	1,000 cwt	5	93,515	5.7	North Dakota
Dry edible beans	1,000 cwt	5	1,056	4.1	North Dakota
Haylage	1,000 tons	7	1,414	5.0	Wisconsin
Corn silage	1,000 tons	8	6,090	4.7	Wisconsin
		Livestock	(
Trout, value sold	1,000 dollars	1	43,414	42.2	Idaho
Milk	million pounds	3	16,628	7.3	California
Cheese	1,000 pounds	3	989,539	7.0	Wisconsin
Milk cows	head	3	661,000	7.0	California
Wool	1,000 pounds	6	1,420	6.4	California
Sheep and lambs	head	7	220,000	4.4	Texas
Cattle and calves, all	head	11	2,500,000	2.8	Texas
Honey	1,000 pounds	14	2,726	2.2	North Dakota

Source: NASS, 2023 Idaho Annual Statistical Bulletin, 2022 Production Year.

Gross Economic Contribution: Idaho Crops

Idaho's crops sector includes all activities in the production and support of potatoes, sugarbeets, food and feed, grains, hay and pasture, fruits, nuts, vegetables, and oil-bearing crops and support services for crop farming such as custom harvester operations.

Gross Contribution of Crop Production to the Idaho Economy, 2022

Jobs	37,500
Wages	\$1.6 billion
Value added	\$3.2 billion

Based on the gross contribution of crop farming to the Idaho economy, crop farming is responsible for

- 51% of all agribusiness jobs;
- 40% of all agribusiness wages;
- 35% of all agribusiness value added.



Gross Economic Contribution: Idaho Livestock

Idaho's animal livestock sector includes the production of beef, dairy products, poultry, eggs, trout, and other animals and their products.

Gross Contribution of Livestock Production, Including Dairy, to the Idaho Economy, 2022

Jobs	11,900
Wages	\$640 million
Value added	\$1.8 billion

Based on the gross contribution of livestock production to the Idaho economy, livestock production is responsible for

- 16% of all agribusiness jobs;
- 16% of all agribusiness wages;
- 28% of all agribusiness value added.



Gross Economic Contribution: Idaho Agricultural Processing

Idaho's agricultural processing sector makes products from both crops and livestock. Examples include grain milling, sugarbeet processing, and cheese manufacturing.

Gross Contribution of Agricultural Processing to the Idaho Economy, 2022

Jobs	24,100
Wages	\$1.8 billion
Value added	\$3.3 billion

Based on the gross contribution of agricultural processing to the Idaho economy, agricultural processing is responsible for

- · 33% of all agribusiness jobs;
- 44% of all agribusiness wages;
- 37% of all agribusiness value added.

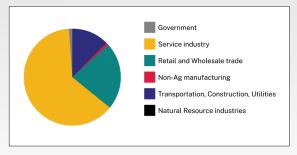


Indirect Contribution of Agribusiness to Idaho Jobs

Idaho agribusiness operations generated 58,010 jobs in other sectors of the Idaho economy in 2022.

Contribution of Agribusiness to Jobs in Other Sectors

Sectors	Indirectly Created Jobs
Natural Resource industries	109
Transportation, Construction, Utilities	7,200
Non-Ag manufacturing	545
Retail and Wholesale trade	13,080
Service industry	36,460
Government	617
Total	58,010

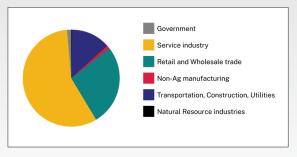


Indirect Contribution of Agribusiness to Value Added

Idaho agribusiness generated \$6.0 billion in value added in other sectors of Idaho's economy in 2022.

Contribution of Agribusiness to Value Added in Other Sectors

Sectors	Indirect Value Added
Natural Resource industries	\$17 million
Transportation, Construction, Utilities	\$781 million
Non-Ag manufacturing	\$68 million
Retail and Wholesale trade	\$1.6 billion
Service industry	\$3.4 billion
Government	\$74 million
Total	\$6 billion



Idaho's Top Agribusiness Counties

Total 2022 Cash Receipts for Agricultural Crops and Livestock by County

Agricultural Cash Receipts (Thousands of Dollars)

County	Livestock	Percentage of State Livestock Total	Crops	Percentage of State Crop Total	Total Ag Cash Receipts (as percentage of state total)
Cassia	\$1,122,750	15.77	\$367,185	8.02	12.73
Gooding	\$1,260,624	17.70	\$99,656	2.18	11.63
Twin Falls	\$830,709	11.67	\$235,358	5.14	9.11
Jerome	\$845,791	11.88	\$169,626	3.70	8.68
Canyon	\$445,881	6.26	\$448,435	9.79	7.64
Bingham	\$147,583	2.07	\$512,443	11.19	5.64
Elmore	\$477,065	6.70	\$172,384	3.76	5.55
Minidoka	\$160,545	2.25	\$376,903	8.23	4.59
Jefferson	\$190,455	2.67	\$251,431	5.49	3.78
Owyhee	\$336,011	4.72	\$87,341	1.91	3.62
Lincoln	\$282,702	3.97	\$61,404	1.34	2.94
Power	\$33,687	0.47	\$305,516	6.67	2.90
Payette	\$187,935	2.64	\$71,102	1.55	2.21
Bonneville	\$78,926	1.11	\$155,148	3.39	2.00
Madison	\$15,567	0.22	\$210,939	4.61	1.94
Ada	\$151,428	2.13	\$60,986	1.33	1.82
Fremont	\$28,536	0.40	\$167,605	3.66	1.68
Franklin	\$103,032	1.45	\$36,684	0.80	1.19
Caribou	\$46,701	0.66	\$78,536	1.72	1.07
Latah	\$8,249	0.12	\$99,273	2.17	0.92
Nez Perce	\$18,795	0.26	\$79,131	1.73	0.84
Washington	\$39,571	0.56	\$30,167	0.66	0.60

Total Cash Receipts by County, cont.

Teton	\$6,383	0.09	\$58,508	1.28	0.55
Butte	\$9,330	0.13	\$51,450	1.12	0.52
Gem	\$36,085	0.51	\$19,413	0.42	0.47
Idaho	\$22,673	0.32	\$31,779	0.69	0.47
Bannock	\$23,708	0.33	\$29,879	0.65	0.46
Bear Lake	\$27,603	0.39	\$25,329	0.55	0.45
Custer	\$38,148	0.54	\$12,521	0.27	0.43
Lewis	\$5,233	0.07	\$45,417	0.99	0.43
Oneida	\$22,180	0.31	\$23,396	0.51	0.39
Lemhi	\$36,728	0.52	\$8,480	0.19	0.39
Boundary	\$5,199	0.07	\$39,304	0.86	0.38
Camas	\$5,851	0.08	\$32,876	0.72	0.33
Clark	\$9,092	0.13	\$27,636	0.60	0.31
Blaine	\$12,001	0.17	\$23,854	0.52	0.31
Kootenai	\$5,593	0.08	\$25,067	0.55	0.26
Benewah	\$882	0.01	\$25,380	0.55	0.22
Adams	\$12,917	0.18	\$4,756	0.10	0.15
Clearwater	\$9,554	0.13	\$4,630	0.10	0.12
Bonner	\$5,690	0.08	\$8,048	0.18	0.12
Valley	\$12,130	0.17	\$1,268	0.03	0.11
Boise	\$1,438	0.02	\$2,284	0.05	0.03
Shoshone	\$153	0.00	\$97	0.00	0.00

Source: US Bureau of Economic Analysis, CA45 Farm Income and Expenses, 2022.





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