

# The Contribution of Colorado's Agribusiness System to the State's Economy in 1997



July 2000

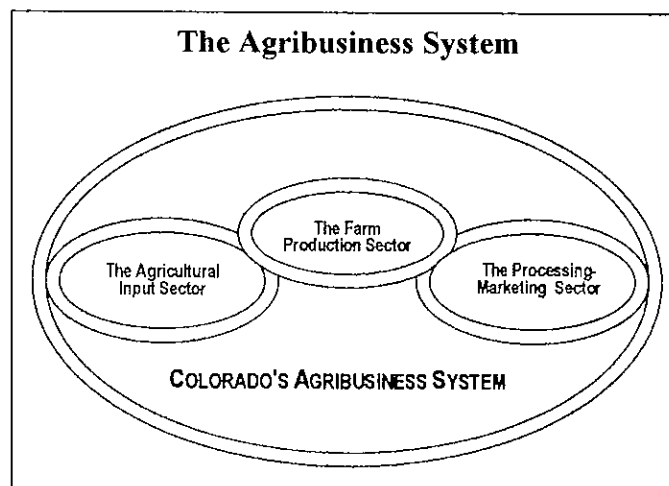
Department of Agricultural and Resource Economics

## Executive Summary \*

### What is the Agribusiness System?

The *Agribusiness System* is composed of three distinct economic sectors: Farm Production, Agricultural Inputs, and Agricultural Processing and Marketing.

*Agribusiness* encompasses the traditional farm production of commodities such as wheat, corn, and livestock, green industry, and horse industry with linkages to the agricultural inputs necessary for their growth. Agribusiness also includes the first order processing and marketing necessary to bring the final goods to the consumer. Agribusiness does not include economic contributions from restaurants and supermarkets.



### What is Economic Contribution?

This paper describes *economic contribution* in four ways: employment, income, value added, and gross sales.

**Employment** shows the number of jobs that are located in the different industries. Farm employment production numbers reflect FTE labor and include farmer owner/operator's labor only if (1) the farmer owner/operator reported agriculture as the primary source of income and (2) the farmer owner/operator employed additional laborers as reported by the Colorado Department of Labor and Employment.

**Proprietor and Labor Income** includes net income from employees and business but does not include corporate farm income, which is provided in the full report. This section does not suffer from the double counting problem associated with gross sales.

Economic Sector	Employment		Income		Value Added (\$Million)	Gross Sales (\$Million)
		% of State	(\$Million)	% of State		
Farm Production	38,508	1.63	\$733	0.65	\$816	\$4,534
Inputs	36,364	1.54	685	0.61	872	1,531
Processing/Marketing	30,267	1.28	1,046	0.93	1,611	9,803
<b>Total Agribusiness</b>	<b>105,140</b>	<b>4.44</b>	<b>\$2,464</b>	<b>2.19</b>	<b>\$3,299</b>	<b>\$15,868</b>
State Totals:	2,365,508		\$112,699		N/A	N/A

**Value added** is often cited as the most accurate measure of economic contribution. It is net income plus indirect business taxes paid to government entities.

**Gross Sales** is a common measure of economic performance. However, double counting as each product moves from one sector to the next in the agribusiness system limits its validity.

\* This is the executive summary of the full report that can be obtained from the Colorado State University Cooperative Extension Resource Center, General Services Building, Fort Collins, Colorado, 80523-1172 (970-491-6198), or the Department of Agricultural and Resource Economics website: <http://dare.agsci.colostate.edu/questions.html>

# Colorado Farm Gate and Agribusiness Employment, Income, and Sales by County in 1997

County	Employment			Personal Income (\$1,000)			Sales (\$1,000)	
	Farm Gate	Agribusiness	% Total County	Farm Gate	Agribusiness	% Total County	Farm Gate+	Agribusiness*
Adams	1,491	5,951	4.3%	\$28,590	\$145,176	2.1%	\$87,739	\$941,927
Alamosa	468	677	7.2%	17,333	21,523	7.9%	57,195	68,323
Arapahoe	411	5,279	1.8%	-1,487	114,278	0.7%	23,612	487,242
Archuleta	180	239	5.3%	-60	698	0.7%	6,149	8,256
Baca	869	1,034	27.6%	26,058	28,417	36.5%	77,369	93,978
Bent	493	589	19.4%	15,969	17,445	16.8%	50,975	56,269
Boulder	1,055	5,069	3.1%	14,308	107,094	1.1%	43,671	624,242
Chaffee	177	269	3.2%	-682	747	0.4%	5,161	9,563
Cheyenne	278	384	24.0%	7,311	9,586	23.7%	33,645	40,507
Clear Creek	0	36	0.8%	0	404	0.3%	30	1,799
Conejos	610	810	23.7%	5,849	8,847	12.9%	25,488	34,635
Costilla	279	421	28.6%	6,355	7,332	20.7%	15,978	20,056
Crowley	291	327	20.7%	10,518	11,185	22.0%	73,487	74,990
Custer	138	163	11.4%	-559	-324	-1.2%	4,816	5,600
Delta	1,301	1,968	15.9%	4,878	18,087	6.3%	39,083	106,484
Denver	29	9,604	1.9%	942	316,500	1.1%	2,174	2,328,405
Dolores	144	181	24.0%	-290	583	3.3%	8,601	14,552
Douglas	694	2,378	5.3%	-624	29,741	1.7%	17,119	87,657
Eagle	132	730	2.4%	-985	9,157	0.8%	7,413	36,037
Elbert	629	978	19.9%	-2,751	2,402	2.1%	31,249	47,754
El Paso	870	4,074	1.6%	566	56,323	0.5%	30,330	306,344
Fremont	437	636	3.7%	1,186	3,862	0.6%	12,126	28,971
Garfield	573	1,069	4.5%	-1,113	9,006	1.2%	22,817	68,748
Gilpin	0	0	0.0%	0	20	0.0%	D	0
Grand	184	257	3.4%	-817	37	0.0%	8,833	11,308
Gunnison	261	333	3.2%	-238	916	0.3%	8,436	11,489
Hinsdale	0	3	0.6%	111	126	1.2%	377	453
Huerfano	281	315	9.0%	-1,771	-1,455	-2.2%	9,681	10,743
Jackson	290	314	25.2%	4,112	4,397	17.4%	15,593	16,401
Jefferson	711	8,886	4.0%	5,670	300,659	2.4%	19,474	2,014,734
Kiowa	250	314	26.1%	7,403	8,122	27.2%	61,724	66,954
Kit Carson	1,083	1,598	26.2%	43,855	53,752	34.5%	177,051	243,906
Lake	0	11	0.4%	0	116	0.1%	513	879
La Plata	805	1,494	5.1%	-2,801	9,782	1.1%	15,797	93,977
Larimer	1,568	5,337	4.5%	18,186	121,004	2.1%	100,483	671,103
Las Animas	646	715	9.5%	322	961	0.5%	20,336	24,420
Lincoln	601	736	18.7%	7,359	8,876	9.7%	44,773	55,040
Logan	1,203	2,283	18.2%	44,724	77,346	19.4%	292,740	509,264
Mesa	1,458	2,717	4.3%	0	27,024	1.4%	50,450	233,861
Mineral	44	67	10.4%	70	115	0.8%	146	674
Moffat	590	764	9.3%	-370	2,640	1.0%	18,938	38,996
Montezuma	1,351	1,647	11.4%	-2,197	2,950	0.9%	21,874	48,080
Montrose	1,172	2,548	12.9%	9,038	31,065	5.8%	88,274	299,954
Morgan	1,499	4,658	27.7%	49,988	129,696	23.9%	405,945	1,159,574
Otero	577	1,395	12.5%	15,295	30,925	10.0%	100,214	244,527
Ouray	103	136	6.7%	-1,296	-968	-2.1%	3,237	4,295
Park	172	235	7.1%	633	1,737	1.9%	3,622	6,958
Phillips	687	940	28.2%	29,379	35,198	39.9%	117,064	151,880
Pitkin	79	418	2.2%	0	7,770	1.0%	1,527	22,937
Prowers	799	1,212	13.7%	43,618	51,078	18.9%	150,677	187,900
Pueblo	666	1,982	3.3%	3,681	33,215	1.4%	33,642	286,423
Rio Blanco	355	466	10.9%	-4,002	-2,379	-1.7%	14,086	18,230
Rio Grande	479	1,344	20.5%	16,413	35,470	17.4%	72,818	129,576
Routt	431	607	3.7%	531	3,940	0.8%	22,858	30,492
Saguache	470	781	27.3%	9,894	15,713	25.6%	50,305	72,723
San Juan	0	0	0.0%	0	7	0.1%	D	0
San Miguel	0	92	1.6%	-443	1,758	1.0%	2,897	7,286
Sedgwick	339	615	31.2%	9,632	11,877	28.6%	54,751	73,490
Summit	0	173	0.9%	-744	2,689	0.4%	1,511	9,011
Teller	0	96	1.1%	-753	24	0.0%	1,277	4,164
Washington	1,024	1,365	34.3%	33,355	39,105	41.5%	97,898	152,806
Weld	5,384	13,306	17.0%	170,053	390,528	11.6%	1,286,636	2,874,124
Yuma	1,393	2,019	28.9%	93,939	106,200	48.8%	481,374	562,631
<b>Colorado</b>	<b>38,508</b>	<b>105,140</b>	<b>4.4%</b>	<b>\$733,144</b>	<b>\$2,463,988</b>	<b>2.2%</b>	<b>\$4,534,213</b>	<b>\$15,868,129+</b>

Source: See Appendix 2. Note: Counties do not sum to state total due to estimations and non-disclosed data (D) at the county level.

\* Procedures for estimating county-level sales provided by Colorado Department of Agriculture. For complete procedures see full report.

+Sales at the Farm Gate and Colorado Total Gross Sales use Colorado Agricultural Census data. See Appendix 2 in full report.

## COUNTY AGRIBUSINESS DEPENDENCY

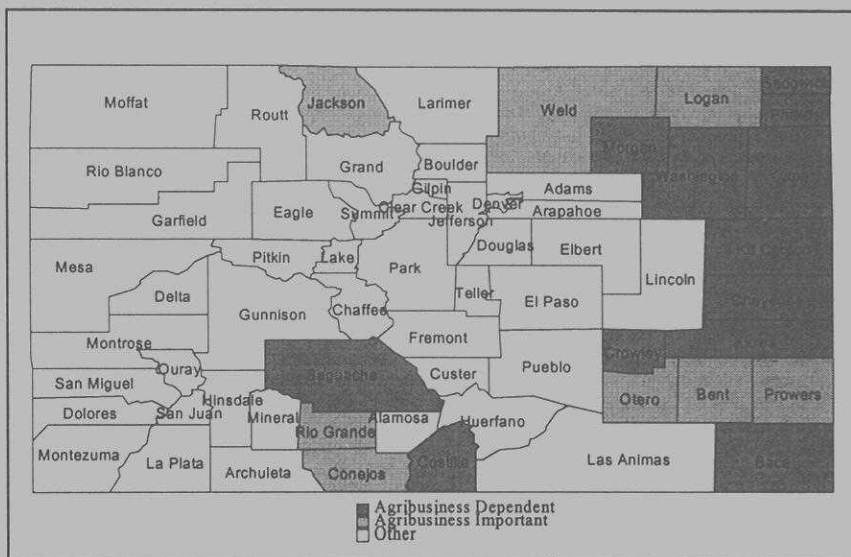
### Colorado Rankings by Agribusiness Income and Percent of Total County Income in 1997

<u>Agribusiness</u> <u>Income (\$1,000)</u>	<u>Agribusiness %</u> <u>of County Total</u>
Weld	390,528
Denver	316,500
Jefferson	300,659
Adams	145,176
Morgan	129,696
Larimer	121,004
Arapahoe	114,278
Boulder	107,094
Yuma	106,200
Logan	77,346
El Paso	56,323
Kit Carson	53,752
Prowers	51,078
Washington	39,105
Rio Grande	35,470
Phillips	35,198
Pueblo	33,215
Montrose	31,065
Otero	30,925
Douglas	29,741
Baca	28,417
Mesa	27,024
Alamosa	21,523
Delta	18,087
Bent	17,445
Saguache	15,713
Sedgwick	11,877
Crowley	11,185
La Plata	9,782
Cheyenne	9,586
Eagle	9,157
Garfield	9,006
Lincoln	8,876
Conejos	8,847
Kiowa	8,122
Pitkin	7,770
Costilla	7,332
Jackson	4,397
Routt	3,940
Fremont	3,862
Montezuma	2,950
Summit	2,689
Moffat	2,640
Elbert	2,402
San Miguel	1,758
Park	1,737
Las Animas	961
Gunnison	916
Chaffee	747
Archuleta	698
Dolores	583
Clear Creek	404
Hinsdale	126
Lake	116
Mineral	115
Grand	37
Teller	24
Gilpin	20
San Juan	7
Custer	-324
Ouray	-968
Huerfano	-1,455
Rio Blanco	-2,379
Yuma	48.8%
Washington	41.5%
Phillips	39.9%
Baca	36.5%
Kit Carson	34.5%
Sedgwick	28.6%
Kiowa	27.2%
Saguache	25.6%
Morgan	23.9%
Cheyenne	23.7%
Crowley	22.0%
Costilla	20.7%
Logan	19.4%
Prowers	18.9%
Rio Grande	17.4%
Jackson	17.4%
Bent	16.8%
Conejos	12.9%
Weld	11.6%
Otero	10.0%
Lincoln	9.7%
Alamosa	7.9%
Delta	6.3%
Montrose	5.8%
Dolores	3.3%
Jefferson	2.4%
Adams	2.1%
Elbert	2.1%
Larimer	2.1%
Park	1.9%
Douglas	1.7%
Pueblo	1.4%
Mesa	1.4%
Hinsdale	1.2%
Garfield	1.2%
Denver	1.1%
La Plata	1.1%
Boulder	1.1%
San Miguel	1.0%
Pitkin	1.0%
Moffat	1.0%
Montezuma	0.9%
Mineral	0.8%
Eagle	0.8%
Routt	0.8%
Archuleta	0.7%
Arapahoe	0.7%
Fremont	0.6%
Las Animas	0.5%
El Paso	0.5%
Summit	0.4%
Chaffee	0.4%
Gunnison	0.3%
Clear Creek	0.3%
Lake	0.1%
San Juan	0.1%
Grand	0.0%
Teller	0.0%
Gilpin	0.0%
Custer	-1.2%
Rio Blanco	-1.7%
Ouray	-2.1%
Huerfano	-2.2%

The figure below shows the location of Colorado's 63 counties and their degree of dependency on agribusiness. Production agriculture alone does not fully represent the economic importance of farming and ranching to an economy. As discussed throughout the full report, other industries depend on production agriculture such as fertilizer sale, food processing, and farm machinery production.

In order to recognize the degree of contribution of agribusiness to a county, two categories have been developed. *Agribusiness Dependent* counties receive over 20% of total county income from agribusiness industries. *Agribusiness Important* counties receive between 10% and 20% of total county income from agribusiness industries. The Other category represents those counties that receive less than 10% of their total county income from agribusiness. Agribusiness dependent counties are not the only counties with large agribusiness sectors. Some counties are not classified as agribusiness important or dependent because they have relatively large non-agricultural sectors. Eight of the 63 counties are *agribusiness important* and twelve are *agribusiness dependent*. Therefore, over 31% of Colorado counties continue to be either *agribusiness dependent* or *agribusiness important* in 1997, which does not represent a significant change from 1992. However, there have been some individual changes within the categories. Of particular note is Lincoln County, which had been ranked in 1992 as agricultural dependent but is now at less than 10%. Dolores County, which had been ranked as agricultural important is now less than 5%. Costilla County is now ranked as agricultural dependent at over 20% and Conejos County has increased to agricultural important with over 12%.

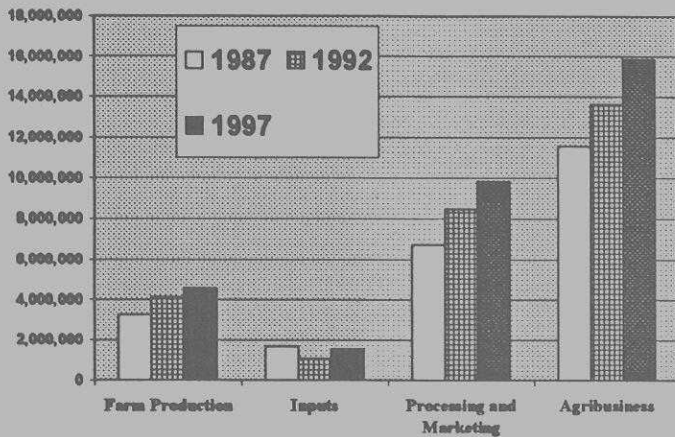
The county rankings of agribusiness importance and dependency are shown in the table on the left. In the first two columns, the counties are ranked according to the total size of agribusiness. The last two columns show the ranking by the percentage of total county income that agribusiness provides in each county. Metro counties rank highest in size while rural sectors rank highest in importance.



# COLORADO AGRIBUSINESS SYSTEM

## Colorado Agriculture in 1997

### Agribusiness Sales (in \$1,000s)



- 28,268 farms and ranches  
Increase of 11% from 1992
- Average farm size of 1,154 acres  
Decreased by 10% from 1992
- Farm sales total \$4.53 billion  
Increased by 13% from 1992  
Crop sales are 29%; Livestock sales are 71%
- Land in Farms: 32.6 million acres  
Decreased by 4% from 1992
- Farm Assets equal \$22.8 billion  
Increase of 33% from 1992
- Farm debt is \$3.6 billion  
Increase of 27% from 1992
- 1/3 of operators worked 200 days or more off farm  
up 22% from 25 years ago

Complete Citations and references are disclosed in full report.  
Partial funding provided by the Colorado Department of Agriculture

Department of Agricultural and Resource Economics  
Colorado State University  
Fort Collins, Colorado 80523-1172