

# 2005 Iowa Farm Costs and Returns

*Ag Decision Maker*

File C1-10

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The farm record data utilized in this report were obtained from the Iowa Farm Business Associations. The average of all farms in each table represents a weighted average of the values for each size group listed. Weighting factors are based on the number of farms in each size group in the economic area, as computed from the most recent Census of Agriculture. Only farms with sales of \$40,000 or more were counted in making the weighting. Thus, overall averages should be representative of full-time Iowa farms.

All records were kept on the accrual, or inventory, basis. On rented farms, only operator income and expenses were recorded. Data for ending assets and liabilities represent those of the operator only, and do not include the value of rented land.

## Definition of Terms Used

**Net farm income, cash** - total sales and other cash income minus cash expenses, including purchases of livestock and feed. Does not include principal borrowed or repaid, sales and purchases of capital assets, or nonfarm income and expenses.

**Net farm income, accrual** - cash net income adjusted for inventory changes and accrued expenses. Represents a return to unpaid labor, net worth (equity), management, and profit.

**Value of farm production** - value of crops produced (at market price), livestock production (net of feed and purchased livestock), inventory value gain or loss, and miscellaneous income. This measures the total production per farm.

**Management return** - accrual net farm income less six percent interest on value of equity (net worth), and wages for operator and family labor. The wage rate used for operator labor was \$1,700 per month. For family labor, the rate was \$850 per month.

**Inventory value gain or loss** - change in value of crops or livestock sold due to differences in opening inventory price and final sale price.

**Livestock returns per \$100 feed fed** - value of livestock production minus livestock purchases, divided by value of feed fed, multiplied by 100.

**Machinery cost per crop acre** - total of machinery repairs, fuel, custom machine hire, utilities, machinery depreciation and auto expense, less 75 percent of all custom hire income received, divided by crop acres. Depreciation is estimated at 10 percent of current value of the machinery.

**Return to owned assets** - net farm income, plus interest expense, minus value of operator and family labor, divided by total farm assets owned.

**Return to equity** - net farm income minus value of operator and family labor, divided by net worth.

**Asset turnover ratio** - value of farm production divided by total farm assets.

**Operating profit margin ratio** - net farm income, plus interest expense, minus value of operator and family labor, divided by value of farm production.

The data for this report were collected by Iowa Farm Business Association consultants, and compiled by Iowa State University Extension, with assistance from the Iowa Agricultural Experiment Station, project number 0111.

## 2005 Iowa Farm Costs and Returns

The following summary is intended to provide a general picture of costs and returns to well-managed, full-time Iowa farms during 2005. The values presented are averages, however, and results vary widely from one farm to the next.

Farm financial results were generally good in 2005, though somewhat lower than the record levels recorded in 2004. Accrual net farm income averaged \$49,041, the 2nd highest value ever recorded in this survey. Good crop yields and favorable livestock prices were the primary factors. Cash income decreased modestly from 2004 and averaged \$54,658. Other than machinery cost per acre, most financial efficiency factors showed relative strength in 2005.

**Table 1. Comparison by years**

	2005	2004	2003	2002	2001	2000
<b>Financial Returns</b>						
Net farm income - accrual	\$49,041	\$58,785	\$44,368	\$37,743	\$26,209	\$44,860
Return to management	367	12,543	(2,489)	(7,534)	(20,263)	1,206
Net farm income - cash	54,658	56,868	54,205	38,473	53,313	50,126
<b>Resources Used</b>						
Acres per farm	564	598	623	618	597	553
Labor months	12	12	12	13	13	13
Livestock, feed, supplies	203,974	\$203,469	\$191,384	\$178,287	\$167,828	\$173,707
Machinery and equipment	130,720	124,598	122,209	115,470	113,576	104,461
Land and improvements	490,358	446,467	405,836	390,032	397,971	373,438
Total assets	825,052	774,535	719,429	683,789	679,480	651,605
<b>Sources of Income</b>						
Livestock income less feed	\$34,520	\$44,540	\$30,791	\$18,101	\$30,208	\$29,733
Crop production	153,536	160,515	159,084	151,624	134,432	136,941
Miscellaneous	21,227	19,595	15,609	9,800	15,574	15,009
Crop inventory gain or loss	10,143	9,170	605	6,538	(4,176)	2,180
Value of farm production	219,426	233,819	206,089	186,064	176,039	183,863
Capital gain or loss	2,042	1,975	1,038	1,459	1,775	359
<b>Expenses</b>						
Operating	\$98,451	\$94,850	\$88,279	\$79,294	\$79,357	\$73,960
Fixed	73,976	75,656	74,479	70,485	72,248	65,402
<b>Efficiency</b>						
Corn yield (bu. per acre)	165	181	155	162	142	143
Crop value per acre	\$335	\$322	\$319	\$312	\$275	\$298
Machinery cost per crop acre	81	74	65	63	60	63
Livestock returns per \$100 feed fed	203	186	181	139	163	173
Value of farm production per person	226,723	230,976	209,855	194,526	176,435	171,094
Value of farm prod. per \$1 expense	\$1.27	\$1.32	\$1.28	\$1.29	\$1.18	\$1.35
Asset turnover ratio	0.33	0.35	0.37	0.39	0.38	0.37
Average sale price for corn	\$1.60	\$1.70	\$2.19	\$2.15	\$1.81	\$1.84
% return to owned assets	4.8%	5.9%	4.7%	4.7%	2.3%	6.0%
Interest expense ratio	0.04	0.04	0.06	0.07	0.08	0.09
Debt to asset ratio	0.25	0.27	0.28	0.28	0.30	0.29

## Assets and Liabilities

A breakdown of farm assets and liabilities by value of agricultural production per farm is shown in Table 2 below. Both assets and debts increased as farm size increased. The total debt-to-asset ratio also increased as farm size increased, indicating that larger farms utilized more credit.

**Table 2. Assets and Liabilities by Size of Farm, End of Year Values.**

	Average	Total Value of Ag Production		
		\$40,000 to \$99,999	\$100,000 to \$249,999	\$250,000 and above
<b>Farm Assets</b>				
Feeding livestock	\$47,321	\$10,744	\$17,759	\$122,570
Corn	53,384	14,173	42,745	113,994
Soybeans	40,519	14,234	33,381	81,484
Other feed	5,666	3,237	3,655	11,159
Supplies, prepaid expenses	41,296	16,164	27,668	89,110
Total short term assets	\$188,185	\$58,552	\$125,208	\$418,317
Breeding livestock	15,788	10,593	10,874	27,854
Machinery, equipment	130,720	51,766	97,382	270,008
Total intermediate assets	\$146,508	\$62,359	\$108,256	\$297,863
Land and improvements	490,358	322,275	459,141	735,102
Total assets	\$825,052	\$443,186	\$692,605	\$1,451,282
<b>Farm Liabilities</b>				
Operating notes, accounts payable	63,061	9,900	43,443	148,067
Intermediate and long term due	3,396	774	3,459	6,628
FSA marketing loans	5,834	1,410	4,133	13,584
Total short term debt	\$72,291	\$12,084	\$51,034	\$168,279
Intermediate term debts	29,903	3,239	23,322	70,695
Long term debts	87,129	36,647	64,025	175,229
Total liabilities	\$189,322	\$51,971	\$138,381	\$414,203
<b>Farm Net Worth</b>				
Net worth change from last year	\$44,675	\$24,634	\$30,141	\$87,701
Working capital	\$115,895	\$46,469	\$74,174	\$250,038
Current asset/debt ratio	4.39	7.57	2.59	2.49
Total debt/asset ratio	0.25	0.16	0.28	0.32
Total acres farmed	564	289	426	1,082
Months of labor used	12.0	7.6	10.8	18.7

## Income and Expenses

A summary of operating and fixed expenses by size of farm is shown in Table 3. Most expenses increased as farm size increased. Crop expenses include seed, fertilizer, pesticides, and other expenses related to crop production.

**Table 3. Expenses by Size of Farm**

	Average	Total Value of Ag Production		
		\$40,000 to \$99,999	\$100,000 to \$249,999	\$250,000 and above
Machinery and equip. repairs	\$10,842	\$5,017	\$9,459	\$19,610
Fuel and oil	9,203	3,242	7,305	18,671
Machine hire	5,695	2,494	4,990	10,487
Auto and truck expense	2,949	1,840	2,434	4,949
Utilities	3,945	1,930	3,215	7,221
Labor hired	4,720	272	1,163	14,132
Livestock expense	5,317	1,107	2,098	13,451
Crop expense	52,311	16,566	41,569	109,705
Miscellaneous	3,476	1,461	2,694	6,898
Total Cash Operating Expense	\$98,451	\$33,929	\$74,927	\$205,107
Cash rent	\$30,004	\$5,598	\$16,858	\$76,199
Property taxes	4,336	2,550	4,125	6,843
Insurance	6,654	2,356	5,179	13,592
Building repairs	3,367	1,417	2,252	7,063
Depreciation	18,364	7,247	13,320	37,806
Interest	11,252	3,350	8,745	23,657
Total Fixed Expense	\$73,976	\$22,518	\$50,479	\$165,161

Sources of cash income and expenses are summarized in Table 4. Cash income includes all sales and miscellaneous income received during the year. Cash fixed expenses include all fixed expenses from Table 3 except depreciation. Cash net farm income ranged from \$16,471 for the smallest farms up to \$119,249 for the largest, with an average of \$54,658 per farm. However, machinery purchases exceeded sales and net new loans, so net cash flow from the farm was only \$35,699. Adding nonfarm income received and subtracting family living expenses showed an average of \$24,044 left for income taxes, savings, and investment. Larger farms tended to have less nonfarm income and higher living expenses.

**Table 4. Summary of Cash Income and Expenses by Size of Farm**

	Average	Total Value of Ag Production		
		\$40,000 to \$99,999	\$100,000 to \$249,999	\$250,000 and above
Livestock sales	\$102,581	\$15,869	\$38,626	\$276,533
Crop sales	119,103	41,835	93,342	246,771
Crop insurance payments	1,471	99	1,473	3,243
Government payments	37,309	11,898	28,215	79,605
Other cash income	11,062	3,410	9,764	22,311
<b>Total Cash Income</b>	<b>\$271,527</b>	<b>\$73,112</b>	<b>\$171,420</b>	<b>\$628,463</b>
Cash operating expenses	\$98,451	\$33,929	\$74,927	\$205,107
Cash fixed expenses	55,611	15,271	37,159	127,355
Feed purchased	22,419	3,195	6,328	62,840
Livestock purchased	40,388	4,247	12,395	113,912
<b>Total Cash Expenses</b>	<b>\$216,870</b>	<b>\$56,641</b>	<b>\$130,809</b>	<b>\$509,214</b>
<b>Cash Net Farm Income</b>	<b>\$54,658</b>	<b>\$16,471</b>	<b>\$40,612</b>	<b>\$119,249</b>
+ Sales of machinery & improvements	3,643	1,323	5,064	4,640
- Purchases of machinery and improv.	27,674	8,614	16,306	64,095
+ Loans received minus loans paid	5,073	(1,477)	2,305	14,376
<b>Net Farm Cash Flow</b>	<b>\$35,699</b>	<b>\$7,703</b>	<b>\$31,675</b>	<b>\$74,170</b>
+Nonfarm income	22,356	27,031	20,962	18,929
-Family living expenses	34,011	25,885	28,607	49,629
<b>Net Cash Available</b>	<b>\$24,044</b>	<b>\$8,849</b>	<b>\$24,031</b>	<b>\$43,470</b>

A more accurate measure of net farm income is achieved by netting out changes in the values of beginning and ending inventories, subtracting a depreciation charge for farm assets, and including accrued income and expenses. A summary of income and expenses using accrual accounting is shown in Table 5. The average accrual net farm income ranged from \$8,024 for the smallest farms to \$119,211 for the largest. Return to management in 2005 ranged from -\$22,570 for the small size group to \$40,394 for the large farms.

**Table 5. Summary of Accrual Income and Expenses by Size of Farm**

	Average	Total Value of Ag Production		
		\$40,000 to \$99,999	\$100,000 to \$249,999	\$250,000 and above
Value of livestock production	\$68,228	\$14,312	\$26,831	\$177,894
Feed fed	33,708	7,331	12,961	88,959
Livestock production less feed	34,520	6,981	13,871	88,934
Value of crop production	153,536	48,817	115,676	328,712
Miscellaneous income	21,227	5,732	16,993	45,959
Crop inventory gain or loss	10,143	2,442	7,714	22,550
<b>Value of Farm Production</b>	<b>\$219,426</b>	<b>\$63,972</b>	<b>\$154,255</b>	<b>\$486,155</b>
Operating expenses	\$98,451	\$33,929	\$74,927	\$205,107
Fixed expenses	73,976	22,518	50,479	165,161
Accrual net farm income from oper.	46,999	7,526	28,849	115,887
Capital gain or loss	2,042	498	2,715	3,324
<b>Accrual Net Farm Income</b>	<b>\$49,041</b>	<b>\$8,024</b>	<b>\$31,564</b>	<b>\$119,211</b>
Operator and family labor charge	\$17,218	\$12,612	\$17,508	\$22,489
Charge for equity capital	31,456	17,981	24,931	56,328
<b>Return to Management</b>	<b>367</b>	<b>(22,570)</b>	<b>(10,876)</b>	<b>40,394</b>

## Efficiency Factors

Efficiency can be measured in many ways. Several efficiency factors are shown in Table 6, for three farm size groups. Crop value and machinery investment per acre increased as farm size increased. Other than machinery cost per crop acre and livestock returns/\$100 feed fed, most financial measures tended to improve with farm size in 2005.

The small farms showed higher livestock returns per \$100 feed fed but the lowest return to equity. Average return on equity showed a gain of 5.2% in 2005.

**Table 6. Overall Efficiency Factors by Size of Farm**

	Average	Total Value of Ag Production		
		\$40,000 to \$99,999	\$100,000 to \$249,999	\$250,000 and above
<b>Crops</b>				
Acres in crops	446	169	346	911
Crop value per acre	\$335	\$300	\$346	\$367
Crop acres per person	488	358	444	703
Machinery cost per crop acre	\$81	\$84	\$84	\$74
Machinery investment per crop acre	\$256	\$242	\$258	\$271
<b>Livestock</b>				
Livestock returns/\$100 feed fed	\$203	\$226	\$189	\$195
<b>Financial</b>				
Value of farm production per person	\$226,723	\$150,068	\$195,124	\$360,624
Value of farm prod. per \$1 expense	\$1.27	\$1.21	\$1.27	\$1.35
Asset turnover ratio	0.33	0.24	0.35	0.42
% return to owned assets	4.8%	0.6%	5.1%	9.3%
% return to equity	5.2%	0.3%	4.2%	12.5%
Operating profit margin ratio	0.17	0.11	0.16	0.24
Interest expense ratio	0.04	0.04	0.05	0.05
Operating expense ratio	0.69	0.75	0.68	0.62
Depreciation expense ratio	0.09	0.11	0.09	0.08
Net farm income ratio	0.18	0.09	0.20	0.25
Median interest rate on debt	5.9%	6.4%	5.7%	5.6%

## Crop and Livestock Production

Details of crop production income and expenses per acre are summarized in Table 7. Acres rented under a share lease are reduced to reflect only the tenant's share of total costs, so that expenses per acre are comparable to expenses on owned or cash rented acres.

Some expenses, such as cash rent, did not occur on all farms or on all acres, but are shown as the average cost per farm. Total economic costs include a six percent opportunity cost charge for the farm net worth capital, a depreciation charge, and a charge for operator and family labor.

Cash flow needs include all cash costs, principal payments, and living costs.

**Table 7. Crop Production**

	All Corn	Soybeans	Hay	Small Grain
Acres, operator share	218	188	35	22
Yield, bushels or tons per acre	166	53	3.8	-
Crop value per bushel or ton	\$1.61	\$4.93	\$71.67	-
Crop value per acre	\$265	\$285	\$270	-
<b>Crop Expenses</b>				
Seed	\$44.25	\$29.61	\$7.97	\$18.29
Fertilizer and Lime	66.69	8.21	11.95	7.37
Herbicide	30.79	18.94	1.82	0.97
Insecticide	1.99	3.00	0.88	0.73
Drying and storage	13.60	1.85	0.01	0.00
Machinery, fuel, repairs, machine hire	57.35	57.16	49.46	21.68
Utilities	8.87	8.07	5.78	1.99
Insurance	13.63	14.07	8.43	4.86
Hired labor	3.86	3.74	4.56	8.74
Interest	21.00	21.24	15.95	8.71
Cash rent	53.01	51.57	41.83	26.92
Property tax	11.13	11.65	8.14	5.66
Building repair	5.45	5.25	4.97	1.01
Other crop expenses	11.48	11.29	7.29	3.95
Total cash crop expenses	\$344.14	\$245.65	\$169.05	\$110.87
Machinery depreciation	\$28.52	\$27.49	\$21.78	\$19.03
Building depreciation	8.15	8.54	9.20	2.57
Charge for equity capital	65.06	64.81	40.04	28.88
Unpaid labor value	44.23	43.85	34.07	19.76
Total economic cost per acre	\$490.09	\$390.33	\$274.14	\$181.12
Total economic cost per bu. or ton	\$2.98	\$7.32	\$72.11	-
Principal payments	\$15.01	\$14.54	\$5.12	\$5.43
Family living expenses	\$75.12	\$84.88	\$47.13	\$27.66
Total cash flow needed per acre	\$434.27	\$345.07	\$221.30	\$143.95
Total cash flow needed per bu. or ton	\$2.65	\$6.48	\$58.36	-

**Table 8. Livestock Production**

	Swine	Beef	Dairy	Sheep
Percent of farms with enterprise	16 %	31 %	1 %	4 %
Number of hundred weight produced	2,831	825	30,654	156
Average number of breeding units	652	60	237	93
Average weaning rate	8.27	0.94	0.93	0.66
Lbs. of feed per lb. of production	3.24	12.79	2.14	7.00
Feed cost per cwt. of production	\$23.78	\$40.47	\$8.19	\$54.05
Livestock production per \$100 feed fed	\$178.00	\$226.00	\$228.00	\$148.00
Average value produced per cwt.	\$45.90	\$86.54	\$14.67	\$97.17

**Table 9. Comparison of High and Low Profit Farms, Ranked by Return to Management**

	High Third	Middle Third	Low Third	Your Farm
<b>Farm Income</b>				
Value of livestock production	\$254,483	\$61,815	\$52,156	
Feed fed	123,045	32,887	29,174	
Livestock production less feed	131,439	28,928	22,982	
Value of crop production	366,303	200,187	173,309	
Miscellaneous income	60,477	26,690	16,674	
Crop inventory gain or loss	26,400	16,798	7,468	
Value of Farm Production	\$584,618	\$272,604	\$220,433	
Operating expenses	\$229,624	\$121,534	\$112,416	
Fixed expenses	190,305	91,067	84,431	
Accrual net farm income from oper.	\$164,689	\$60,003	\$23,585	
Capital gain or loss	6,365	1,472	934	
Accrual Net Farm Income	\$171,054	\$61,475	\$24,519	
Operator and family labor charge	\$23,174	\$18,811	\$18,407	
Charge for equity capital	51,159	34,221	49,090	
Return to Management	\$96,721	\$8,443	(\$42,978)	
<b>Crops</b>				
Acres in crops	537	297	365	
Crop value per acre	\$374	\$353	\$329	
Crop acres per person	677	584	575	
Corn yield, bu. per acre	175	173	163	
Average price received for corn	\$1.67	\$1.59	\$1.60	
Total economic cost per bu. for corn	\$2.43	\$2.71	\$3.31	
Machinery cost per crop acre	\$71	\$76	\$90	
Machinery investment per crop acre	\$276	\$245	\$281	
<b>Livestock</b>				
Livestock returns/\$100 feed fed	\$208	\$181	\$190	
<b>Value of farm product - Sources (%)</b>				
Crops	64 %	75 %	78 %	
Livestock	21 %	10 %	12 %	
Miscellaneous income	10 %	9 %	8 %	
Crop inventory gain or loss	5 %	6 %	3 %	
<b>Financial</b>				
Value of farm production per person	\$381,514	\$267,455	\$240,769	
Value of farm prod. per \$1 expense	\$1.47	\$1.33	\$1.12	
Asset turnover ratio	0.49	0.43	0.27	
% return to owned assets	13.9%	7.4%	0.7%	
% return to equity	23.2%	9.5%	-1.0%	
Operating profit margin ratio	0.30	0.19	0.06	
Interest expense ratio	0.04	0.05	0.07	
Operating expense ratio	0.58	0.65	0.74	
Depreciation expense ratio	0.07	0.08	0.12	
Net farm income ratio	0.31	0.23	0.11	
Debt to asset ratio	0.37	0.32	0.22	
Median interest rate on debt	5.6%	6.0%	5.8%	



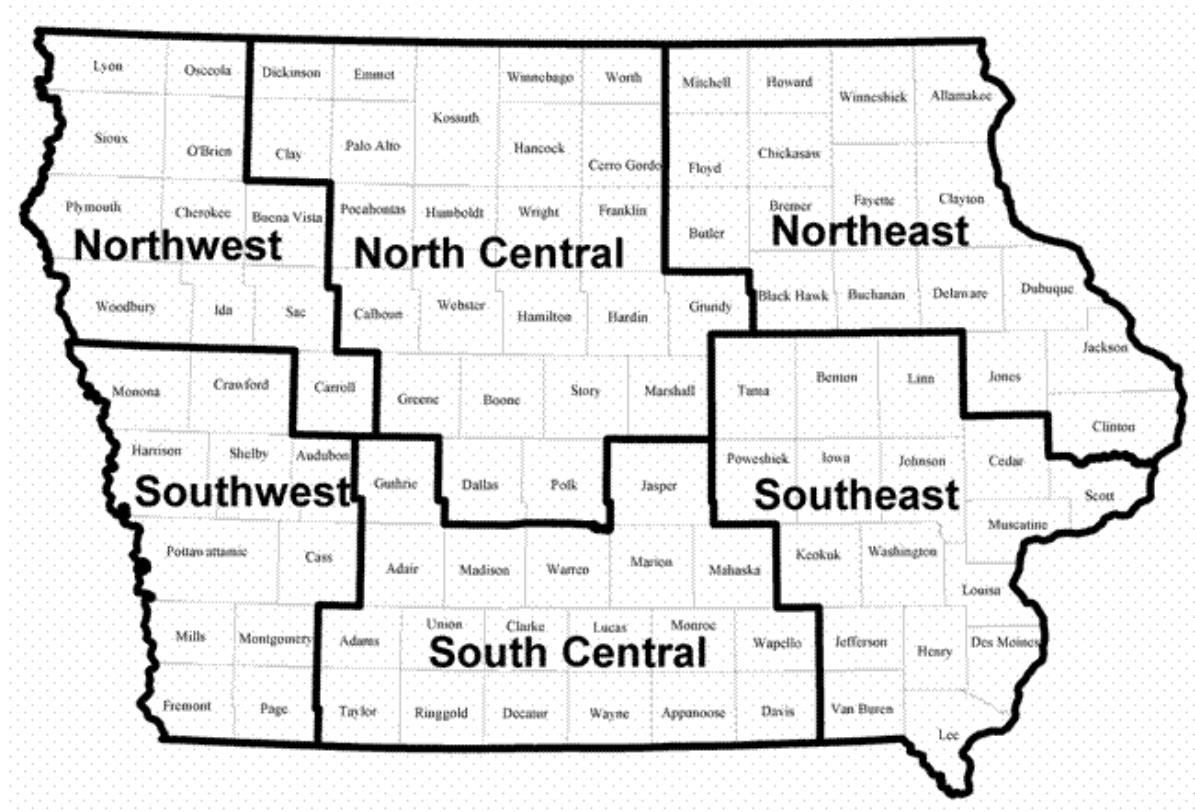
## Comparison by Economic Areas

Table 10 compares six economic areas in Iowa, as show below. More detailed summaries for each area are available from your County Extension Office, the Publications Distribution office at Iowa State University (515-294-5247), or from the web pages: [www.extension.iastate.edu/store/](http://www.extension.iastate.edu/store/) or [www.extension.iastate.edu/agdm](http://www.extension.iastate.edu/agdm)

Northwest Iowa had the highest accrual net farm income per farm of \$69,400. The other five regions had with accrual incomes ranging from \$33,772 in Northeast Iowa to \$57,254 in the North Central region. Northwest Iowa had the highest value of livestock income less feed per farm, while North Central Iowa had the largest value for crop production per farm of \$175,337.

Livestock returns per \$100 feed fed were highest in Northwest Iowa. Southwest Iowa farmers had the highest value of production per person. Southeast Iowa had the most favorable debt to asset ratio. North Central Iowa had the highest % return to owned assets in 2005.

### Economic Areas of Iowa



**Table 10. Comparison of Farm Businesses by Economic Areas of Iowa, 2005**

Economic Area	Northwest Iowa	North Central Iowa	Northeast Iowa	Southwest Iowa	South Central Iowa	Southeast Iowa
<b>Financial Returns</b>						
Net farm income - accrual	\$69,400	\$57,254	\$33,772	\$47,175	\$42,884	\$41,913
Return to management	22,951	6,111	(9,881)	6,322	(15,553)	(10,027)
Net farm income - cash	64,353	58,428	44,164	56,435	54,177	56,435
<b>Resources Used</b>						
Acres per farm	463	589	688	526	578	473
Labor months	14	11	13	11	11	11
Livestock, feed, supplies	\$234,187	\$207,639	\$191,438	\$204,746	\$198,874	\$187,563
Machinery and equipment	123,280	127,700	142,488	133,804	107,854	141,416
Land and improvements	406,914	448,905	615,885	328,780	533,067	539,838
Total assets	764,381	784,245	949,810	667,330	839,796	868,818
<b>Sources of Income</b>						
Livestock income less feed	\$70,922	\$28,029	\$28,031	\$23,249	\$30,241	\$26,121
Crop production	159,676	175,337	156,854	128,698	125,574	144,905
Miscellaneous	13,063	21,737	24,890	51,753	10,607	12,208
Crop inventory gain or loss	10,099	11,090	7,649	10,617	3,938	16,286
Value of farm production	253,760	236,193	217,424	214,318	170,360	199,519
Capital gain or loss	591	2,203	3,671	306	1,102	2,830
<b>Expenses</b>						
Operating	\$105,957	\$104,917	\$102,357	\$95,790	\$75,684	\$93,481
Fixed	78,994	76,225	84,966	71,658	52,894	66,956
<b>Efficiency</b>						
Corn yield (bu. per acre)	181	184	148	156	153	156
Crop value per acre	\$371	\$369	\$319	\$257	\$318	\$328
Machinery cost per crop acre	80	76	82	80	71	97
Livestock returns per \$100 feed fed	226	208	170	216	213	204
Value of farm production per person	232,443	264,142	186,665	266,302	188,844	220,176
Value of farm prod. per \$1 expense	\$1.33	\$1.39	\$1.06	\$1.31	\$1.39	\$1.20
Asset turnover ratio	0.34	0.43	0.26	0.40	0.21	0.32
Average sale price for corn	\$1.55	\$1.59	\$1.60	\$1.55	\$1.69	\$1.64
% return to owned assets	6.2 %	7.2 %	2.6 %	6.4 %	4.2 %	2.3 %
Interest expense ratio	0.06	0.04	0.06	0.04	0.02	0.02
Debt to asset ratio	0.33	0.24	0.26	0.29	0.21	0.19

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## Trends

Table 11 illustrates trends in production and financial efficiency over the past ten years. Livestock income per \$100 feed fed has shown a cyclical pattern throughout the period. The average in 2005 of \$203 was \$83 above the 1998 low of \$120. This result was \$17 above the previous high observed in 2004, and \$40 above the 10-year average of \$163.

The average corn yield of 165 bushels per acre was 16 below the previous high of 181 but crop value for all acres increased slightly in 2005 to \$335 per acre. The percent return to owned assets remained positive in 2005 with average gains of 4.8%. Excluding 1998, percent return to owned assets has been positive each year of the decade, and the return for 2005 was above the ten-year average of 4.1%.

**Table 11. Trends in Production and Financial Efficiency on Iowa Farms**

Year	Livestock Income per \$100 Feed Fed	Corn Yield per Acre	Value of Farm Production per \$1 Expense	Crop Value per Acre	Percent Return to Owned Assets
1996	149	135	1.43	310	7.0 %
1997	149	134	1.38	319	5.8 %
1998	120	150	1.08	302	-2.1 %
1999	165	147	1.21	279	1.7 %
2000	173	143	1.35	298	6.0 %
2001	163	142	1.18	275	2.3 %
2002	139	162	1.29	312	4.7 %
2003	181	155	1.28	319	4.7 %
2004	186	181	1.32	322	5.9 %
2005	203	165	1.27	335	4.8 %
10-Yr Average	\$163	151	\$1.28	\$307	4.1 %

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## Costs and Returns of Specialized Farms

Table 12 summarizes the average net incomes over the past ten years for farms specializing in farrow to finish hog production, beef feeding, dairy, grain, and beef raising. These data are not adjusted for farm size, so the results are not comparable to data shown in the previous tables. Farrow to finish farms were the most profitable sector in 2005 and showed the highest net income per farm for the second year in a row. All groups had net income above their 10-year averages in 2005.

Table 13 shows the percent return to owned assets for specialized farms. This is calculated by adding interest expense to the net farm income for the farm, subtracting a charge for operator and family labor, and dividing by the value of total farm assets owned. Farrow to finish farms had the highest return to capital in 2005 with gains of 11.1%, followed by dairy farms with a return of 9.6%. All the specialized farm groups had returns to capital in 2005 that were above their ten-year averages.

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**Table 12. Net Income of Specialized Farms**

Year	Net Income				
	Farrow to Finish	Beef Feeding	Dairy	Cash Grain	Beef Raising
1996	91,360	77,759	40,143	61,689	38,874
1997	80,458	55,734	39,874	66,254	48,656
1998	(29,514)	(565)	82,571	25,654	7,380
1999	49,326	46,730	77,956	27,803	32,187
2000	113,021	56,221	49,439	55,097	41,162
2001	83,758	15,858	52,419	26,635	16,271
2002	46,223	49,010	49,042	56,154	37,785
2003	76,887	169,963	63,714	49,269	68,011
2004	175,675	112,461	128,279	59,899	56,518
2005	161,140	93,056	125,619	69,541	72,629
10-Yr Average	84,833	67,623	70,906	49,799	41,947

**Table 13. Return to Owned Assets for Specialized Farms**

Year	Percent Return to Capital				
	Farrow to Finish	Beef Feeding	Dairy	Cash Grain	Beef Raising
1996	11.3	8.6	6.4	10.2	4.3
1997	9.2	6.7	5.0	9.3	6.7
1998	(6.6)	(1.0)	8.3	1.3	(1.7)
1999	4.8	5.5	10.6	2.5	3.4
2000	11.4	7.1	5.6	7.9	5.2
2001	7.6	2.2	11.2	3.2	1.0
2002	4.0	5.8	4.6	6.4	5.5
2003	5.6	12.0	6.6	5.8	5.7
2004	12.5	8.2	11.8	7.9	5.8
2005	11.1	5.9	9.6	7.5	7.2
10-Yr Average	7.1 %	6.1 %	8.0 %	6.2 %	4.3 %

Table 14 summarizes resources, production, income, expenses, and efficiency for farms specializing in farrow to finish, beef feeding, cash grain, dairy, and beef raising.

Beef feeding farms had the highest total investment while the lowest return to management in 2005 was in cash grain. Cash grain operations utilized the least amount of labor but had a 7.5% return on assets. Accrual net farm income was highest for farrow to finish farms followed by the dairy farm group.

**Table 14. Characteristics of Specialized Farms**

	Farrow to Finish <sup>1</sup>	Beef Feeding <sup>2</sup>	Cash Grain <sup>3</sup>	Dairy <sup>4</sup>	Beef Raising <sup>5</sup>
<b>Resources Used</b>					
Acres per farm	964	779	738	535	775
Labor months	22	18	12	41	15
Current assets	\$442,618	\$583,295	\$226,525	\$281,160	\$328,463
Machinery and breeding stock	279,030	243,205	185,989	442,032	239,533
Land and buildings	769,685	716,632	544,732	662,930	519,211
Total farm assets	<u>\$1,491,333</u>	<u>\$1,543,132</u>	<u>\$957,245</u>	<u>\$1,386,122</u>	<u>\$1,087,207</u>
Total farm liabilities	<u>378,355</u>	<u>530,799</u>	<u>247,719</u>	<u>456,630</u>	<u>414,969</u>
Farm net worth	\$1,112,979	\$1,012,333	\$709,526	\$929,493	\$672,239
<b>Production</b>					
Total crop acres	701	688	699	383	618
Average sow units	178	-	-	-	-
Hogs sold	3,340	-	-	-	-
Beef cows	-	-	-	-	73
Beef cattle sold	-	721	-	-	-
Cows milked	-	-	-	141	-
Gross revenue	\$743,983	\$799,026	\$312,309	\$588,266	\$438,360
<b>Sources of Farm Production</b>					
Total Livestock increase	\$406,824	\$209,510	\$10,067	\$478,925	\$122,462
Less feed fed to livestock	<u>196,210</u>	<u>112,506</u>	<u>1,014</u>	<u>200,910</u>	<u>61,461</u>
Livestock increase over feed fed	210,613	97,028	9,052	278,014	61,016
Crop production	256,745	254,543	256,741	174,542	203,151
Miscellaneous	23,020	31,250	34,285	20,803	35,885
Crop inventory gain or loss	<u>19,319</u>	<u>11,003</u>	<u>18,953</u>	<u>5,266</u>	<u>15,753</u>
Value of Farm Production	\$506,018	\$391,847	\$316,386	\$478,152	\$313,628
<b>Expenses</b>					
Operating	\$198,382	\$180,933	\$138,877	\$246,810	\$134,365
Fixed	<u>150,176</u>	<u>119,835</u>	<u>110,613</u>	<u>106,197</u>	<u>108,812</u>
<b>Financial Returns</b>					
Net farm income, accrual	\$161,140	\$93,056	\$69,541	\$125,619	\$72,629
Charge for operator, family labor	23,940	21,224	18,431	29,973	20,753
Charge for equity capital	<u>63,424</u>	<u>54,916</u>	<u>39,412</u>	<u>54,144</u>	<u>35,559</u>
Return to management	\$73,776	\$16,916	\$11,699	\$41,501	\$16,316
<b>Efficiency</b>					
Machine and power cost/crop acre	\$67	\$78	\$85	\$81	\$69
Interest expense ratio	0.04	0.07	0.05	0.05	0.06
Livestock increase/\$100 feed fed	206	190	192	227	222
Value of farm production per person	\$309,305	\$280,297	\$308,273	\$182,218	\$317,132
Value of farm prod. per \$1 expense	1.47	1.29	1.30	1.38	1.34
Return on assets	11.1 %	5.9 %	7.5 %	9.6 %	7.2 %
Return on equity	15.5 %	7.3 %	10.3 %	15.3 %	10.5 %
Asset turnover ratio	0.41	0.30	0.44	0.39	0.37
Debt to asset ratio	0.30	0.39	0.29	0.32	0.35
Current Ratio	2.50	1.90	1.23	2.79	2.45

<sup>1</sup> Hog income was 80% or more of total livestock income, 90% or more of hogs sold were farrowed. At least 50% of crops raised were fed.

<sup>2</sup> Beef income was 80% or more of total livestock income. Beef feeding was the major enterprise. At least 50% of crops raised were fed.

<sup>3</sup> Feed fed was less than 5% of the value of all crops.

<sup>4</sup> At least 20 cows milked and 80% or more of total livestock increase from dairy products sold. At least 50% of crops raised were fed.

<sup>5</sup> Beef increase was 50% or more of total livestock increase. No large cattle purchases. At least 50% of crops raised were fed.

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**. . . and justice for all**

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