

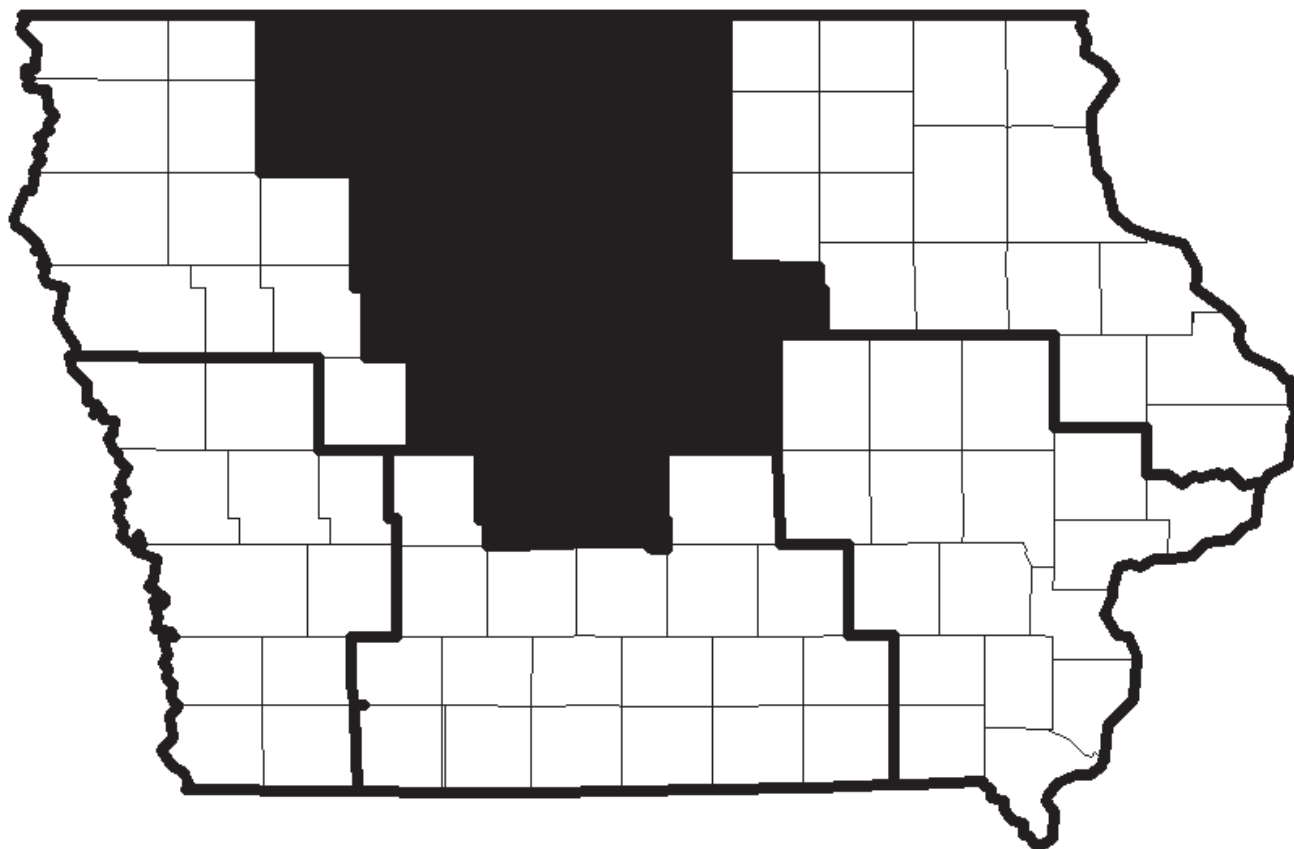
# 2007 Farm Business Summary

*Ag Decision Maker*

File CI-13

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## North Central Iowa



Production • Costs • Returns

## Explanation of Data

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The farm record data used 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 \$100,000 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.

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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.

## 2007 Farm Business Summary for North Central Iowa

**Table 1. Comparison by years**

	2007*	2006	2005	2004	2003	2002
<b>Financial Returns</b>						
Net farm income - accrual	\$158,901	\$83,499	\$57,254	\$52,805	\$48,799	\$42,605
Return to management	80,963	34,389	6,111	1,836	(2,844)	(4,503)
Net farm income - cash	103,224	56,192	58,428	54,453	60,607	43,900
<b>Resources Used</b>						
Acres per farm	725	496	589	665	672	649
Labor months	14	11	11	12	13	13
Livestock, feed, supplies	\$442,598	\$218,359	\$207,639	\$209,520	\$220,312	\$190,030
Machinery and equipment	202,403	127,100	127,700	127,310	137,266	118,791
Land and improvements	740,804	389,175	448,905	421,615	463,990	421,280
Total assets	1,385,805	751,672	784,245	758,445	821,567	730,101
<b>Sources of Income</b>						
Livestock income less feed	\$23,748	\$22,819	\$28,029	\$34,987	\$32,834	\$16,770
Crop production	392,259	210,585	175,337	171,559	177,251	161,950
Miscellaneous	31,523	19,338	21,737	18,930	16,537	9,089
Crop inventory gain or loss	1,268	7,803	11,090	10,734	1,440	8,341
Value of farm production	448,798	260,546	236,193	236,210	228,062	196,149
Capital gain or loss	1,952	1,322	2,203	1,774	847	1,509
<b>Expenses</b>						
Operating	\$164,251	\$101,091	\$104,917	\$104,671	\$99,082	\$83,102
Fixed	127,597	77,278	76,225	80,508	81,028	71,951
<b>Efficiency</b>						
Corn yield (bu. per acre)	172	169	184	187	157	162
Crop value per acre	\$583	\$465	\$369	\$330	\$329	\$312
Machinery cost per crop acre	87	94	76	68	64	62
Livestock returns per \$100 feed fed	154	184	208	161	196	138
Value of farm production per person	452,231	302,249	264,142	257,417	215,930	186,529
Value of farm prod. per \$1 expense	\$1.61	\$1.59	\$1.39	\$1.29	\$1.29	\$1.32
Asset turnover ratio	0.48	0.52	0.43	0.47	0.38	0.39
Average sale price for corn	\$3.68	\$3.15	\$1.59	\$1.67	\$2.17	\$2.15
% return to owned assets	16.0%	13.3%	7.2%	6.6%	5.1%	5.1%
Interest expense ratio	0.05	0.04	0.04	0.04	0.06	0.07
Debt to asset ratio	0.22	0.19	0.24	0.28	0.30	0.30

\* Due to changes in weighting procedures, 2007 is not directly comparable with previous years. Farms with a value of farm production less than \$100,000 are not included after 2006, due to low numbers.

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

	Average	Total Value of Ag Production		
		\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 and above
<b>Farm Assets</b>				
Feeding livestock	\$52,934	\$5,867	\$19,014	\$133,479
Corn	193,285	80,370	167,139	329,944
Soybeans	101,586	40,036	86,648	176,780
Other feed	6,163	2,163	3,817	12,459
Supplies, prepaid expenses	71,188	36,612	46,872	129,740
Total short term assets	\$425,156	\$165,049	\$323,490	\$782,404
Breeding livestock	17,442	3,618	9,197	39,341
Machinery, equipment	202,403	91,385	175,540	337,949
Total intermediate assets	\$219,845	\$95,003	\$184,737	\$377,289
Land and improvements	740,804	415,465	676,564	1,123,187
Total assets	\$1,385,805	\$675,517	\$1,184,790	\$2,282,880
<b>Farm Liabilities</b>				
Operating notes, accounts payable	97,203	24,203	63,874	202,378
Intermediate and long term due	4,459	900	840	11,629
FSA Marketing Loans	9,228	4,288	7,688	15,611
Total short term debt	\$110,890	\$29,392	\$72,402	\$229,618
Intermediate term debts	40,653	19,859	27,186	74,683
Long term debts	124,674	49,796	86,737	236,398
Total liabilities	\$276,218	\$99,046	\$186,326	\$540,700
<b>Farm Net Worth</b>				
Net worth change from last year	\$147,165	\$64,694	\$115,320	\$260,037
Working capital	\$314,266	\$135,657	\$251,087	\$552,785
Current asset/debt ratio	4.49	5.62	4.47	3.41
Total debt/asset ratio	0.22	0.19	0.20	0.27
Total acres farmed	725	362	633	1,172
Months of labor used	13.8	8.9	12.5	19.8

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

	Average	Total Value of Ag Production		
		\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 and above
Machinery and equip. repairs	\$16,882	\$7,914	\$15,442	\$27,084
Fuel and oil	16,120	7,620	12,748	27,845
Machine hire	6,671	3,551	5,113	11,304
Auto and truck expense	4,493	3,004	4,616	5,815
Utilities	5,502	3,017	4,648	8,794
Labor hired	9,252	856	4,441	22,349
Livestock expense	9,982	895	4,351	24,591
Crop expense	99,596	42,811	80,810	174,097
Miscellaneous	5,339	2,259	5,109	8,572
Total Cash Operating Expense	\$173,836	\$71,927	\$137,278	\$310,451
Cash rent	\$54,981	\$20,055	\$40,295	\$104,010
Property taxes	4,993	2,477	4,539	7,908
Insurance	14,366	6,220	11,605	25,121
Building repairs	4,877	1,741	4,165	8,657
Depreciation	29,618	12,170	24,914	51,415
Interest	23,092	8,087	18,004	42,905
Total Fixed Expense	\$131,927	\$50,749	\$103,521	\$240,017

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

	Average	Total Value of Ag Production		
		\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 and above
Livestock sales	\$150,194	\$20,805	\$57,408	\$371,144
Crop sales	292,334	127,987	253,834	491,694
Crop insurance payments	1,116	1,536	336	1,505
Government payments	16,099	6,838	14,658	26,585
Other cash income	18,564	9,112	15,423	30,979
Total Cash Income	\$478,306	\$166,278	\$341,660	\$921,908
Cash operating expenses	\$173,836	\$71,927	\$137,278	\$310,451
Cash fixed expenses	102,309	38,579	78,607	188,601
Feed purchased	41,928	4,743	11,110	109,681
Livestock purchased	57,009	4,667	15,323	150,642
Total Cash Expenses	\$375,083	\$119,917	\$242,318	\$759,377
Cash Net Farm Income	\$103,224	\$46,361	\$99,342	\$162,531
+ Sales of machinery & improvements	2,640	2,107	2,553	3,248
- Purchases of machinery and improv.	59,140	22,624	50,883	103,131
+ Loans received minus loans paid	20,220	6,590	6,822	47,206
Net Farm Cash Flow	\$66,943	\$32,435	\$57,834	\$109,855
+Nonfarm income	\$23,914	\$30,492	\$23,957	\$17,469
-Family living expenses	38,674	31,191	37,026	47,645
Net Cash Available	\$43,057	\$28,771	\$43,964	\$56,029

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

	Total Value of Ag Production			
	Average	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 and above
Value of livestock production	\$73,074	\$14,927	\$41,141	\$162,365
Feed fed	49,325	9,396	22,075	116,094
Livestock production less feed	23,748	5,531	19,066	46,271
Value of crop production	392,259	170,839	346,889	654,193
Miscellaneous income	31,523	13,485	23,137	57,666
Crop inventory gain or loss	1,268	(434)	(6,247)	10,621
<b>Value of Farm Production</b>	<b>\$448,798</b>	<b>\$189,421</b>	<b>\$382,845</b>	<b>\$768,751</b>
Operating expenses	\$164,251	\$71,927	\$137,278	\$281,721
Fixed expenses	127,597	50,749	103,521	227,039
Accrual net farm income from oper.	156,950	66,745	142,047	259,991
Capital gain or loss	1,952	986	2,270	2,565
<b>Accrual Net Farm Income</b>	<b>\$158,901</b>	<b>\$67,731</b>	<b>\$144,317</b>	<b>\$262,556</b>
Operator and family labor charge	\$18,646	\$14,056	\$19,986	\$21,741
Charge for equity capital	59,292	32,248	55,934	89,049
<b>Return to Management</b>	<b>\$80,963</b>	<b>\$21,427</b>	<b>\$68,398</b>	<b>\$151,766</b>

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

	Total Value of Ag Production			
	Average	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 and above
<b>Crops</b>				
Acres in crops	666	324	591	1,075
Crop value per acre	\$583	\$544	\$593	\$610
Crop acres per person	684	578	594	878
Machinery cost per crop acre	\$87	\$101	\$81	\$79
Machinery investment per crop acre	\$247	\$216	\$250	\$273
<b>Livestock</b>				
Livestock returns/\$100 feed fed	\$154	\$158	\$154	\$149
<b>Financial</b>				
Value of farm production per person	\$452,231	\$355,053	\$383,257	\$617,447
Value of farm prod. per \$1 expense	\$1.61	\$1.61	\$1.65	\$1.57
Asset turnover ratio	0.48	0.47	0.46	0.50
% return to owned assets	16.0%	14.2%	16.4%	17.2%
% return to equity	20.3%	17.2%	20.5%	23.2%
Operating profit margin ratio	0.35	0.32	0.37	0.36
Interest expense ratio	0.05	0.04	0.05	0.06
Operating expense ratio	0.53	0.54	0.51	0.54
Depreciation expense ratio	0.06	0.06	0.07	0.06
Net farm income ratio	0.36	0.35	0.38	0.34
Median interest rate on debt	7.6%	8.5%	8.4%	5.9%

**Table 7. Crop Production**

	All Corn	Soybeans	Hay	Small Grain
Acres, operator share	389	269	37	51
Yield, bushels or tons per acre	172	52	3.6	-
Crop value per bushel or ton	\$3.77	\$9.80	\$92.42	-
Crop value per acre	\$634	\$513	\$335	-
<b>Crop Expenses</b>				
Seed	\$55.63	\$31.81	\$10.66	\$42.34
Fertilizer and Lime	83.42	7.47	36.03	-
Herbicide	23.28	18.86	2.34	7.25
Insecticide	2.33	5.57	1.79	5.61
Drying and storage	9.41	2.38	0.13	-
Machinery, fuel, repairs, machine hire	54.59	60.37	60.06	-
Utilities	6.91	6.35	6.04	1.26
Insurance	18.79	20.24	15.27	-
Hired labor	6.18	6.89	12.17	4.20
Interest	28.81	29.25	27.28	14.80
Cash rent	74.44	75.74	65.33	47.47
Property tax	7.29	8.27	4.65	2.40
Building repair	4.69	5.21	2.97	0.46
Other crop expenses	10.40	9.94	8.30	6.61
Total cash crop expenses	\$386.18	\$288.32	\$253.01	\$168.18
Machinery depreciation	\$29.38	\$29.92	\$31.37	-
Building depreciation	7.73	9.99	9.29	-
Charge for equity capital	90.90	88.26	33.39	-
Unpaid labor value	30.82	32.99	29.11	-
Total economic cost per acre	\$545.01	\$449.49	\$356.18	\$168.18
Total economic cost per bu. or ton	\$3.17	\$8.60	\$98.24	-
Principal payments	\$14.58	\$13.89	\$8.66	-
Family living expenses	\$57.21	\$60.63	\$37.13	-
Total cash flow needed per acre	\$457.97	\$362.84	\$298.80	\$168.18
Total cash flow needed per bu. or ton	\$2.66	\$6.94	\$82.42	-

**Table 8. Livestock Production**

	Swine	Beef	Dairy	Sheep
Percent of farms with enterprise	10%	9%	1%	1%
Number of hundred weight produced	4,198	1,712	39,563	89
Average number of breeding units	568	48	335	91
Average weaning rate	8.13	0.88	0.98	1.54
Lbs. of feed per lb. of production	4.53	12.85	2.53	12.42
Feed cost per cwt. of production	\$27.52	\$52.46	\$8.65	\$50.73
Livestock production per \$100 feed fed	\$142.08	\$136.60	\$250.75	\$206.46
Average value produced per cwt.	\$41.76	\$76.39	\$18.61	\$100.39

**Table 9. Comparison of High and Low Profit Farms**

	High Third	Middle Third	Low Third	Your Farm
<b>Farm Income</b>				
Value of livestock production	\$208,182	\$45,023	\$103,628	
Feed fed	127,525	26,450	81,389	
Livestock production less feed	80,656	18,573	22,239	
Value of crop production	727,836	358,503	293,948	
Miscellaneous income	63,062	24,122	26,247	
Crop inventory gain or loss	14,565	100	(7,854)	
Value of Farm Production	\$886,119	\$401,298	\$334,580	
Operating expenses	\$303,440	\$143,554	\$151,713	
Fixed expenses	239,052	114,736	103,411	
Accrual net farm income from oper.	343,628	143,007	79,456	
Capital gain or loss	3,652	2,994	638	
Accrual Net Farm Income	\$347,279	\$146,001	\$80,094	
Operator and family labor charge	\$23,944	\$19,375	\$16,500	
Charge for equity capital	92,231	46,387	68,410	
Return to Management	\$231,104	\$80,238	(\$4,816)	
<b>Crops</b>				
Acres in crops	1,153	622	517	
Crop value per acre	\$630	\$585	\$561	
Crop acres per person	866	637	614	
Corn yield, bu. per acre	180	171	169	
Average price received for corn	\$3.71	\$3.65	\$3.68	
Total economic cost per bu. for corn	\$2.88	\$2.96	\$3.59	
Machinery cost per crop acre	\$74	\$79	\$93	
Machinery investment per crop acre	\$249	\$237	\$265	
<b>Livestock</b>				
Livestock returns/\$100 feed fed	\$160	\$154	\$139	
<b>Value of farm product - Sources (%)</b>				
Crops	86%	89%	90%	
Livestock	6%	6%	5%	
Miscellaneous income	7%	6%	8%	
Crop inventory gain or loss	2%	-1%	-3%	
<b>Financial</b>				
Value of farm production per person	\$633,000	\$418,110	\$377,877	
Value of farm prod. per \$1 expense	\$1.73	\$1.66	\$1.45	
Asset turnover ratio	0.57	0.47	0.47	
% return to owned assets	22.3%	17.0%	10.7%	
% return to equity	29.9%	23.9%	9.9%	
Operating profit margin ratio	0.42	0.38	0.27	
Interest expense ratio	0.04	0.05	0.06	
Operating expense ratio	0.50	0.51	0.60	
Depreciation expense ratio	0.05	0.06	0.08	
Net farm income ratio	0.41	0.38	0.26	
Debt to asset ratio	0.25	0.25	0.16	
Median interest rate on debt	7.1%	7.1%	7.2%	



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## Other farm record files

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FM 1789 / AgDM C1-10 - 2007 Iowa Cost and Returns

FM 1781 / AgDM C1-11 - 2007 Farm Business Summary - Northwest Iowa

FM 1782 / AgDM C1-12 - 2007 Farm Business Summary - Southwest Iowa

FM 1785 / AgDM C1-14 - 2007 Farm Business Summary - South Central Iowa

FM 1786 / AgDM C1-15 - 2007 Farm Business Summary - Northeast Iowa

FM 1788 / AgDM C1-16 - 2007 Farm Business Summary - Southeast Iowa

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### **. . . and justice for all**

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Prepared by Darnell Smith, extension associate  
(515) 294-8122, [darnell@iastate.edu](mailto:darnell@iastate.edu) and  
William Edwards, extension economist  
(515) 294-6161, [wedwards@iastate.edu](mailto:wedwards@iastate.edu)

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