# 2006 Iowa Farm Costs and Returns

### **Ag Decision Maker**

File C1-10

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.

### 2006 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 2006. The values presented are averages; however, results vary widely from one farm to the next.

Farm financial results showed general improvement in 2006. Accrual net farm income averaged \$72,865, the highest value ever recorded in this survey. Good crop yields and favorable prices were the primary factors. Cash income decreased modestly from 2005 and averaged \$49,297. Other than machinery cost per acre and livestock returns, most financial efficiency factors showed relative strength in 2006.

**Table 1. Comparison by years** 

	2006	2005	2004	2003	2002	2001
Financial Returns				'		
Net farm income - accrual	\$72,865	\$49,041	\$58,785	\$44,368	\$37,743	\$26,209
Return to management	23,683	367	12,543	(2,489)	(7,534)	(20,263)
Net farm income - cash	49,297	54,658	56,868	54,205	38,473	53,313
Resources Used						
Acres per farm	477	564	598	623	618	597
Labor months	11	12	12	12	13	13
Livestock, feed, supplies	230,640	\$203,974	\$203,469	\$191,384	\$178,287	\$167,828
Machinery and equipment	127,579	130,720	124,598	122,209	115,470	113,576
Land and improvements	477,720	490,358	446,467	405,836	390,032	397,971
Total assets	835,940	825,052	774,535	719,429	683,789	679,480
Sources of Income						
Livestock income less feed	\$25,259	\$34,520	\$44,540	\$30,791	\$18,101	\$30,208
Crop production	186,570	153,536	160,515	159,084	151,624	134,432
Miscellaneous	13,572	21,227	19,595	15,609	9,800	15,574
Crop inventory gain or loss	8,634	10,143	9,170	605	6,538	(4,176)
Value of farm production	234,035	219,426	233,819	206,089	186,064	176,039
Capital gain or loss	2,065	2,042	1,975	1,038	1,459	1,775
Expenses						
Operating	\$92,155	\$98,451	\$94,850	\$88,279	\$79,294	\$79,357
Fixed	71,001	73,976	75,656	74,479	70,485	72,248
Efficiency						
Corn yield (bu. per acre)	166	165	181	155	162	142
Crop value per acre	\$454	\$335	\$322	\$319	\$312	\$275
Machinery cost per crop acre	96	81	74	65	63	60
Livestock returns per \$100 feed fed	178	203	186	181	139	163
Value of farm production per person	260,301	226,723	230,976	209,855	194,526	176,435
Value of farm prod. per \$1 expense	\$1.47	\$1.27	\$1.32	\$1.28	\$1.29	\$1.18
Asset turnover ratio	0.37	0.33	0.35	0.37	0.39	0.38
Average sale price for corn	\$3.17	\$1.60	\$1.70	\$2.19	\$2.15	\$1.81
% return to owned assets	8.2%	4.8%	5.9%	4.7%	4.7%	2.3%
Interest expense ratio	0.04	0.04	0.04	0.06	0.07	0.08
Debt to asset ratio	0.23	0.25	0.27	0.28	0.28	0.30

### **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.

•	Total Value of Ag Production				
		\$40,000	\$100,000	\$250,000	
		to	to	and	
	Average	\$99,999	\$249,999	above	
Farm Assets					
Feeding livestock	\$39,122	\$7,625	\$16,159	\$102,694	
Corn	87,478	25,973	62,300	193,483	
Soybeans	45,185	14,909	33,366	96,927	
Other feed	5,916	3,716	4,150	10,903	
Supplies, prepaid expenses	36,439	12,305	25,414	80,421	
Total short term assets	\$209,966	\$51,673	\$141,388	\$484,427	
Breeding livestock	16,501	11,747	11,139	29,699	
Machinery, equipment	127,579	54,594	90,582	264,037	
Total intermediate assets	\$144,080	\$66,340	\$101,722	\$293,737	
Land and improvements	477,720	324,500	392,646	781,704	
Total assets	\$835,940	\$455,368	\$635,756	\$1,559,868	
Farm Liabilities					
Operating notes, accounts payable	65,970	15,114	42,274	153,760	
Intermediate and long term due	2,885	1,159	2,221	5,905	
FSA marketing loans	6,321	248	2,447	18,944	
Total short term debt	\$75,176	\$16,522	\$46,941	\$178,609	
Intermediate term debts	31,986	6,835	25,796	70,298	
Long term debts	84,147	23,945	62,507	182,855	
Total liabilities	\$191,310	\$47,302	\$135,245	\$431,762	
Farm Net Worth	\$644,630	\$408,066	\$500,511	\$1,128,106	
Net worth change from last year	\$55,353	\$17,534	\$38,656	\$125,338	
Working capital	\$138,963	\$48,006	\$94,447	\$305,818	
Current asset/debt ratio	2.92	3.07	3.12	2.71	
Total debt/asset ratio	0.23	0.12	0.27	0.30	
Total acres farmed	477	222	377	919	
Months of labor used	11.4	6.9	10.2	18.1	

# **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

		Total	Value of Ag Produc	ction
		\$40,000 to	\$100,000 to	\$250,000 and
	Average	\$99,999	\$249,999	above
Machinery and equip. repairs	\$10,262	\$5,240	\$8,107	\$18,944
Fuel and oil	9,541	3,891	7,089	19,317
Machine hire	4,618	2,418	3,511	8,848
Auto and truck expense	3,475	2,469	2,687	5,478
Utilities	3,914	2,039	2,930	7,328
Labor hired	4,410	324	1,078	13,136
Livestock expense	5,714	1,474	1,966	14,664
Crop expense	46,396	16,108	35,080	97,120
Miscellaneous	3,826	1,666	3,557	6,914
Total Cash Operating Expense	\$92,155	\$35,628	\$66,005	\$191,750
Cash rent	\$27,884	\$5,030	\$17,588	\$68,181
Property taxes	3,878	1,937	3,496	6,863
Insurance	6,847	2,631	5,214	13,877
Building repairs	3,144	1,527	1,975	6,547
Depreciation	17,526	6,587	12,139	37,231
Interest	11,722	2,934	8,472	25,956
Total Fixed Expense	\$71,001	\$20,645	\$48,885	\$158,655

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 \$14,758 for the smallest farms up to \$104,372 for the largest, with an average of \$49,297 per farm. However, machinery purchases exceeded sales and net new loans, so net cash flow from the farm was only \$41,590. Adding nonfarm income received and subtracting family living expenses showed an average of \$27,680 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

		Total	l Value of Ag Produc	ction
		\$40,000 to	\$100,000 to	\$250,000
	Average	\$99,999	\$249,999	and above
Livestock sales	\$99,488	\$17,390	\$35,242	\$268,203
Crop sales	124,097	42,599	100,200	252,310
Crop insurance payments	992	96	517	2,777
Government payments	17,368	5,975	13,825	35,747
Other cash income	11,197	5,530	8,336	22,491
Total Cash Income	\$253,141	\$71,591	\$158,119	\$581,529
Cash operating expenses	\$92,155	\$35,628	\$66,005	\$191,750
Cash fixed expenses	53,474	14,059	36,746	121,423
Feed purchased	22,562	5,103	6,394	61,006
Livestock purchased	35,653	2,043	11,644	102,977
Total Cash Expenses	\$203,845	\$56,833	\$120,790	\$477,157
Cash Net Farm Income	\$49,297	\$14,758	\$37,329	\$104,372
+ Sales of machinery & improvements	1,558	1,700	737	2,297
- Purchases of machinery and improv.	28,978	9,824	17,232	64,962
+ Loans received minus loans paid	19,712	9,386	10,076	42,274
Net Farm Cash Flow	\$41,590	\$16,020	\$30,909	\$83,981
+Nonfarm income	18,243	19,727	20,049	13,854
-Family living expenses	32,153	21,275	29,265	48,231
Net Cash Available	\$27,680	\$14,472	\$21,693	\$49,604

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 \$18,097 for the smallest farms to \$164,527 for the largest. Return to management in 2006 ranged from -\$9,315 for the small size group to \$80,531 for the large farms.

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

	<del>_</del>	Total	Value of Ag Produ	ction
		\$40,000 to	\$100,000 to	\$250,000
	Average	\$99,999	\$249,999	and above
Value of livestock production	\$59,673	\$12,528	\$22,731	\$156,967
Feed fed	34,414	7,398	12,916	91,195
Livestock production less feed	25,259	5,130	9,815	65,773
Value of crop production	186,570	58,766	140,716	398,895
Miscellaneous income	13,572	7,147	10,407	26,174
Crop inventory gain or loss	8,634	2,928	4,185	21,014
Value of Farm Production	\$234,035	\$73,970	\$165,124	\$511,855
Operating expenses	\$92,155	\$35,628	\$66,005	\$191,750
Fixed expenses	71,001	20,645	48,885	158,655
Accrual net farm income from oper.	70,800	17,495	50,233	161,450
Capital gain or loss	2,065	602	2,847	3,076
Accrual Net Farm Income	\$72,865	\$18,097	\$53,081	\$164,527
Operator and family labor charge	\$16,845	\$11,331	\$17,483	\$22,819
Charge for equity capital	32,337	16,080	25,966	61,177
Return to Management	\$23,683	(\$9,315)	\$9,632	\$80,531

### **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 2006.

The small farms showed higher livestock returns per \$100 feed fed but the lowest return to equity. Return on equity showed an average gain of 8.1%.

Table 6. Overall Efficiency Factors by Size of Farm

		Total Value of Ag Production		
		\$40,000 to	\$100,000 to	\$250,000
	Average	\$99,999	\$249,999	and above
Crops	'		,	_
Acres in crops	406	136	318	847
Crop value per acre	\$454	\$436	\$454	\$472
Crop acres per person	475	323	468	677
Machinery cost per crop acre	\$91	\$101	\$93	\$76
Machinery investment per crop acre	\$261	\$258	\$261	\$271
Livestock				
Livestock returns/\$100 feed fed	\$178	\$196	\$164	\$172
Financial				
Value of farm production per person	\$260,301	\$167,254	\$246,074	\$392,800
Value of farm prod. per \$1 expense	\$1.47	\$1.39	\$1.52	\$1.54
Asset turnover ratio	0.37	0.30	0.40	0.41
% return to owned assets	8.5%	3.7%	9.6%	12.6%
% return to equity	8.1%	2.1%	9.1%	14.6%
Operating profit margin ratio	0.22	0.13	0.23	0.31
Interest expense ratio	0.04	0.03	0.05	0.05
Operating expense ratio	0.63	0.67	0.62	0.58
Depreciation expense ratio	0.08	0.09	0.08	0.07
Net farm income ratio	0.26	0.20	0.28	0.29
Median interest rate on debt	5.9%	6.1%	5.9%	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** 

Table 7. Crop Frounction	All			Small
	Corn	Soybeans	Hay	Grain
Acres, operator share	206	181	33	29
Yield, bushels or tons per acre	165	53	4.4	-
Crop value per bushel or ton	\$3.34	\$6.17	\$72.53	-
Crop value per acre	\$526	\$329	\$318	-
Crop Expenses				
Seed	\$46.66	\$30.40	\$11.78	\$12.54
Fertilizer and Lime	72.99	8.96	9.78	3.65
Herbicide	30.32	18.84	1.32	1.56
Insecticide	1.91	1.37	1.37	0.00
Drying and storage	11.90	2.22	0.04	0.00
Machinery, fuel, repairs, machine hire	57.82	63.12	55.60	32.11
Utilities	9.62	10.07	5.08	2.68
Insurance	14.92	17.73	9.85	4.73
Hired labor	3.68	3.07	5.40	2.71
Interest	23.07	21.74	19.49	7.35
Cash rent	57.49	55.41	50.49	43.54
Property tax	9.69	10.14	8.66	4.97
Building repair	5.98	4.94	3.67	1.74
Other crop expenses	13.12	12.36	7.52	2.55
Total cash crop expenses	\$360.20	\$260.35	\$190.04	\$120.14
Machinery depreciation	\$32.40	\$30.73	\$25.47	\$19.94
Building depreciation	7.19	7.44	5.52	1.30
Charge for equity capital	71.94	74.72	39.14	26.19
Unpaid labor value	45.98	43.45	36.20	19.66
Total economic cost per acre	\$517.71	\$416.70	\$296.38	\$187.23
Total economic cost per bu. or ton	\$3.14	\$7.82	\$70.10	-
Principal payments	\$11.56	\$11.49	\$5.84	\$2.90
Family living expenses	\$73.18	\$75.71	\$35.75	\$26.20
Total cash flow needed per acre	\$444.94	\$347.55	\$231.64	\$149.24
Total cash flow needed per bu. or ton	\$2.70	\$6.54	\$54.35	

**Table 8. Livestock Production** 

	Swine	Beef	Dairy	Sheep
Percent of farms with enterprise	16 %	30 %	2 %	3 %
Number of hundred weight produced	2,940	926	30,801	110
Average number of breeding units	389	62	233	77
Average weaning rate	8.16	0.94	0.93	1.28
Lbs. of feed per lb. of production	3.68	11.30	3.00	3.88
Feed cost per cwt. of production	\$23.52	\$45.10	\$8.04	\$47.55
Livestock production per \$100 feed fed	\$154.34	\$188.96	\$184.37	\$197.37
Average value produced per cwt.	\$38.59	\$81.16	\$12.80	\$57.06

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Table 9. Comparison of High and Low Profit Farms, Ranked by Return to Management					
	High	Middle	Low	Your	
	Third	Third	Third	Farm	
Farm Income					
Value of livestock production	\$199,815	\$83,673	\$76,862		
Feed fed	106,075	46,267	55,437		
Livestock production less feed	93,740	37,406	21,425		
Value of crop production	474,091	276,671	223,150		
Miscellaneous income	30,793	17,796	10,531		
Crop inventory gain or loss	38,051	10,608	2,711		
Value of Farm Production	\$636,674	\$342,481	\$264,335		
Operating expenses	\$212,244	\$129,550	\$123,899		
Fixed expenses	174,534	105,605	99,435		
Accrual net farm income from oper.	\$249,896	\$107,326	\$41,001		
Capital gain or loss	1,926	642	3,512		
Accrual Net Farm Income	\$251,823	\$107,968	\$44,513		
Operator and family labor charge	\$22,870	\$20,069	\$20,023		
Charge for equity capital	61,768	38,249	52,877		
Return to Management	\$167,184	\$49,650	(\$28,387)		
Crops					
Acres in crops	977	593	515		
Crop value per acre	\$488	\$475	\$431		
Crop acres per person	761	571	502		
Corn yield, bu. per acre	177	171	162		
Average price received for corn	\$3.22	\$3.17	\$3.17		
Total economic cost per bu. for corn	\$2.53	\$2.81	\$3.40		
Machinery cost per crop acre	\$72	\$76	\$96		
Machinery investment per crop acre	\$261	\$267	\$311		
Livestock					
Livestock returns/\$100 feed fed	\$185	\$169	\$160		
Value of farm product - Sources (%)					
Crops	76 %	83 %	84 %		
Livestock	13 %	9 %	6 %		
Miscellaneous income	5 %	5 %	4 %		
Crop inventory gain or loss	6 %	3 %	5 %		
Financial					
Value of farm production per person	\$476,924	\$315,719	\$252,596		
Value of farm prod. per \$1 expense	\$1.75	\$1.56	\$1.29		
Asset turnover ratio	0.47	0.44	0.33		
% return to owned assets	18.6%	13.2%	4.8%		
% return to equity	29.0%	19.5%	5.3%		
Operating profit margin ratio	0.41	0.32	0.18		
Interest expense ratio	0.04	0.04	0.07		
Operating expense ratio	0.49	0.55	0.67		
Depreciation expense ratio	0.06	0.07	0.10		
Net farm income ratio	0.41	0.34	0.20		
Debt to asset ratio	0.30	0.28	0.27		
Median interest rate on debt	6.2%	6.1%	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/ or www.extension.iastate.edu/agdm

North Central Iowa had the highest accrual net farm income per farm of \$83,499. The other five regions showed differences among themselves with accrual incomes ranging from \$64,503 in South Central Iowa to \$74,747 in the Southeast 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 \$210,585.

Livestock returns per \$100 feed fed were highest in Northeast Iowa. North Central 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 2006.

# Lyon Orcola Dickinson Emmet Winnerbago Worth Mitchell Howard Winnerbick Allamakee Stoux O'Brien Clay Palo Alto Kosanth Hanceck Cerro Gorder Floyd Chickasaw Plymouth Cherokee Boena Vitta Pecahontas Humboldt Wright Franklin North Central Woodbury Ida Sac Calhon Webster Hamiltoe Hardin Grundy Black Hawk Buchanan Delan are Dubuque Monona Crawford Carroll Greene Boene Story Mardadt Tama Bemen Linn Jones Marrison Shielby Audubon Southwest Guithre Dallas Polk Jasper Southeast Potan attamae Cass Adair Madison Warren Marica Mahaska Kookuk Washington Mills Montgomers Adams South Central Wagne Appanoose Davis Van Buren Lee Fremont Page Trysfor Ringgold Decauer Wagne Appanoose Davis Van Buren Lee

### **Economic Areas of Iowa**

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Table 10. Comparison of Farm Businesses by Economic Areas of Iowa, 2006

	Northwest	North	Northeast	Southwest	South	Southeast
Economic Area	Iowa	Central	Iowa	Iowa	Central	Iowa
		Iowa			Iowa	
Financial Returns						
Net farm income - accrual	\$73,817	\$83,499	\$64,801	\$69,349	\$64,503	\$74,747
Return to management	26,015	34,389	15,472	28,268	9,272	23,471
Net farm income - cash	51,302	56,192	46,561	43,766	42,571	43,766
Resources Used						
Acres per farm	451	496	503	527	457	423
Labor months	15	11	10	11	11	11
Livestock, feed, supplies	\$262,224	\$235,398	\$215,401	\$231,051	\$214,271	\$223,140
Machinery and equipment	117,628	127,100	144,237	133,803	105,710	127,586
Land and improvements	426,624	389,175	703,396	306,182	465,732	475,289
Total assets	806,477	751,672	1,063,035	671,035	785,713	826,016
Sources of Income						
Livestock income less feed	\$47,774	\$22,819	\$20,112	\$15,958	\$19,926	\$22,583
Crop production	192,328	210,585	179,136	189,627	141,331	184,400
Miscellaneous	9,579	19,338	13,318	19,995	11,409	6,160
Crop inventory gain or loss	10,300	7,803	7,430	6,997	7,956	11,362
Value of farm production	259,981	260,546	219,996	232,578	180,622	224,505
Capital gain or loss	2,506	1,322	2,668	112	3,397	2,204
Expenses						
Operating	\$107,035	\$101,091	\$84,582	\$89,245	\$73,825	\$88,442
Fixed	81,636	77,278	73,281	74,096	45,691	63,519
Efficiency						
Corn yield (bu. per acre)	156	169	165	169	170	169
Crop value per acre	\$449	\$465	\$465	\$384	\$449	\$476
Machinery cost per crop acre	83	94	102	84	80	124
Livestock returns per \$100 feed fed	166	184	202	160	190	152
Value of farm production per person	233,821	302,249	295,633	244,653	180,631	241,848
Value of farm prod. per \$1 expense	\$1.41	\$1.59	\$1.37	\$1.51	\$1.56	\$1.42
Asset turnover ratio	0.34	0.52	0.27	0.43	0.21	0.37
Average sale price for corn	\$3.19	\$3.15	\$3.10	\$3.25	\$3.20	\$3.23
% return to owned assets	6.2 %	13.3 %	7.7 %	7.4 %	4.9 %	6.3 %
Interest expense ratio	0.06	0.04	0.05	0.04	0.02	0.02
Debt to asset ratio	0.35	0.19	0.26	0.22	0.25	0.11

### **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 2006 of \$178 was \$58 above the 1998 low of \$120. While this result was \$25 below the previous high observed in 2005, it was also \$12 above the 10 year average of \$166.

Average corn yield of 166 bushels was 15 below the previous high of 181 but crop value for all acres increased in 2006 to \$454 per acre. The percent return to owned assets improved in 2006 with average gains of 8.2%. Excluding 1998, percent return to owned assets has been positive each year of the decade, and the return for 2006 was above the ten-year

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

	Livestock Income per	Corn Yield	Value of Farm Production	Crop Value	Percent Return to
Year	\$100 Feed Fed	per Acre	per \$1 Expense	per Acre	Owned Assets
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 %
2006	178	166	1.47	454	8.2 %
10-Yr Average	\$166	155	\$1.28	\$321	4.2 %

### 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 2006 and showed the highest net income per farm for the third year in a row.

All groups had net income above their 10-year averages in 2006.

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. Cash grain farms had the highest return to capital in 2006 with gains of 14.4%, followed by farrow to finish farms with a return of 12.3%. All the specialized farm groups had returns to capital in 2006 that were above their ten-year averages.

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Table 12. Net Income of Specialized Farms

	Net Income						
Year	Farrow to Finish	Beef Feeding	Dairy	Cash Grain	Beef Raising		
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		
2006	191,858	85,798	110,666	128,320	79,211		
10-Yr Average	94,883	68,427	77,958	56,463	45,981		

Table 13. Return to Owned Assets for Specialized Farms

Percent Return to Capital									
Year	Farrow to Finish	Beef Feeding	Dairy	Cash Grain	Beef Raising				
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				
2006	12.3	8.7	10.5	14.4	8.1				
10-Yr Average	7.2 %	6.1 %	8.4 %	6.6 %	4.7 %				

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

Farrow to finish farms had the highest total investment while the lowest return to management in 2006 was in beef feeding. Cash grain operations utilized the least amount of labor but had a 14.4% 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	Beef	Cash		Beef
	Finish <sup>1</sup>	Feeding <sup>2</sup>	Grain <sup>3</sup>	Dairy <sup>4</sup>	Raising <sup>5</sup>
Resources Used					
Acres per farm	744	722	736	481	818
Labor months	21	18	12	45	15
Current assets	\$506,262	\$607,253	\$310,364	\$300,197	\$359,861
Machinery and breeding stock	275,107	219,855	195,127	424,015	246,973
Land and buildings	821,418	607,624	569,689	524,594	570,218
Total farm assets	\$1,602,787	\$1,434,733	\$1,075,180	\$1,248,805	\$1,177,053
Total farm liabilities	419,494	459,246	268,594	555,374	495,802
Farm net worth	\$1,183,293	\$975,486	\$806,586	\$693,431	\$681,250
Production					
Total crop acres	682	672	700	414	646
Average sow units	755	-	-	-	-
Hogs sold	3,348	-	-	-	-
Beef cows	-	-	-	-	243
Beef cattle sold	-	765	-	-	-
Cows milked	-	-	-	161	-
Gross revenue	\$731,742	\$793,477	\$300,913	\$549,471	\$474,584
Sources of Farm Production					
Total Livestock increase	\$397,511	\$157,549	\$9,531	\$423,054	\$99,528
Less feed fed to livestock	222,537	122,932	1,146	191,475	75,472
Livestock increase over feed fed	174,974	34,617	8,386	231,579	24,056
Crop production	326,961	304,478	333,032	194,684	283,355
Miscellaneous	17,353	35,316	22,629	34,591	29,616
Crop inventory gain or loss	25,642	16,496	13,828	9,714	9,773
Value of Farm Production	\$543,377	\$378,744	\$375,185	\$467,477	\$344,799
Expenses					
Operating	\$201,797	\$172,367	\$134,551	\$238,654	\$145,788
Fixed	151,275	132,742	115,004	121,248	121,800
Financial Returns					
Net farm income, accrual	\$191,858	\$85,798	\$128,320	\$110,666	\$79,211
Charge for operator, family labor	23,740	25,553	19,237	31,090	19,189
Charge for equity capital	62,299	61,142	44,610	41,650	35,413
Return to management	\$105,819	(\$896)	\$64,473	\$37,926	\$24,608
Efficiency	,-	(, /	, - , ,	, ,-	,
Machine and power cost/crop acre	\$75	\$76	\$87	\$73	\$75
Interest expense ratio	0.04	0.10	0.05	0.08	0.07
Livestock increase/\$100 feed fed	180	149	188	200	160
Value of farm production per person	\$357,078	\$280,223	\$369,929	\$166,530	\$315,188
Value of farm production per person Value of farm prod. per \$1 expense	1.59	1.36	1.56	1.32	1.39
Return on assets	12.3 %	8.7 %	14.4 %	10.5 %	8.1 %
Return on equity	8.8 %	9.2 %	18.7 %	32.0 %	10.5 %
Asset turnover ratio	0.43	0.33	0.47	0.41	0.39
Debt to asset ratio	0.32	0.39	0.26	0.46	0.37
Current Ratio	2.31	1.85	2.83	1.42	2.10

 $<sup>^{1}</sup>$  Hog income was 80% of 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>&</sup>lt;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>&</sup>lt;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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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jack M. Payne, director, Cooperative Extension Service, Iowa State Univer-

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