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SOUTHWESTERN MINNESOTA  
FARM BUSINESS MANAGEMENT ASSOCIATION

# 2011

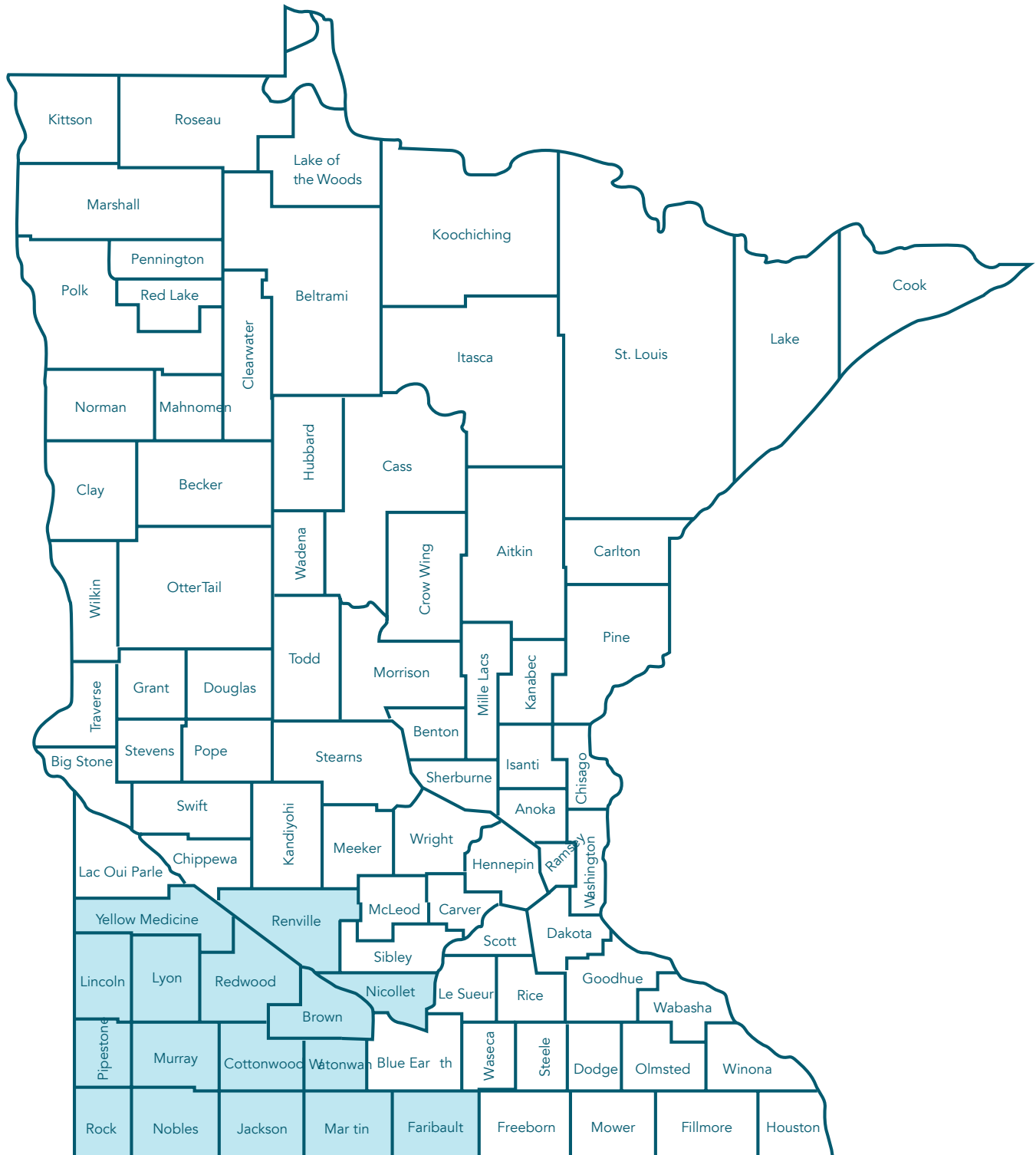
## ANNUAL REPORT



Staff Paper P12-2  
Department of Applied Economics  
University of Minnesota  
Saint Paul, MN 55108  
March 2012

In Cooperation with:  
Center for Farm Financial Management · Department of Applied Economics · University of Minnesota Extension  
College of Food, Agricultural and Natural Resource Sciences · University of Minnesota

# SOUTHWEST MINNESOTA FARM BUSINESS MANAGE ASSOCIATION

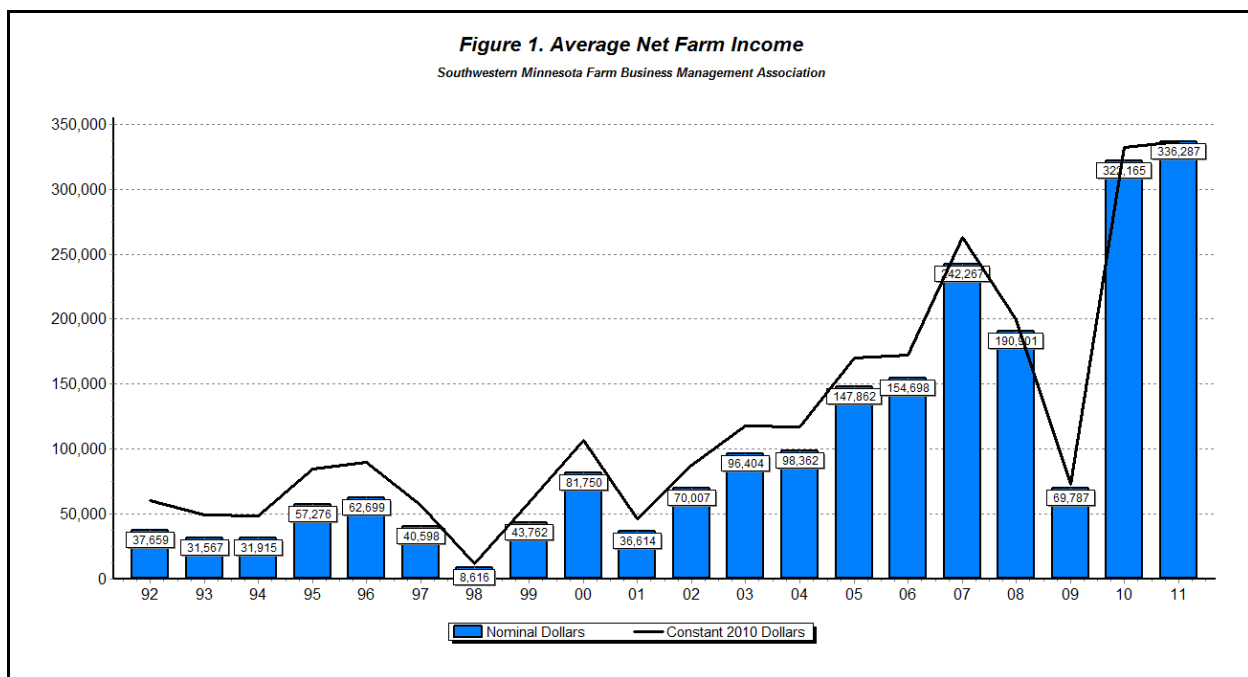


## *Executive Summary*

# **2011 Annual Report of the Southwestern Minnesota Farm Business Management Association**

by Dale W. Nordquist, Donald L. Nitchie, James N. Kurtz,  
Garen J. Paulson, Janet M. Froslan and John L. Woodford

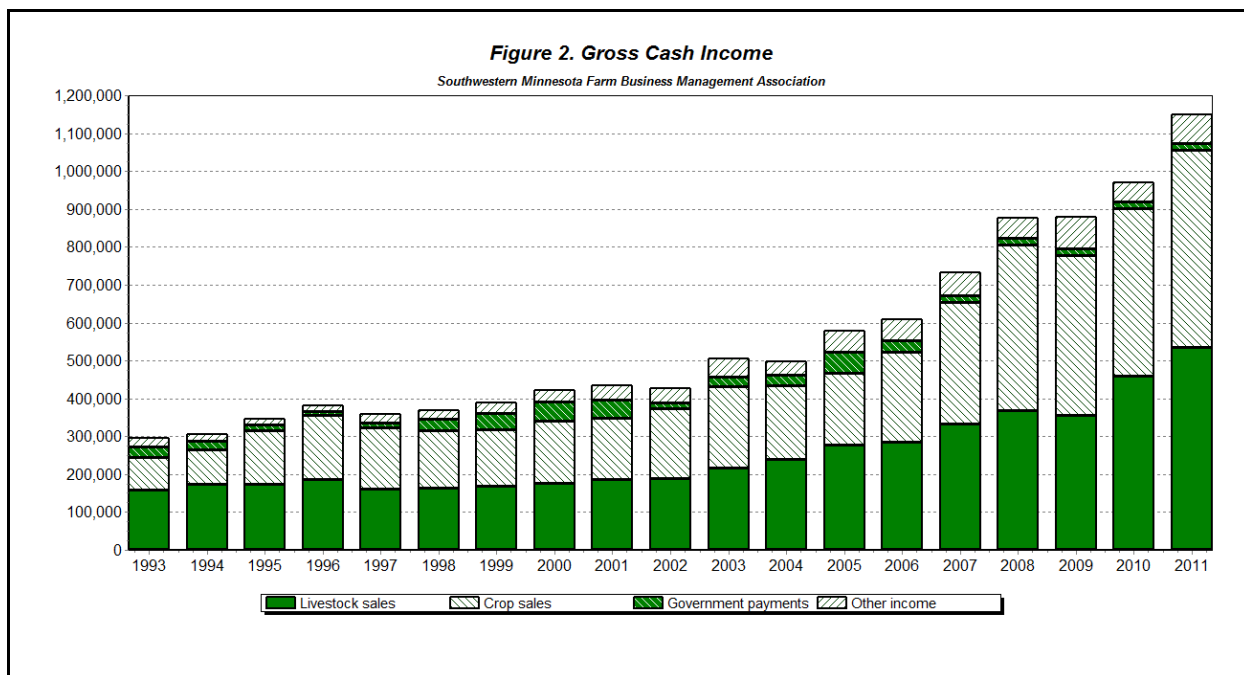
Average net farm income was \$336,287 in 2011 for the 107 farms included in this annual report of the Southwestern Minnesota Farm Business Management Association. Inflation adjusted profits were virtually unchanged from the very strong earnings reported in 2010. Strong prices for corn, soybeans, and hogs offset lower corn and soybean yields and increasing costs of production. Profits for livestock farms continued to recover from 2009 lows.



Highlights of association financial results for 2011:

- Median net farm income, or the income earned by the middle farm, was \$241,009, substantially lower than the average (\$336,287). This indicates that the average is skewed by high profits of the most profitable farms. This is consistent with most recent years with the exception of 2009, when large losses suffered by large livestock farms reversed this relationship.
- As is the case every year, incomes varied widely across the entire group. The average net farm income for the most profitable 20% of the farms was \$878,976 while the least profitable 20% earned \$53,107.
- Average gross cash income was up 19% from 2010 while cash expenses increased by 15%.

Entire report is available at: [http://www.cffm.umn.edu/Publications/Pubs/FBMA/SW\\_MN\\_FBMA\\_2011.pdf](http://www.cffm.umn.edu/Publications/Pubs/FBMA/SW_MN_FBMA_2011.pdf)



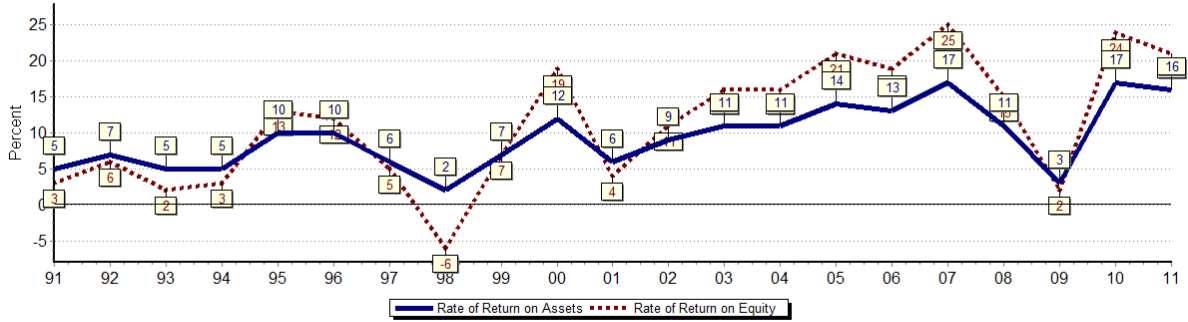
- Crop sales accounted for 45% of gross income while livestock sales were 46% (Figure 2). These percentages were virtually unchanged from 2010.
- Increased conservation payments resulted in a slight rise in total government payments received by association farms. Government payments accounted for 2% of gross cash farm income and 5% of net farm income.
- Rates of return were very strong, though slightly lower than earned in 2010. Average rate of return on assets (ROA) was 16% (assets valued at adjusted cost or book value), down from 17% in 2010 (Figure 3). Rate of return on equity (ROE) averaged 21%, down from 24% in 2010.
- The average farm reported net worth growth of \$318,987. Net worth growth from earnings (farm and non-farm) averaged \$279,595. The remainder resulted from changes in asset values.
- The debt-to-asset ratio of the average farm decreased from 38% to 36% (Figure 4).

## Crops

- Corn yields averaged 173 bushels per acre, slightly higher than the average of the past 10 years but down 11 bushels per acre from 2010. Soybeans yields averaged 46 bushels, one bushel per acre lower than the ten year association average and down from 51 in 2010 (Figure 5).
- Corn and soybean prices were very strong compared to historical averages. The average price received for corn was \$5.29 per bushel compared to \$3.67 in 2010. Soybeans average \$11.58 per bushel, up from \$9.72.
- The cost to raise an acre of corn (with land rent) increased by 16% while soybean costs increased by 13%. The cost to produce a bushel of corn increased from \$3.12 per bushel in 2010 to \$3.74 in 2011. Soybean costs per bushel increased from \$8.17 to \$9.86 per bushel. These costs include a charge for unpaid labor and management, but do not include a charge for equity capital.

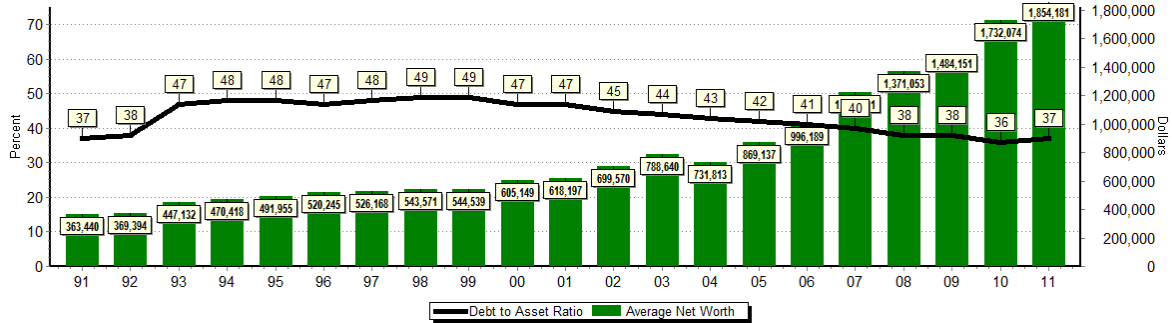
**Figure 3: Rates of Return on Assets (ROA) and Equity (ROE)**

Southwest Minnesota Farm Business Management Association

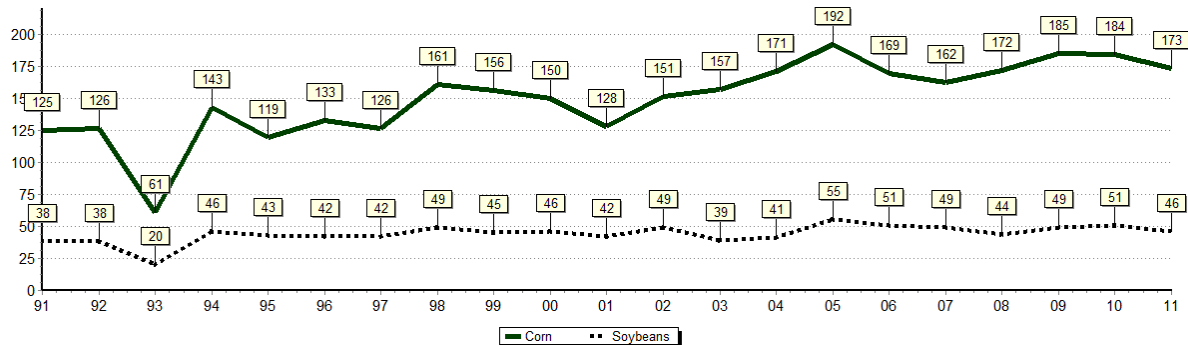


**Figure 4: Ending Equity and Ending Debt to Asset Ratio**

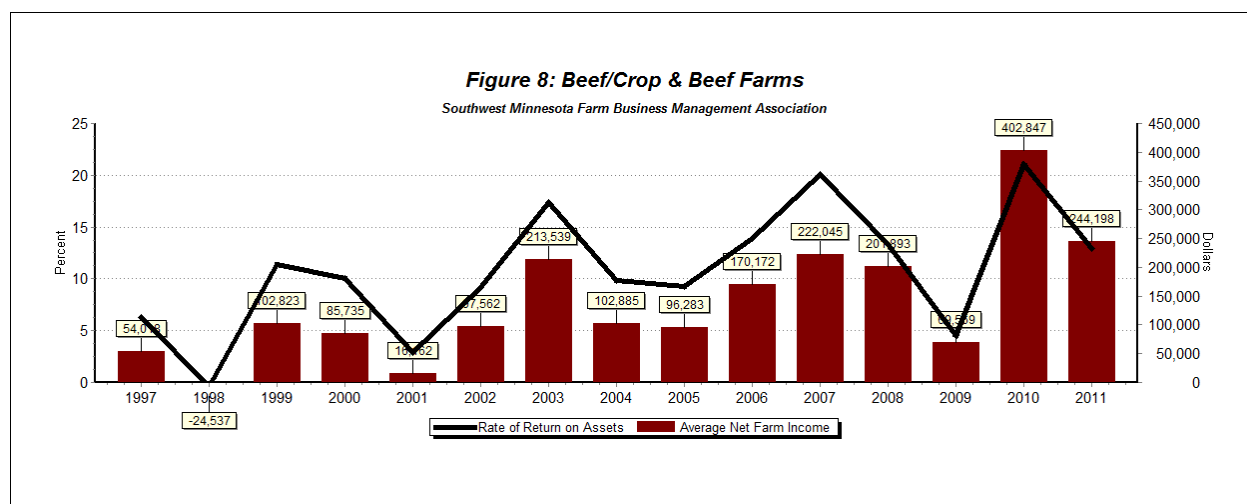
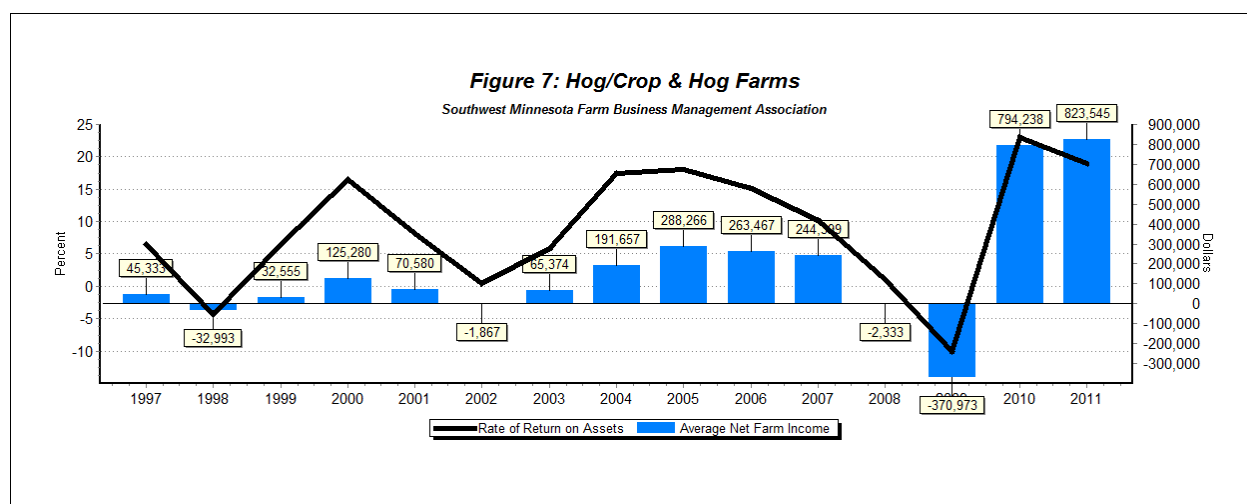
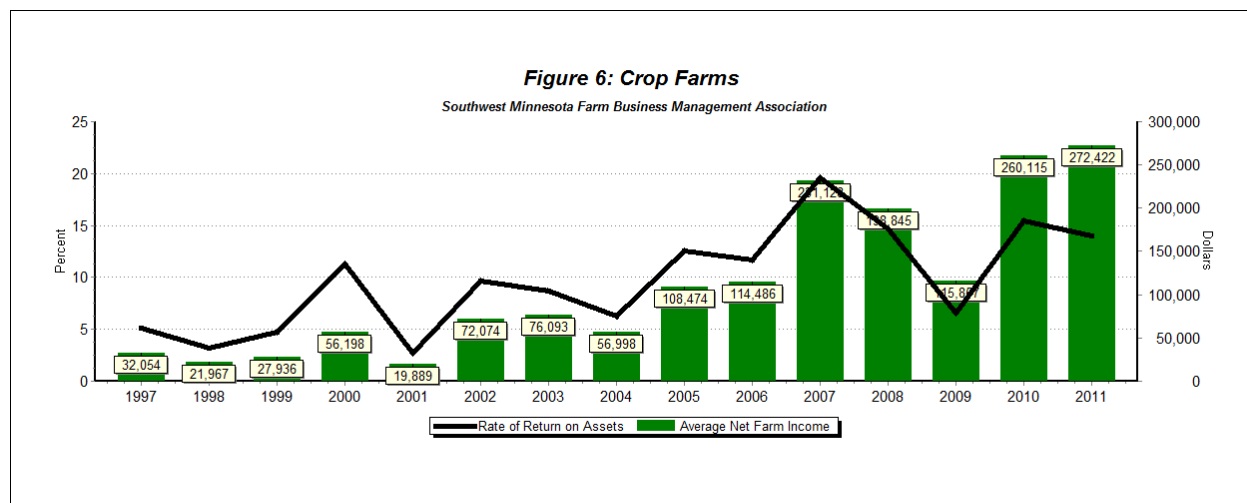
Southwest Minnesota Farm Business Management Association



**Figure 5: Average Corn and Soybean Yields**







## **Type of Farm**

- Crop farms were again very profitable, with an average net farm income of \$272,422 and an average ROA of 14.0 % (Figure 6). Sharp increases in corn and soybean prices more than offset decreased crop yields caused by a lack of late season rainfall.
- For a second consecutive year, hog farms were very profitable after losses in the two preceding years. Specialized hog farms and hog/crop farms (those farms with over 70% of gross income from sale of hogs or a combination of hogs and crops) earned an average net farm income of \$823,545 and an ROA of 19% (Figure 7).
- Beef farms were also profitable although their earnings were down substantially from 2010. Specialized beef farms and beef/crop farms (those farms with over 70% of gross income from sales of beef or a combination of beef and crops) earned an average net farm income of \$244,198, down from \$402,847 in 2010 (Figure 8).

## **Size of Farm**

- Profits generally increased with farm size. When sorted by gross farm income, the largest farms, those with sales over \$1,000,000, were most profitable with rates of return on assets of 18%.
- The smaller farms were profitable but not as profitable. The smallest group, with sales of \$100,000 to \$250,000 earned an ROA of 9%.

The report provides additional information on whole farm financial performance as well detailed information on crop and livestock enterprise profitability. The report also includes whole-farm financial condition and performance by business size, type of farm, debt-to-asset ratio, and age of operator.





# **2011 Annual Report**

## **Southwestern Minnesota Farm Business Management Association**

by

by Dale W. Nordquist, Donald L. Nitchie, James N. Kurtz,  
Garen J. Paulson, Janet M. Froslan and John L. Woodford <sup>1</sup>

This report summarizes the individual farm records of the members of the Southwestern Minnesota Farm Business Management Association for 2011.

Whole-farm information and enterprise costs and returns are reported. The year-end analysis of the individual farms was performed by the Association fieldmen using the FINPACK software from the Center for Farm Financial Management. The individual analyses were summarized at the Department of Applied Economics using RankEm Central. In addition to the average of all farms, the averages for the high and low income groups are also presented. The tables are divided into four major groups: whole-farm information, crop enterprises, livestock enterprises, and summary information. The summary information includes whole farm historical trends and information by county, farm size, type of farm, debt to asset ratio, and operator age.

Of the 114 farms in the Southwestern Association, the data for 107 farms are included in this report. The rest were omitted because the records were incomplete at the time that this report was prepared. In addition to this report, members receive an annual farm business analysis; on-farm instructional visits; end-of-year income tax planning and preparation; periodic meetings, tours, and seminars; a monthly newsletter; and other managerial and educational assistance. Each farmer pays an annual fee which covers the majority of the cost, with the balance defrayed by University of Minnesota Extension and research programs of the University of Minnesota.

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<sup>1</sup>Nordquist is Extension Economist–Center For Farm Financial Management (CFFM), University of Minnesota, Twin Cities; Nitchie is Regional Extension Educator--Farm Management and Fieldmen for the Association; Kurtz, Paulson, Froslan and Woodford are financial analysts for the Association;

Special thanks to Rann Loppnow, Software Development, CFFM; Eliza Herman, Program Associate, CFFM; and Barb Lenning, Southwest Research and Outreach Center.

## **Southwestern Minnesota Farm Business Management Association**

### **Distribution of Membership -- 2011**

County	Number of Farm Units	Number of Records Submitted
Cottonwood	14	12
Jackson	18	17
Martin	4	3
Murray	18	16
Nobles	21	17
Pipestone	10	12
Redwood	6	6
Rock	5	6
Watonwan	7	7
Others <sup>2</sup>	<u>11</u>	<u>11</u>
TOTAL	114	107

#### **Officers and Directors**

Mike Sandager, President

Randy Peter, Vice President

Kerry Tutt, Secretary-Treasurer

The directors of the Southwestern Minnesota Farm Business Management Association for 2011/2012 are: Chad Diemer, Robert Hartman, Charles Leuthold, Brian Ling and Matt Wolle.

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<sup>2</sup>Records were also submitted from members in Faribault, Lac Qui Parle, Lyon, McLeod and Wabasha counties.

# Southwestern Minnesota Farm Business Management Association

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# Whole-Farm Reports

The whole-farm reports summarize the financial performance of member farms in 2011. Each table (except for the balance sheets) includes the average of the 107 farms included in the report and the average 20 percent of the farms with the lowest and highest profits (base on Net Farm Income). In a change from previous years, the balance sheet reports include all farms, including partnerships and corporations. Appendix I provides detail on how the whole-farm measures are calculated. Below is a short summary of the whole farm reports.

## Financial Summary

The Financial Summary report provides a summary of the key financial measures and ratios included on the other detailed whole farm reports.

## Financial Standards Measures

The Farm Financial Standards Council recommends that farms use these sixteen measures as standard measures of farm financial performance. They are sometimes called the *Sweet 16*. Many are repeated from the Profitability, Liquidity, and Balance Sheet tables. For a complete description, see the Financial Guidelines for Agricultural Producers at <http://www.ffsc.org/guidelines.htm>.

## Farm Income Statement

The Income Statement calculates the accrual Net Farm Income generated by the average farm for year 2011. Net Farm Income represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). It is the amount the farm contributed to owner family living, income taxes, and net worth growth. However, it does not include any asset appreciation, debt forgiveness or asset repossessions.

## Profitability Measures

The profitability measures are calculated based on both the cost value of assets and the market value. When calculated based on the market value of assets, the profitability measures can be compared to interest rates and returns available on alternative investments. When based on cost values, the returns more closely estimate the actual returns from the actual investment. (Cost values do not reflect the tax basis of farm assets. Instead, a method of calculating depreciation is used that estimates economic depreciation over the useful life of the assets.)

The *Rate of Return on Assets* (ROA) can be thought of as the interest rate earned by all investment in farm assets. *Rate of Return on Equity* (ROE) is the rate earned on the operator's equity or net worth in the farm business. If ROE is higher than ROA, borrowed funds more than paid for their cost in interest expense. *Operating Profit Margin* measures efficiency in farm operations. The higher the margin, the more of the farm income remained in pockets of the farm operator. *Asset Turnover Rate* measures efficiency in use of capital. Again, the higher the better. Farms with high investment in fixed assets will generally have a lower turnover rate than those who lease a major share of their capital.

## **Liquidity and Repayment Capacity Measures**

Liquidity reflects the ability of the farm to meet its financial obligations on time. *Current Ratio* is current farm assets divided by current farm liabilities. *Working Capital* is current farm assets minus current farm liabilities. Businesses with more working capital are generally in a better position to overcome short-term financial downturns or production problems. *Working Capital to Gross Income* measures liquidity relative to business size.

Repayment capacity measures the ability of the business to meet debt payments and replace capital assets. *Term Debt Coverage Ratio* measures the ability of the business to meet its scheduled debt payments. A term debt coverage ratio greater than 1.0 indicates that the business produced more than enough earnings to meet its scheduled debt payments. *Replacement Coverage Ratio* adds the need for capital replacement. A replacement coverage ratio greater than 1.0 indicates that the business produced more than enough earnings to meet its payments and replace its depreciable assets.

## **Balance Sheets**

Balance sheet reports are included for both the cost and market value of assets. Current assets are identical in both tables, with crop and livestock inventories generally valued at market value. This conforms to the methodology recommended by the Farm Financial Standards Council. Intermediate and long term assets are shown at depreciated value using estimated economic depreciation, not tax, on the cost-based table. On the market table, they are valued at estimated market value.

Liabilities are the same on the cost and market tables except for the inclusion of *Deferred Liabilities* on the market statements. Deferred liabilities are the estimated taxes that would be paid if assets were liquidated at their market values.

*Net Worth Change* on the cost value table is the amount of earned net worth growth or loss for the year. Net worth change on the market value table includes both earned growth and changes in the market valuation of capital assets.

## **Statement of Cash Flows**

The Statement of Cash Flows displays the sources and uses of cash for the year. *Cash From Operating Activities* includes sources and uses of cash related to normal farm operations. *Cash From Investing Activities* reflect cash used to buy and sell capital assets. *Cash From Financing Activities* includes sources and uses of borrowed funds as well as cash from nonfarm activities.

## **Crop Production and Marketing**

This table reports farm size in acres farmed, average crop yields for major commodities, and average crop sales prices for the calendar year. Yields and prices are reported for the average of all farms for more commodities than those included in the High and Low columns because a minimum of five farms are required to report the yield or price for any group.



### **Household and Personal Expenses**

This table reports family living and other non-farm expenditures. Only sole proprietors who keep detailed family living records are included.

### **Operator and Labor Information**

All previous tables report results per farm, regardless of the number of families or operators involved in the operation. This report repeats several measures from previous tables on a *Per Operator* basis. It also summarizes estimated labor hours used and labor performance.

### **Nonfarm Summary**

This table summarizes nonfarm earnings for the average farm and details nonfarm assets and liabilities.

**Financial Summary**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	107	21	22
<b>Income Statement</b>			
Gross cash farm income	1,150,686	305,546	3,422,353
Total cash farm expense	898,752	221,542	2,873,067
Net cash farm income	251,934	84,004	549,286
Inventory change	136,582	-5,752	438,051
Depreciation	-55,244	-25,248	-113,448
Net farm income from operations	333,272	53,004	873,890
Gain or loss on capital sales	3,015	103	5,086
Average net farm income	336,287	53,107	878,976
Median net farm income	241,009	56,166	582,170
<b>Profitability (cost)</b>			
Rate of return on assets	15.7 %	4.3 %	21.1 %
Rate of return on equity	21.3 %	4.2 %	28.8 %
Operating profit margin	34.6 %	12.5 %	39.2 %
Asset turnover rate	45.5 %	34.6 %	53.8 %
<b>Liquidity &amp; Repayment (end of year)</b>			
Current assets	950,626	291,192	2,251,448
Current liabilities	291,181	112,288	591,848
Current ratio	3.26	2.59	3.80
Working capital	659,446	178,904	1,659,600
Working capital to gross inc	52.4 %	61.6 %	43.6 %
Term debt coverage ratio	5.60	2.23	8.67
Replacement coverage ratio	3.93	1.33	6.09
<b>Solvency (end of year at market)</b>			
Number of farms	107	21	22
Total farm assets	2,825,658	1,227,519	5,138,445
Total farm liabilities	1,067,961	431,313	1,852,841
Total assets	3,109,470	1,421,426	5,337,443
Total liabilities	1,132,769	473,401	1,927,100
Net worth	1,976,701	948,025	3,410,343
Net worth change	318,987	51,328	707,490
Farm debt to asset ratio	38 %	35 %	36 %
Total debt to asset ratio	36 %	33 %	36 %
<b>Nonfarm Information</b>			
Net nonfarm income	35,042	34,248	22,198
Farms reporting living expenses	43	9	6
Total family living expense	73,704	69,392	54,525
Total living, invest, cap. purch	119,913	98,721	110,592
<b>Crop Acres</b>			
Total acres owned	232	148	294
Total crop acres	791	308	1,384
Total crop acres owned	202	96	263
Total crop acres cash rented	532	177	1,051
Total crop acres share rented	57	35	69

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**Financial Standards Measures**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	107	21	22
<b>Liquidity</b>			
Current ratio	3.26	2.59	3.80
Working capital	659,446	178,904	1,659,600
Working capital to gross inc	52.4 %	61.6 %	43.6 %
<b>Solvency (market)</b>			
Farm debt to asset ratio	38 %	35 %	36 %
Farm equity to asset ratio	62 %	65 %	64 %
Farm debt to equity ratio	0.61	0.54	0.56
<b>Profitability (cost)</b>			
Rate of return on farm assets	15.7 %	4.3 %	21.1 %
Rate of return on farm equity	21.3 %	4.2 %	28.8 %
Operating profit margin	34.6 %	12.5 %	39.2 %
Net farm income	336,287	53,107	878,976
EBIDTA	416,429	88,921	1,046,207
<b>Repayment Capacity</b>			
Capital debt repayment capacity	347,977	52,255	902,073
Capital debt repayment margin	285,869	28,780	797,979
Replacement margin	259,383	12,932	754,034
Term debt coverage ratio	5.60	2.23	8.67
Replacement coverage ratio	3.93	1.33	6.09
<b>Efficiency</b>			
Asset turnover rate (cost)	45.5 %	34.6 %	53.8 %
Operating expense ratio	66.9 %	69.4 %	72.5 %
Depreciation expense ratio	4.4 %	8.7 %	3.0 %
Interest expense ratio	2.3 %	3.6 %	1.6 %
Net farm income ratio	26.7 %	18.3 %	23.1 %

**Farm Income Statement**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	107	21	22
<b>Cash Farm Income</b>			
Barley	307	610	-
Beans, Navy	407	-	-
Corn	316,059	115,122	554,197
Corn Silage	1,390	-	-
Hay, Alfalfa	31,602	724	145,574
Hay, Mixed	177	-	-
Oats	377	-	658
Peas, Processing	646	932	2,250
Soybeans	172,884	69,319	269,433
Sugar Beets	1,021	-	-
Sweet Corn, Processing	1,107	-	1,739
Wheat, Spring	385	733	272
Wheat, Winter	61	310	-
Miscellaneous crop income	11,446	381	54,013
Beef Cow-Calf, Beef Calves	1,776	4,098	1,231
Beef Backgrounding	494	-	2,403
Beef Finishing	39,269	33,823	46,263
Dairy, Milk	76,250	13,192	341,596
Dairy, Dairy Calves	1,906	449	8,843
Dairy Replacement Heifers	3,526	1,141	-
Dairy Finishing	4,491	6,543	-
Hogs, Farrow To Finish, Raised Ho	19,443	3,717	72,723
Hogs, Finish Feeder Pigs	7,925	-	-
Sheep, Market Lamb Prod, Mkt Lamb	2,946	-	60
Hogs, Weaning to Finish	355,944	-	1,731,182
Cull breeding livestock	4,881	1,414	17,588
Misc. livestock income	180	239	-
Direct, CCP & ACRE pymts	11,482	4,962	18,223
CRP payments	590	392	305
Other government payments	5,765	1,841	9,371
Custom work income	35,130	10,853	106,450
Patronage dividends, cash	6,180	3,467	9,097
Insurance income	7,241	7,442	5,281
Sale of resale items	182	925	-
Contract livestock income	14,760	10,220	906
Other farm income	12,459	12,700	22,696
Gross Cash Farm Income	1,150,686	305,546	3,422,353

**Farm Income Statement (Continued)**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low20%</u>	<u>High 20%</u>
Number of farms	107	21	22
<b>Cash Farm Expense</b>			
Seed	65,229	26,926	106,384
Fertilizer	68,251	28,275	103,313
Crop chemicals	22,096	8,519	28,057
Crop insurance	13,731	6,208	21,680
Drying expense	1,206	491	1,393
Storage	205	101	189
Crop miscellaneous	2,056	449	4,909
Feeder livestock purchase	101,379	18,006	414,507
Purchased feed	283,774	14,326	1,309,811
Breeding fees	1,310	269	5,096
Veterinary	9,267	989	40,793
Supplies	5,833	1,778	23,306
DHIA	32	156	6
Contract production exp.	8,846	2,481	37,731
Livestock leases	672	-	3,271
Interest	28,447	10,518	59,672
CCC buyback	3,626	3,111	-
Fuel & oil	34,004	14,319	75,881
Repairs	39,551	19,121	79,169
Custom hire	11,279	3,036	28,147
Hired labor	33,803	5,304	127,232
Land rent	97,842	37,655	207,658
Machinery leases	7,607	434	23,590
Building leases	19,014	-	88,088
Real estate taxes	5,190	2,716	7,424
Farm insurance	9,366	4,700	22,205
Utilities	9,099	4,248	19,627
Hauling and trucking	2,612	1,086	8,065
Marketing	2,704	831	9,471
Dues & professional fees	2,364	1,709	2,804
Purchase of resale items	1,804	-	-
Miscellaneous	6,555	3,781	13,588
Total cash expense	898,752	221,542	2,873,067
Net cash farm income	251,934	84,004	549,286
<b>Inventory Changes</b>			
Prepays and supplies	26,992	9,900	50,928
Accounts receivable	7,253	172	27,372
Hedging accounts	15,345	-2,029	80,986
Other current assets	-854	-320	-3,848
Crops and feed	69,193	-14,241	204,215
Market livestock	16,725	2,475	76,564
Breeding livestock	1,395	-828	8,203
Other assets	-1,592	-552	-12,912
Accounts payable	1,592	-179	5,741
Accrued interest	534	-151	803
Total inventory change	136,582	-5,752	438,051
Net operating profit	388,516	78,252	987,338
<b>Depreciation</b>			
Machinery and equipment	-40,211	-18,971	-81,773
Titled vehicles	-2,917	-1,108	-6,324
Buildings and improvements	-12,116	-5,169	-25,350
Total depreciation	-55,244	-25,248	-113,448
Net farm income from operations	333,272	53,004	873,890
Gain or loss on capital sales	3,015	103	5,086
Net farm income	336,287	53,107	878,976

**Profitability Measures**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	107	21	22
<b>Profitability (assets valued at cost)</b>			
Net farm income from operations	333,272	53,004	873,890
Rate of return on assets	15.7 %	4.3 %	21.1 %
Rate of return on equity	21.3 %	4.2 %	28.8 %
Operating profit margin	34.6 %	12.5 %	39.2 %
Asset turnover rate	45.5 %	34.6 %	53.8 %
Farm interest expense	27,914	10,669	58,869
Value of operator lbr and mgmt.	59,927	31,279	117,858
Return on farm assets	301,259	32,394	814,901
Average farm assets	1,914,089	745,953	3,864,006
Return on farm equity	273,345	21,725	756,032
Average farm equity	1,281,200	512,141	2,622,142
Value of farm production	871,265	258,141	2,078,726
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	107	21	22
<b>Profitability (assets valued at market)</b>			
Net farm income from operations	370,181	77,070	845,362
Rate of return on assets	12.9 %	4.7 %	16.5 %
Rate of return on equity	19.3 %	5.9 %	24.8 %
Operating profit margin	38.8 %	21.9 %	37.8 %
Asset turnover rate	33.2 %	21.7 %	43.6 %
Farm interest expense	27,914	10,669	58,869
Value of operator lbr and mgmt.	59,927	31,279	117,858
Return on farm assets	338,168	56,460	786,373
Average farm assets	2,623,636	1,190,340	4,767,155
Return on farm equity	310,254	45,791	727,503
Average farm equity	1,608,464	777,327	2,933,024
Value of farm production	871,265	258,141	2,078,726

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**Liquidity & Repayment Capacity Measures**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	107	21	22
<b>Liquidity</b>			
Current ratio	3.26	2.59	3.80
Working capital	659,446	178,904	1,659,600
Working capital to gross inc	52.4 %	61.6 %	43.6 %
Current assets	950,626	291,192	2,251,448
Current liabilities	291,181	112,288	591,848
Gross revenues (accrual)	1,258,222	290,472	3,803,045
<b>Repayment capacity</b>			
Net farm income from operations	333,272	53,004	873,890
Depreciation	55,244	25,248	113,448
Personal income	35,042	34,248	22,198
Family living/owner withdrawals	-75,300	-55,497	-119,641
Payments on personal debt	-2,494	-2,816	-465
Income taxes paid	-19,127	-8,197	-23,277
Interest on term debt	21,340	6,265	35,921
Capital debt repayment capacity	347,977	52,255	902,073
Scheduled term debt payments	-62,108	-23,475	-104,094
Capital debt repayment margin	285,869	28,780	797,979
Cash replacement allowance	-26,487	-15,848	-43,945
Replacement margin	259,383	12,932	754,034
Term debt coverage ratio	5.60	2.23	8.67
Replacement coverage ratio	3.93	1.33	6.09



**Balance Sheet at Cost Values**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	107		21		22	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
<b>Assets</b>						
Current Farm Assets						
Cash and checking balance	43,557	57,792	24,172	28,490	104,728	147,231
Prepaid expenses & supplies	88,507	115,499	35,874	45,774	153,801	204,728
Growing crops	77	6	249	0	139	27
Accounts receivable	23,515	30,768	1,987	2,159	64,953	92,325
Hedging accounts	8,698	22,736	490	95	36,653	100,840
Crops held for sale or feed	488,528	547,379	192,088	174,559	862,451	1,065,330
Crops under government loan	11,531	20,308	9,859	13,597	21,837	23,174
Market livestock held for sale	139,107	155,832	22,473	24,949	541,229	617,793
Other current assets	1,090	308	1,640	1,569	3,736	0
Total current farm assets	804,611	950,626	288,833	291,192	1,789,526	2,251,448
Intermediate Farm Assets						
Breeding livestock	22,959	25,096	4,437	3,912	86,523	95,123
Machinery and equipment	296,342	361,347	142,991	156,746	504,771	660,588
Titled vehicles	14,181	15,184	5,931	7,261	26,282	24,512
Other intermediate assets	11,372	12,475	2,928	2,928	22,443	24,862
Total intermediate farm assets	344,855	414,101	156,287	170,846	640,019	805,084
Long Term Farm Assets						
Farmland	328,818	398,866	144,582	167,392	508,725	523,823
Buildings and improvements	229,904	249,772	104,085	102,109	473,426	486,365
Other long-term assets	53,836	54,888	35,290	33,551	124,407	125,191
Total long-term farm assets	612,557	703,526	283,957	303,052	1,106,557	1,135,379
Total Farm Assets	1,762,023	2,068,253	729,077	765,091	3,536,102	4,191,911
Total Nonfarm Assets	205,735	231,299	155,544	169,054	149,378	173,268
Total Assets	1,967,758	2,299,552	884,621	934,145	3,685,480	4,365,179
<b>Liabilities</b>						
Current Farm Liabilities						
Accrued interest	7,517	6,980	2,541	2,692	9,680	8,877
Accounts payable	18,759	17,167	6,100	6,279	59,412	53,671
Current notes	211,464	203,276	83,803	79,461	525,244	445,099
Government crop loans	3,791	5,895	3,538	4,691	7,035	5,172
Principal due on term debt	40,767	57,862	17,210	19,164	68,173	79,029
Total current farm liabilities	282,298	291,181	113,192	112,288	669,544	591,848
Total intermediate farm liabs	85,614	94,623	32,120	40,285	182,499	175,167
Total long term farm liabilities	243,689	270,471	78,470	93,531	428,761	435,910
Total farm liabilities	611,602	656,275	223,782	246,104	1,280,804	1,202,925
Total nonfarm liabilities	47,589	55,114	40,541	38,921	45,752	69,714
Total liabilities	659,190	711,389	264,322	285,024	1,326,556	1,272,639
Net worth (farm and nonfarm)	1,308,568	1,588,163	620,299	649,120	2,358,924	3,092,540
Net worth change		279,595		28,822		733,616
Percent net worth change		21 %		5 %		31 %
<b>Ratio Analysis</b>						
Current farm liabilities / assets	35 %	31 %	39 %	39 %	37 %	26 %
Intermediate farm liab. / assets	25 %	23 %	21 %	24 %	29 %	22 %
Long term farm liab. / assets	40 %	38 %	28 %	31 %	39 %	38 %
Total debt to asset ratio	33 %	31 %	30 %	31 %	36 %	29 %

**Balance Sheet at Market Values**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>		<u>Low20%</u>		<u>High 20%</u>	
Number of farms	107		21		22	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
<b>Assets</b>						
Current Farm Assets						
Cash and checking balance	43,557	57,792	24,172	28,490	104,728	147,231
Prepaid expenses & supplies	88,507	115,499	35,874	45,774	153,801	204,728
Growing crops	77	6	249	0	139	27
Accounts receivable	23,515	30,768	1,987	2,159	64,953	92,325
Hedging accounts	8,698	22,736	490	95	36,653	100,840
Crops held for sale or feed	488,528	547,379	192,088	174,559	862,451	1,065,330
Crops under government loan	11,531	20,308	9,859	13,597	21,837	23,174
Market livestock held for sale	139,107	155,832	22,473	24,949	541,229	617,793
Other current assets	1,090	308	1,640	1,569	3,736	0
Total current farm assets	804,611	950,626	288,833	291,192	1,789,526	2,251,448
Intermediate Farm Assets						
Breeding livestock	33,860	37,851	13,213	14,140	114,384	124,979
Machinery and equipment	453,680	534,042	229,740	257,188	756,525	928,143
Titled vehicles	18,129	20,382	7,632	10,206	33,520	33,570
Other intermediate assets	13,569	15,110	3,309	3,141	28,470	29,782
Total intermediate farm assets	519,237	607,385	253,894	284,674	932,899	1,116,474
Long Term Farm Assets						
Farmland	695,738	830,766	393,887	431,759	829,234	877,207
Buildings and improvements	336,814	364,436	142,895	145,704	701,338	730,486
Other long-term assets	67,312	72,445	75,913	74,189	142,868	162,830
Total long-term farm assets	1,099,863	1,267,647	612,695	651,652	1,673,440	1,770,524
Total Farm Assets	2,423,712	2,825,658	1,155,422	1,227,519	4,395,865	5,138,445
Total Nonfarm Assets	255,090	283,812	182,133	193,907	172,055	198,998
Total Assets	2,678,802	3,109,470	1,337,555	1,421,426	4,567,920	5,337,443
<b>Liabilities</b>						
Current Farm Liabilities						
Accrued interest	7,517	6,980	2,541	2,692	9,680	8,877
Accounts payable	18,759	17,167	6,100	6,279	59,412	53,671
Current notes	211,464	203,276	83,803	79,461	525,244	445,099
Government crop loans	3,791	5,895	3,538	4,691	7,035	5,172
Principal due on term debt	40,767	57,862	17,210	19,164	68,173	79,029
Total current farm liabilities	282,298	291,181	113,192	112,288	669,544	591,848
Total intermediate farm liabs	85,614	94,623	32,120	40,285	182,499	175,167
Total long term farm liabilities	243,689	270,471	78,470	93,531	428,761	435,910
Total farm liabilities	611,602	656,275	223,782	246,104	1,280,804	1,202,925
Total nonfarm liabilities	47,589	55,114	40,541	38,921	45,752	69,714
Total liabs excluding deferreds	659,190	711,389	264,322	285,024	1,326,556	1,272,639
Total deferred liabilities	361,898	421,381	176,535	188,376	538,510	654,461
Total liabilities	1,021,089	1,132,769	440,858	473,401	1,865,066	1,927,100
Retained earnings	1,308,568	1,588,163	620,299	649,120	2,358,924	3,092,540
Market valuation equity	349,145	388,538	276,399	298,905	343,929	317,803
Net worth (farm and nonfarm)	1,657,713	1,976,701	896,697	948,025	2,702,853	3,410,343
Net worth excluding deferreds	2,019,612	2,398,081	1,073,233	1,136,402	3,241,364	4,064,804
Net worth change		318,987		51,328		707,490
Percent net worth change		19 %		6 %		26 %
<b>Ratio Analysis</b>						
Current farm liabilities / assets	35 %	31 %	39 %	39 %	37 %	26 %
Intermediate farm liab. / assets	16 %	16 %	13 %	14 %	20 %	16 %
Long term farm liab. / assets	22 %	21 %	13 %	14 %	26 %	25 %
Total debt to asset ratio	38 %	36 %	33 %	33 %	41 %	36 %
Debt to assets excl deferreds	25 %	23 %	20 %	20 %	29 %	24 %

**Statement Of Cash Flows**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	107	21	22
Beginning cash (farm & nonfarm)	55,323	30,408	106,157
<b>Cash Provided By Operating Activities</b>			
Gross cash farm income	1,150,686	305,546	3,422,353
Total cash farm expense	-898,752	-221,542	-2,873,067
Net cash from hedging transactions	1,308	-1,634	16,799
Cash provided by operating	253,242	82,370	566,086
<b>Cash Provided By Investing Activities</b>			
Sale of breeding livestock	196	401	-
Sale of machinery & equipment	6,875	4,761	16,370
Sale of titled vehicles	322	214	271
Sale of farm land	1,484	-	4,917
Sale of farm buildings	63	-	-
Sale of other farm assets	1,722	1,312	3,631
Sale of nonfarm assets	3,746	1,978	415
Purchase of breeding livestock	-928	-656	-398
Purchase of machinery & equip.	-110,477	-37,088	-252,331
Purchase of titled vehicles	-4,182	-2,652	-4,825
Purchase of farm land	-67,078	-22,810	-17,134
Purchase of farm buildings	-31,984	-3,193	-38,289
Purchase of other farm assets	-5,383	-469	-19,746
Purchase of nonfarm assets	-24,550	-16,422	-29,785
Cash provided by investing	-230,175	-74,623	-336,904
<b>Cash Provided By Financing Activities</b>			
Money borrowed	592,027	217,257	1,369,799
Principal payments	-543,488	-195,072	-1,443,646
Personal income	35,042	34,248	22,198
Family living/owner withdrawals	-75,300	-55,497	-119,641
Income and social security tax	-19,127	-8,197	-23,277
Capital contributions	-	-	-
Capital distributions	-1,230	-	-
Dividends paid	-37	-	-
Cash gifts and inheritances	4,174	4,770	7,773
Gifts given	-632	-50	-732
Other cash flows	-	-	-
Cash provided by financing	-8,571	-2,541	-187,526
Net change in cash balance	14,496	5,206	41,655
Ending cash (farm & nonfarm)	69,819	35,613	147,811

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**Crop Production and Marketing Summary**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	107	21	22
<b>Acreage Summary</b>			
Total acres owned	232	148	294
Total crop acres	791	308	1,384
Crop acres owned	202	96	263
Crop acres cash rented	532	177	1,051
Crop acres share rented	57	35	69
Total pasture acres	6	8	2
Percent crop acres owned	26 %	31 %	19 %
<b>Average Price Received (Cash Sales Only)</b>			
Soybeans per bushel	11.58	11.18	12.29
Corn per bushel	5.29	4.65	5.67
Hay, Alfalfa per ton	100.50	-	-
Wheat, Spring per bushel	8.88	-	-
<b>Average Yield Per Acre</b>			
Corn (bushel)	172.82	162.99	177.77
Soybeans (bushel)	46.24	42.15	47.70
Hay, Alfalfa (ton)	4.44	4.23	4.51
Hay, Grass (ton)	2.71	2.00	-
Corn Silage (ton)	21.60	-	24.63
Wheat, Spring (bushel)	34.37	-	-
Oats (bushel)	82.94	-	-

**Household and Personal Expenses**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	43	9	6
Average family size	3.0	3.1	3.3
Family Living Expenses			
Food and meals expense	9,243	8,896	7,713
Medical care	4,957	6,504	5,587
Health insurance	5,990	9,012	5,244
Cash donations	6,150	2,332	4,766
Household supplies	7,504	5,157	2,030
Clothing	3,453	3,018	2,712
Personal care	2,240	2,450	1,444
Child / Dependent care	229	331	-
Alimony and child support	-	-	-
Gifts	5,025	1,994	2,946
Education	3,043	4,261	2,634
Recreation	5,748	3,358	4,401
Utilities (household share)	3,214	3,764	3,004
Personal vehicle operating exp	5,203	5,831	4,950
Household real estate taxes	604	629	680
Dwelling rent	-	-	-
Household repairs	1,419	1,042	704
Personal interest	1,841	2,752	984
Disability / Long term care ins	361	411	473
Life insurance payments	2,884	2,357	2,176
Personal property insurance	383	566	720
Miscellaneous	3,489	3,770	1,112
Total cash family living expense	72,979	68,435	54,279
Family living from the farm	724	957	246
Total family living	73,704	69,392	54,525
Other Nonfarm Expenditures			
Income taxes	25,296	10,392	28,655
Furnishing & appliance purchases	1,772	1,928	2,926
Nonfarm vehicle purchases	6,019	1,973	3,599
Nonfarm real estate purchases	7,429	15,362	18,296
Other nonfarm capital purchases	3,773	1,137	230
Nonfarm savings & investments	2,644	-506	2,608
Total other nonfarm expenditures	46,934	30,285	56,313
Total cash family living investment & nonfarm capital purch	119,913	98,721	110,592

**Operator and Labor Information**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	107	21	22
<b>Operator Information</b>			
Average number of operators	1.1	1.0	1.3
Average age of operators	51.5	50.0	53.4
Average number of years farming	26.8	22.1	29.7
<b>Results Per Operator</b>			
Working capital	581,944	176,799	1,259,007
Total assets (market)	2,744,027	1,404,703	4,049,095
Total liabilities	999,640	467,831	1,461,938
Net worth (market)	1,744,387	936,872	2,587,157
Net worth excl deferred liabs	2,116,245	1,123,032	3,083,644
Gross farm income	1,110,348	287,055	2,885,068
Total farm expense	816,245	234,675	2,222,117
Net farm income from operations	294,104	52,381	662,951
Net nonfarm income	30,924	33,846	16,840
Family living & tax withdrawals	83,329	62,945	108,421
Total acres owned	204.3	146.3	223.2
Total crop acres	698.1	304.8	1,049.6
Crop acres owned	178.4	95.2	199.6
Crop acres cash rented	469.6	174.6	797.6
Crop acres share rented	50.1	35.0	52.4
Total pasture acres	4.9	8.4	1.3
<b>Labor Analysis</b>			
Number of farms	107	21	22
Total unpaid labor hours	2,113	1,582	2,532
Total hired labor hours	2,049	386	7,725
Total labor hours per farm	4,162	1,968	10,257
Unpaid hours per operator	1,865	1,563	1,921
Value of farm production / hour	209.35	131.17	202.66
Net farm income / unpaid hour	157.72	33.51	345.12
Average hourly hired labor wage	18.24	26.89	18.04
<b>Partnerships &amp; LLCs</b>			
Number of farms	9	-	5
Number of operators	2.1	-	1.8
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-
<b>Corporations</b>			
Number of farms	9	2	4
Number of operators	1.4	-	-

**Nonfarm Summary**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	107	21	22
<b>Nonfarm Income</b>			
Personal wages & salary	17,511	23,900	5,651
Net nonfarm business income	5,611	2,964	11,225
Personal rental income	3,347	50	2,416
Personal interest income	526	99	740
Personal cash dividends	366	481	6
Tax refunds	903	1,186	639
Other nonfarm income	6,777	5,569	1,520
Total nonfarm income	35,042	34,248	22,198
Gifts and inheritances	4,174	4,770	7,773
<b>Nonfarm Assets (market)</b>			
Checking & savings	12,027	7,124	580
Stocks & bonds	35,127	3,475	10,143
Other current assets	4,476	570	14,182
Furniture & appliances	10,730	14,265	7,784
Nonfarm vehicles	17,267	14,448	9,588
Cash value of life ins.	12,582	10,060	7,612
Retirement accounts	60,227	43,577	74,535
Other intermediate assets	17,752	3,994	20,912
Nonfarm real estate	78,565	58,086	49,393
Personal bus. investment	112	-	545
Other long term assets	34,947	38,309	3,724
Total nonfarm assets	283,812	193,907	198,998
<b>Nonfarm Liabilities</b>			
Accrued interest	224	139	8
Accounts payable	30,169	8,888	65,604
Current notes	330	71	-
Princ due on term debt	1,358	1,903	154
Total current liabilities	32,081	11,002	65,765
Intermediate liabilities	2,717	4,162	-
Long term liabilities	20,316	23,758	3,949
Total nonfarm liabilities	55,114	38,921	69,714
Nonfarm net worth	228,698	154,986	129,283
Nonfarm debt to asset ratio	19 %	20 %	35 %



## Crop Reports

The Crop Enterprise Analysis tables show the average physical production, gross return, direct costs, overhead costs, and net returns per acre. There are potentially three tables for each crop depending on the farmer's tenure on the land: owned land, cash rented land, and share rented land. Farms are classified into low 20% or high 20% on the basis of net return per acre. The classification is done separately for each table.

*Gross Return Per Acre* includes the value of the crop produced plus any other income directly associated with production of the crop, including hedging gains or losses, LDP payments, crop insurance proceeds and any disaster payments that might have been received. It does not include direct and counter-cyclical government payments (see Net Return With Government Payments).

The *Value Per Unit* is assigned by the producer. For cash crops, the value is based on the actual sales price for production sold or contracted before year-end and the inventory value for crops still in inventory at year-end. The local harvest-time price is used for forages and other feed crops.

*Net Return Per Acre* is the amount contributed toward operator labor, management, and equity capital. Any wages and benefits paid to the operator are removed from labor costs (and added to *Labor and Management Charge*) so that all farms are on equal footing. Land costs include land rent on the rented land pages but only actual interest paid and real estate taxes on owned land. For this reason, net returns from owned and rented land should not be compared.

*Net Return With Government Payments* is the net return per acre after decoupled government payments such as direct and counter-cyclical government payments have been added. These payments are generally allocated evenly per acre across all crops except vegetables and pasture.

*Net Return Over Labor and Management* is the return, including government payments, remaining after compensating the operator for unpaid labor and management. This is the per acre return to equity capital.

*Cost of Production* shows the average cost per unit produced in each cost category. *Total Direct and Overhead Expense per Unit* is the breakeven price needed to cover cash costs and depreciation. *Less Government and Other Income* is the breakeven price if government payments and any miscellaneous income are used to offset some expenses. *With Labor and Management* is the breakeven price to provide a labor and management return for the operator(s).

*Machinery Cost Per Acre* includes fuel and oil, repairs, custom hire, machinery lease payments, machinery depreciation, and interest on intermediate debt.

**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Corn on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of fields	104	18	21
Number of farms	69	13	14
Acres	97.74	89.09	66.02
Yield per acre (bu.)	172.44	154.34	195.15
Operators share of yield %	100.00	100.00	100.00
Value per bu.	5.80	5.28	6.03
Other product return per acre	0.26	-	-
Total product return per acre	999.61	815.45	1,176.39
Hedging gains/losses per acre	0.00	-	-0.88
Crop insurance per acre	6.48	29.87	-
Other crop income per acre	6.98	0.73	0.78
Gross return per acre	1,013.07	846.06	1,176.28
<b>Direct Expenses</b>			
Seed	105.32	106.41	102.18
Fertilizer	115.20	123.87	102.52
Crop chemicals	25.25	28.72	26.87
Crop insurance	16.75	18.00	18.28
Drying expense	2.72	5.96	0.84
Fuel & oil	28.61	26.53	26.02
Repairs	42.15	51.93	34.90
Custom hire	10.82	9.50	10.62
Machinery leases	2.94	6.80	0.38
Hauling and trucking	1.11	0.91	-
Marketing	1.06	3.14	0.53
Operating interest	5.30	10.66	3.96
Miscellaneous	2.63	2.06	0.77
Total direct expenses per acre	359.87	394.49	327.86
Return over direct exp per acre	653.20	451.57	848.43
<b>Overhead Expenses</b>			
Hired labor	13.42	13.66	9.39
Machinery leases	0.96	2.03	0.34
Building leases	0.78	0.11	0.21
RE & pers. property taxes	18.86	16.58	22.64
Farm insurance	8.35	8.44	6.53
Utilities	5.04	3.51	4.88
Dues & professional fees	3.63	2.40	2.83
Interest	52.20	77.44	37.35
Mach & bldg depreciation	56.76	49.62	53.85
Miscellaneous	4.56	4.83	3.29
Total overhead expenses per acre	164.57	178.62	141.31
Total dir & ovhd expenses per acre	524.44	573.11	469.17
Net return per acre	488.63	272.95	707.11
Government payments	18.14	18.14	17.89
Net return with govt pmts	506.76	291.08	725.00
Labor & management charge	57.78	52.46	61.73
Net return over lbr & mgt	448.98	238.62	663.27
<b>Cost of Production</b>			
Total direct expense per bu.	2.09	2.56	1.68
Total dir & ovhd exp per bu.	3.04	3.71	2.40
Less govt & other income	2.86	3.40	2.31
With labor & management	3.19	3.74	2.63
Net value per unit	5.80	5.28	6.02
Machinery cost per acre	136.56	139.76	124.45
Est. labor hours per acre	3.25	2.81	2.49

**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Corn on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of fields	237	56	54
Number of farms	87	17	18
Acres	120.18	86.05	117.81
Yield per acre (bu.)	173.62	159.88	186.11
Operators share of yield %	100.00	100.00	100.00
Value per bu.	5.93	5.57	6.09
Other product return per acre	0.36	-	-
Total product return per acre	1,029.91	891.33	1,134.20
Hedging gains/losses per acre	4.78	-4.81	13.42
Crop insurance per acre	3.06	10.26	-
Other crop income per acre	3.70	2.19	7.17
Gross return per acre	1,041.44	898.97	1,154.79
<b>Direct Expenses</b>			
Seed	104.10	104.45	102.98
Fertilizer	113.24	140.77	72.57
Crop chemicals	22.72	20.03	19.07
Crop insurance	18.46	23.25	15.03
Drying expense	1.90	3.10	1.34
Fuel & oil	29.40	31.47	28.98
Repairs	37.30	42.74	24.89
Custom hire	6.03	11.22	2.66
Hired labor	0.17	0.10	0.71
Land rent	190.28	204.81	201.27
Machinery leases	2.54	0.09	-
Hauling and trucking	1.95	3.45	0.14
Marketing	1.09	2.62	1.40
Operating interest	6.49	6.48	5.96
Miscellaneous	2.72	3.06	3.37
Total direct expenses per acre	538.41	597.62	480.38
Return over direct exp per acre	503.03	301.35	674.41
<b>Overhead Expenses</b>			
Hired labor	11.13	11.77	6.19
Machinery leases	2.05	0.46	4.08
Building leases	1.79	1.20	1.66
Farm insurance	7.54	11.24	7.23
Utilities	3.91	4.77	3.71
Dues & professional fees	2.39	2.88	1.38
Interest	4.00	3.65	4.64
Mach & bldg depreciation	47.72	54.36	42.82
Miscellaneous	4.77	8.83	2.32
Total overhead expenses per acre	85.29	99.15	74.03
Total dir & ovhd expenses per acre	623.69	696.77	554.41
Net return per acre	417.74	202.20	600.38
Government payments	17.93	17.66	17.14
Net return with govt pmts	435.67	219.86	617.52
Labor & management charge	56.17	60.55	57.57
Net return over lbr & mgt	379.50	159.31	559.95
<b>Cost of Production</b>			
Total direct expense per bu.	3.10	3.74	2.58
Total dir & ovhd exp per bu.	3.59	4.36	2.98
Less govt & other income	3.42	4.20	2.78
With labor & management	3.74	4.58	3.09
Net value per unit	5.96	5.54	6.17
Machinery cost per acre	122.87	138.17	103.78
Est. labor hours per acre	2.53	2.86	2.30

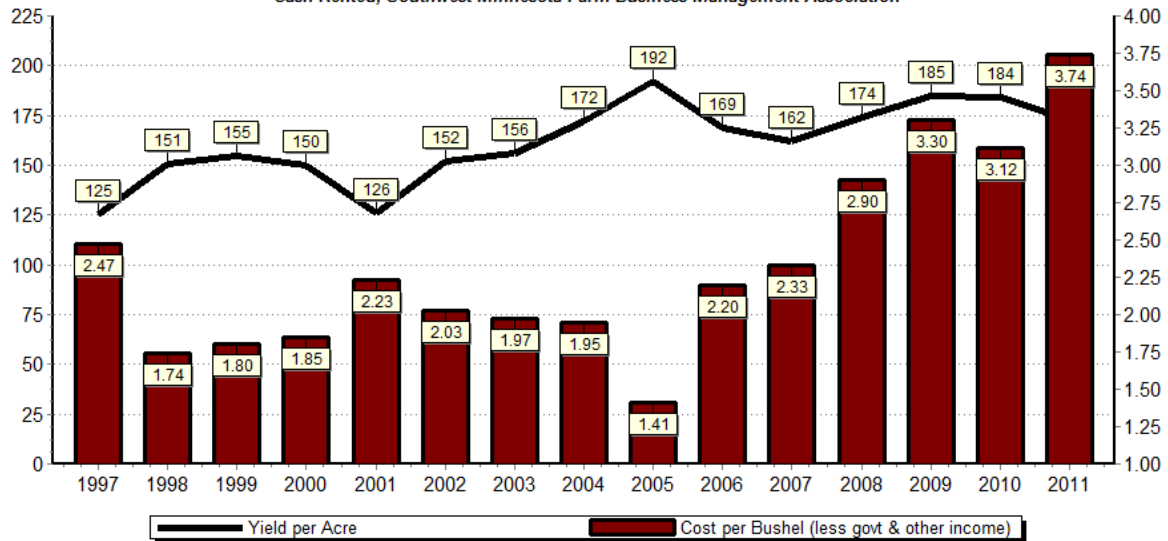
**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Corn on Share Rent**

	<b>Avg. Of All Farms</b>
Number of fields	34
Number of farms	20
Acres	82.18
Yield per acre (bu.)	166.12
Operators share of yield %	54.10
Value per bu.	5.95
Total product return per acre	534.48
Hedging gains/losses per acre	-2.18
Crop insurance per acre	0.58
Other crop income per acre	5.16
Gross return per acre	538.04
<b>Direct Expenses</b>	
Seed	73.20
Fertilizer	70.11
Crop chemicals	18.00
Crop insurance	9.39
Drying expense	0.59
Fuel & oil	27.49
Repairs	36.24
Custom hire	9.86
Hired labor	0.13
Machinery leases	0.22
Hauling and trucking	1.41
Marketing	0.67
Operating interest	6.12
Miscellaneous	0.70
Total direct expenses per acre	254.13
Return over direct exp per acre	283.91
<b>Overhead Expenses</b>	
Hired labor	7.72
Machinery leases	1.65
Building leases	1.56
Farm insurance	6.77
Utilities	3.75
Dues & professional fees	1.85
Interest	4.53
Mach & bldg depreciation	44.42
Miscellaneous	1.81
Total overhead expenses per acre	74.05
Total dir & ovhd expenses per acre	328.18
Net return per acre	209.86
Government payments	11.25
Net return with govt pmts	221.11
Labor & management charge	48.63
Net return over lbr & mgt	172.48
<b>Cost of Production</b>	
Total direct expense per bu.	2.83
Total dir & ovhd exp per bu.	3.65
Less govt & other income	3.49
With labor & management	4.03
Net value per unit	5.92
Machinery cost per acre	118.42
Est. labor hours per acre	2.65

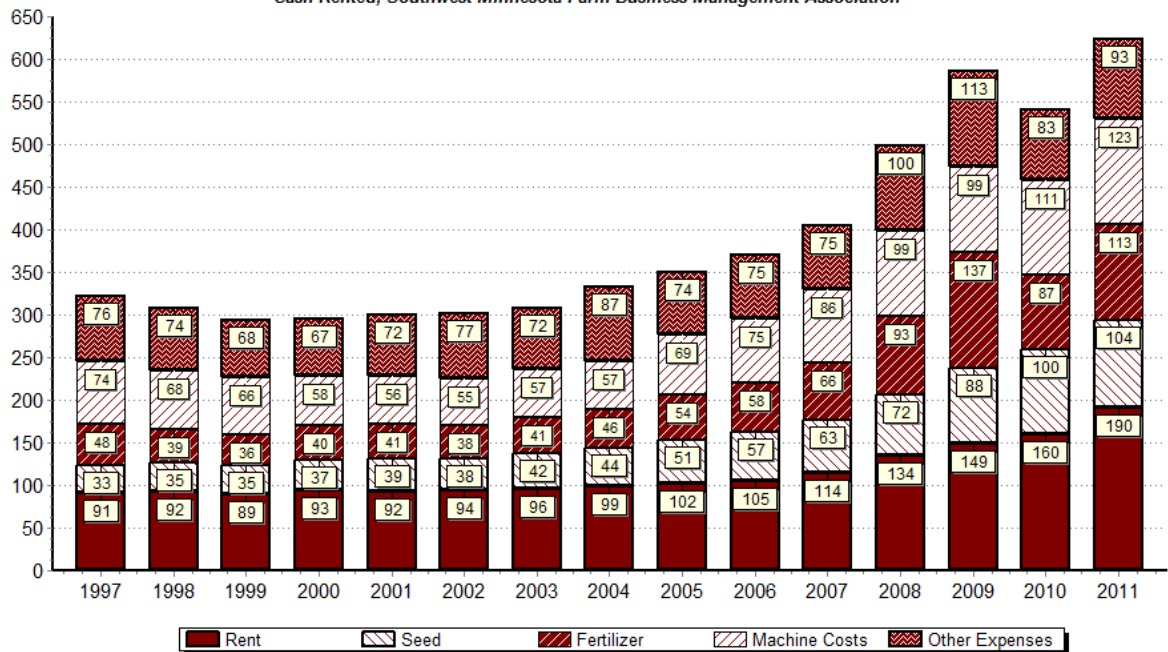
**Figure 9: Corn Yield & Cost of Production**

*Cash Rented, Southwest Minnesota Farm Business Management Association*



**Figure 10: Corn Cost Per Acre**

*Cash Rented, Southwest Minnesota Farm Business Management Association*



**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Soybeans on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of fields	96	19	21
Number of farms	65	13	13
Acres	89.01	96.75	63.66
Yield per acre (bu.)	45.72	41.91	50.05
Operators share of yield %	100.00	100.00	100.00
Value per bu.	11.44	11.33	11.74
Total product return per acre	523.23	474.97	587.41
Hedging gains/losses per acre	0.13	-	-
Crop insurance per acre	10.86	7.27	3.65
Other crop income per acre	6.65	6.37	6.25
Gross return per acre	540.87	488.61	597.31
<b>Direct Expenses</b>			
Seed	53.41	60.50	53.36
Fertilizer	33.57	36.39	26.13
Crop chemicals	28.47	25.05	34.94
Crop insurance	18.63	18.40	13.97
Storage	0.24	0.74	0.02
Fuel & oil	23.67	27.97	18.70
Repairs	33.57	50.12	24.66
Custom hire	7.29	4.63	6.66
Machinery leases	2.41	0.24	0.36
Operating interest	4.28	8.26	2.56
Miscellaneous	3.20	3.59	1.77
Total direct expenses per acre	208.75	235.90	183.14
Return over direct exp per acre	332.12	252.71	414.17
<b>Overhead Expenses</b>			
Hired labor	9.71	12.32	5.63
Machinery leases	0.98	1.06	0.17
Building leases	0.51	1.76	-
RE & pers. property taxes	18.86	17.24	19.07
Farm insurance	6.91	8.50	5.99
Utilities	3.91	3.28	3.70
Dues & professional fees	2.65	2.30	3.64
Interest	48.41	93.80	17.09
Mach & bldg depreciation	42.67	37.69	42.47
Miscellaneous	3.12	3.79	2.10
Total overhead expenses per acre	137.74	181.74	99.86
Total dir & ovhd expenses per acre	346.49	417.64	283.00
Net return per acre	194.38	70.97	314.31
Government payments	17.50	16.94	17.44
Net return with govt pmts	211.89	87.91	331.75
Labor & management charge	44.22	39.11	51.52
Net return over lbr & mgt	167.66	48.79	280.23
<b>Cost of Production</b>			
Total direct expense per bu.	4.57	5.63	3.66
Total dir & ovhd exp per bu.	7.58	9.96	5.65
Less govt & other income	6.81	9.24	5.11
With labor & management	7.78	10.17	6.14
Net value per unit	11.45	11.33	11.74
Machinery cost per acre	106.88	119.22	89.67
Est. labor hours per acre	2.46	2.28	2.46

**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Soybeans on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of fields	200	35	37
Number of farms	83	16	17
Acres	122.72	146.80	130.49
Yield per acre (bu.)	46.55	40.34	51.28
Operator's share of yield %	100.00	100.00	100.00
Value per bu.	11.59	11.21	11.83
Total product return per acre	539.77	452.09	606.54
Hedging gains/losses per acre	4.99	-1.19	11.21
Crop insurance per acre	8.10	16.12	9.26
LDP income per acre	0.34	-	-
Other crop income per acre	3.47	0.74	8.79
Gross return per acre	556.67	467.76	635.79
<b>Direct Expenses</b>			
Seed	52.10	57.49	47.27
Fertilizer	31.43	42.93	17.93
Crop chemicals	26.99	35.16	24.27
Crop insurance	20.20	20.79	13.04
Storage	0.36	0.52	0.15
Fuel & oil	22.88	23.71	21.90
Repairs	29.58	36.53	17.55
Custom hire	5.39	7.28	2.29
Hired labor	0.22	0.16	0.95
Land rent	177.07	183.96	171.41
Machinery leases	1.98	0.04	0.65
Hauling and trucking	0.86	0.22	0.15
Marketing	1.41	0.76	1.80
Operating interest	5.25	7.33	4.34
Miscellaneous	2.69	0.89	3.75
Total direct expenses per acre	378.40	417.77	327.45
Return over direct exp per acre	178.27	49.99	308.35
<b>Overhead Expenses</b>			
Hired labor	8.78	9.47	4.03
Machinery leases	0.98	2.51	0.10
Building leases	1.36	0.14	1.67
Farm insurance	6.14	5.00	3.91
Utilities	3.10	2.77	2.64
Dues & professional fees	2.08	3.73	0.94
Interest	3.22	4.29	1.57
Mach & bldg depreciation	39.15	38.59	30.33
Miscellaneous	3.90	5.95	2.19
Total overhead expenses per acre	68.72	72.46	47.38
Total dir & ovhd expenses per acre	447.12	490.23	374.83
Net return per acre	109.55	-22.47	260.96
Government payments	17.32	16.10	16.77
Net return with govt pmts	126.87	-6.36	277.73
Labor & management charge	45.99	47.64	46.83
Net return over lbr & mgt	80.88	-54.01	230.90
<b>Cost of Production</b>			
Total direct expense per bu.	8.13	10.36	6.39
Total dir & ovhd exp per bu.	9.60	12.15	7.31
Less govt & other income	8.87	11.36	6.41
With labor & management	9.86	12.55	7.32
Net value per unit	11.71	11.18	12.05
Machinery cost per acre	97.95	107.56	71.36
Est. labor hours per acre	2.05	2.10	1.75

**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

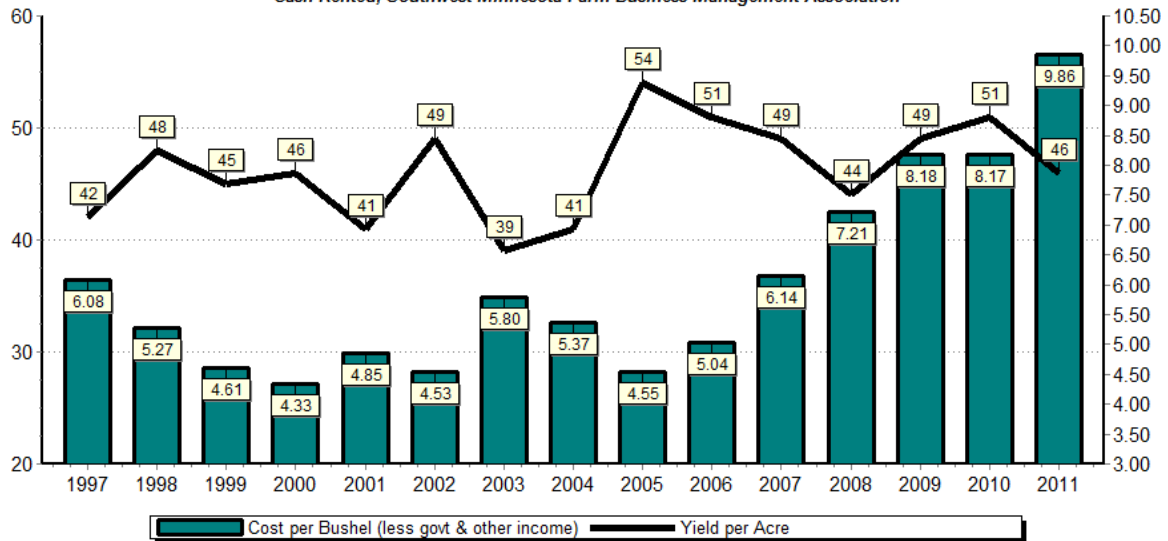
**Soybeans on Share Rent**

	<u>Avg. Of All Farms</u>
Number of fields	34
Number of farms	18
Acres	76.44
Yield per acre (bu.)	45.90
Operators share of yield %	52.59
Value per bu.	11.37
Total product return per acre	274.34
Hedging gains/losses per acre	-0.08
Crop insurance per acre	4.13
Other crop income per acre	1.62
Gross return per acre	280.01
<b>Direct Expenses</b>	
Seed	33.37
Fertilizer	21.87
Crop chemicals	19.72
Crop insurance	10.96
Fuel & oil	22.28
Repairs	31.87
Custom hire	5.46
Machinery leases	0.22
Hauling and trucking	0.79
Marketing	0.98
Operating interest	3.04
Miscellaneous	0.42
Total direct expenses per acre	150.97
Return over direct exp per acre	129.04
<b>Overhead Expenses</b>	
Hired labor	6.60
Machinery leases	1.21
Building leases	1.20
Farm insurance	4.00
Utilities	2.63
Dues & professional fees	1.44
Interest	3.44
Mach & bldg depreciation	36.51
Miscellaneous	1.71
Total overhead expenses per acre	58.75
Total dir & ovhd expenses per acre	209.72
Net return per acre	70.30
Government payments	10.14
Net return with govt pmts	80.43
Labor & management charge	42.34
Net return over lbr & mgt	38.09
<b>Cost of Production</b>	
Total direct expense per bu.	6.25
Total dir & ovhd exp per bu.	8.69
Less govt & other income	8.03
With labor & management	9.79
Net value per unit	11.36
Machinery cost per acre	96.75
Est. labor hours per acre	2.22



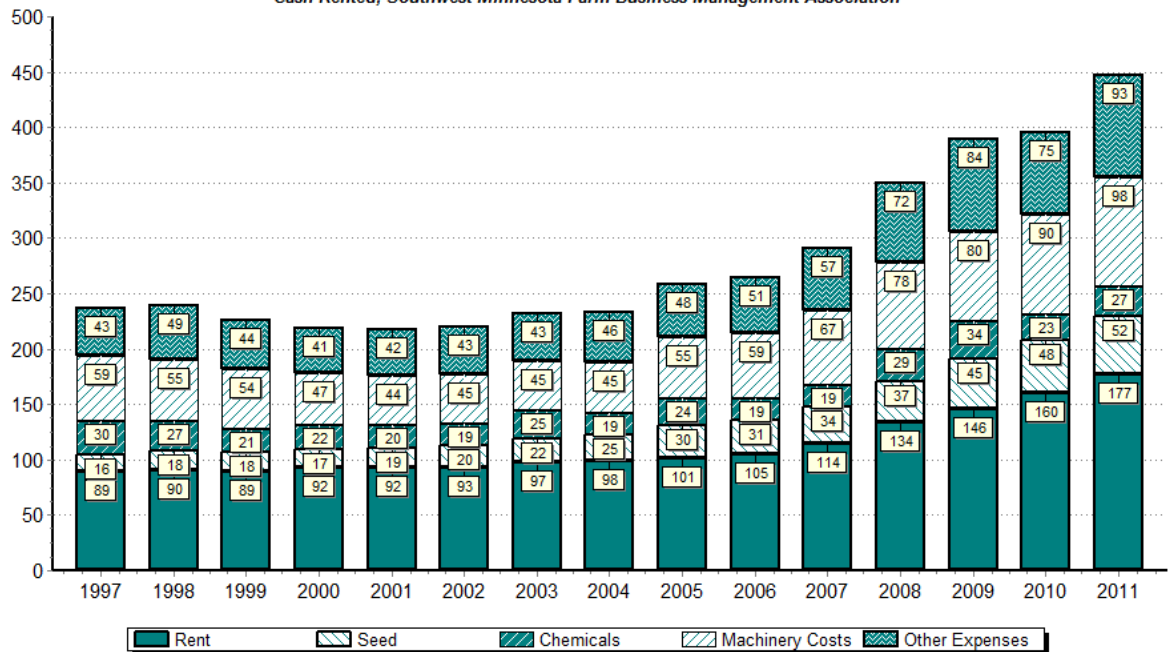
**Figure 11: Soybean Yield & Cost of Production**

*Cash Rented, Southwest Minnesota Farm Business Management Association*



**Figure 12: Soybean Cost Per Acre**

*Cash Rented, Southwest Minnesota Farm Business Management Association*



**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Corn Silage on Owned Land**

	<u>Avg. Of All Farms</u>
Number of fields	12
Number of farms	10
Acres	69.97
Yield per acre (ton)	22.23
Operators share of yield %	100.00
Value per ton	43.44
Total product return per acre	965.76
Crop insurance per acre	19.27
Other crop income per acre	0.48
Gross return per acre	985.51
<b>Direct Expenses</b>	
Seed	95.38
Fertilizer	47.21
Crop chemicals	23.25
Crop insurance	12.05
Fuel & oil	49.54
Repairs	42.32
Custom hire	38.73
Machinery leases	19.06
Marketing	0.98
Operating interest	2.28
Miscellaneous	1.43
Total direct expenses per acre	332.22
Return over direct exp per acre	653.29
<b>Overhead Expenses</b>	
Hired labor	12.92
RE & pers. property taxes	23.56
Farm insurance	5.36
Utilities	4.09
Dues & professional fees	1.45
Interest	50.00
Mach & bldg depreciation	80.43
Miscellaneous	6.47
Total overhead expenses per acre	184.27
Total dir & ovhd expenses per acre	516.49
Net return per acre	469.03
Government payments	17.01
Net return with govt pmts	486.03
Labor & management charge	65.37
Net return over lbr & mgt	420.66
<b>Cost of Production</b>	
Total direct expense per ton	14.94
Total dir & ovhd exp per ton	23.23
Less govt & other income	21.58
With labor & management	24.52
Net value per unit	43.44
Machinery cost per acre	231.54
Est. labor hours per acre	2.52

**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Corn Silage on Cash Rent**

	<u><b>Avg. Of All Farms</b></u>
Number of fields	6
Number of farms	6
Acres	67.17
Yield per acre (ton)	21.49
Operators share of yield %	100.00
Value per ton	45.59
Total product return per acre	979.69
Crop insurance per acre	13.83
Other crop income per acre	11.66
Gross return per acre	1,005.18
<b>Direct Expenses</b>	
Seed	100.45
Fertilizer	109.99
Crop chemicals	20.87
Crop insurance	13.39
Fuel & oil	42.81
Repairs	38.59
Custom hire	15.97
Land rent	188.90
Marketing	9.75
Operating interest	6.27
Miscellaneous	0.03
Total direct expenses per acre	547.00
Return over direct exp per acre	458.18
<b>Overhead Expenses</b>	
Hired labor	13.83
Machinery leases	1.12
Farm insurance	5.89
Utilities	3.46
Dues & professional fees	1.56
Interest	1.42
Mach & bldg depreciation	40.07
Miscellaneous	2.19
Total overhead expenses per acre	69.54
Total dir & ovhd expenses per acre	616.54
Net return per acre	388.64
Government payments	15.85
Net return with govt pmts	404.49
Labor & management charge	39.82
Net return over lbr & mgt	364.67
<b>Cost of Production</b>	
Total direct expense per ton	25.46
Total dir & ovhd exp per ton	28.69
Less govt & other income	26.77
With labor & management	28.62
Net value per unit	45.59
Machinery cost per acre	135.91
Est. labor hours per acre	3.28

**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Hay, Alfalfa on Owned Land**

	<u><b>Avg. Of All Farms</b></u>
Number of fields	13
Number of farms	10
Acres	34.38
Yield per acre (ton)	4.80
Operators share of yield %	100.00
Value per ton	117.08
Total product return per acre	562.37
Gross return per acre	562.37
<b>Direct Expenses</b>	
Seed	3.82
Fertilizer	38.51
Crop chemicals	4.70
Crop insurance	2.13
Fuel & oil	45.53
Repairs	34.46
Custom hire	26.96
Machinery leases	16.03
Operating interest	1.44
Miscellaneous	5.41
Total direct expenses per acre	178.99
Return over direct exp per acre	383.38
<b>Overhead Expenses</b>	
Hired labor	12.39
RE & pers. property taxes	19.28
Farm insurance	9.53
Utilities	4.57
Dues & professional fees	3.34
Interest	33.86
Mach & bldg depreciation	79.78
Miscellaneous	7.11
Total overhead expenses per acre	169.86
Total dir & ovhd expenses per acre	348.84
Net return per acre	213.52
Government payments	15.37
Net return with govt pmts	228.89
Labor & management charge	77.36
Net return over lbr & mgt	151.54
<b>Cost of Production</b>	
Total direct expense per ton	37.26
Total dir & ovhd exp per ton	72.63
Less govt & other income	69.43
With labor & management	85.53
Net value per unit	117.08
Machinery cost per acre	201.79
Est. labor hours per acre	3.73

**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Hay, Alfalfa on Cash Rent**

	<u><b>Avg. Of All Farms</b></u>
Number of fields	22
Number of farms	12
Acres	60.87
Yield per acre (ton)	4.43
Operators share of yield %	100.00
Value per ton	124.83
Total product return per acre	552.42
Other crop income per acre	6.72
Gross return per acre	559.13
<b>Direct Expenses</b>	
Seed	0.52
Fertilizer	52.23
Crop chemicals	5.90
Crop insurance	0.91
Fuel & oil	46.06
Repairs	29.03
Custom hire	4.59
Hired labor	0.43
Land rent	136.19
Machinery leases	5.75
Hauling and trucking	4.15
Marketing	3.94
Operating interest	3.10
Miscellaneous	4.59
Total direct expenses per acre	297.38
Return over direct exp per acre	261.75
<b>Overhead Expenses</b>	
Hired labor	16.71
Building leases	1.97
Farm insurance	4.08
Utilities	2.61
Dues & professional fees	0.85
Interest	3.67
Mach & bldg depreciation	43.66
Miscellaneous	3.48
Total overhead expenses per acre	77.03
Total dir & ovhd expenses per acre	374.41
Net return per acre	184.72
Government payments	12.28
Net return with govt pmts	197.00
Labor & management charge	30.59
Net return over lbr & mgt	166.41
<b>Cost of Production</b>	
Total direct expense per ton	67.20
Total dir & ovhd exp per ton	84.61
Less govt & other income	80.32
With labor & management	87.23
Net value per unit	124.83
Machinery cost per acre	130.88
Est. labor hours per acre	2.60

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**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**Pasture on Owned Land**

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	<u>Avg. Of All Farms</u>
Number of fields	5
Number of farms	5
Acres	41.30
Yield per acre (aum)	3.51
Operators share of yield %	100.00
Value per aum	12.81
Other product return per acre	7.60
Total product return per acre	52.52
Other crop income per acre	6.36
Gross return per acre	58.88
<b>Direct Expenses</b>	
Seed	0.97
Crop chemicals	1.93
Fuel & oil	7.22
Repairs	5.37
Custom hire	1.00
Total direct expenses per acre	16.52
Return over direct exp per acre	42.36
<b>Overhead Expenses</b>	
Hired labor	1.34
RE & pers. property taxes	8.52
Farm insurance	2.52
Utilities	1.05
Dues & professional fees	0.20
Interest	1.96
Mach & bldg depreciation	4.47
Miscellaneous	0.62
Total overhead expenses per acre	20.67
Total dir & ovhd expenses per acre	37.19
Net return per acre	21.69
Government payments	3.92
Net return with govt pmts	25.62
Labor & management charge	10.90
Net return over lbr & mgt	14.71
<b>Cost of Production</b>	
Total direct expense per aum	4.71
Total dir & ovhd exp per aum	10.61
Less govt & other income	5.51
With labor & management	8.62
Net value per unit	12.81
Machinery cost per acre	17.70
Est. labor hours per acre	0.81

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**Crop Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return)**

**CRP on Owned Land**

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	<u>Avg. Of All Farms</u>
Number of fields	19
Number of farms	19
Acres	36.93
Yield per acre (\$)	88.31
Operators share of yield %	100.00
Value per \$	1.00
Total product return per acre	88.31
Other crop income per acre	0.94
Gross return per acre	89.25
<b>Direct Expenses</b>	
Crop chemicals	1.04
Fuel & oil	2.97
Repairs	4.21
Custom hire	1.49
Total direct expenses per acre	10.53
Return over direct exp per acre	78.72
<b>Overhead Expenses</b>	
Hired labor	2.18
RE & pers. property taxes	15.10
Farm insurance	1.00
Utilities	0.67
Interest	30.81
Mach & bldg depreciation	8.19
Miscellaneous	1.71
Total overhead expenses per acre	59.66
Total dir & ovhd expenses per acre	70.19
Net return per acre	19.06
Government payments	-
Net return with govt pmts	19.06
Labor & management charge	5.68
Net return over lbr & mgt	13.38
<b>Cost of Production</b>	
Total direct expense per \$	0.12
Total dir & ovhd exp per \$	0.79
Less govt & other income	0.78
With labor & management	0.85
Net value per unit	1.00
Machinery cost per acre	15.75
Est. labor hours per acre	0.41





# Livestock Reports

The Livestock Enterprise Analysis tables show the average physical production, gross margin over purchase costs, direct costs, overhead costs, and net returns per budget unit.

The “Dairy” table contains the information for only the milking herd (which includes dry cows). “Dairy Replacement Heifers” are those heifers kept for replacement into the milking herd. The “Dairy and Replacement Heifers” table is for the whole herd and includes those farms in the “Dairy” and “Dairy Replacement Heifers” tables; it does not include “Dairy Steers.”

*Gross Margin* is the accrual gross value added by the enterprise. It includes income from sale of offspring and livestock products, cull income, non-cash transfers to other enterprises, and the value of production used in the home or for feed. It also includes the value of inventory change from beginning to the end of the year. The cost of livestock purchased and the value of animals transferred in are deducted.

*Net Return* is the amount contributed by a unit of the enterprise toward operator labor, management, and equity capital. Any wages and benefits paid to the operator are removed from labor costs (and added to *Labor and Management Charge*) so that all farms are on equal footing.

*Net Return Over Labor and Management* is the return remaining after compensating the operator for unpaid labor and management. This is the per unit return to equity capital.

*Cost of Production* section shows the average cost per unit sold in each cost category. *Total direct and overhead expense per unit* is the breakeven price needed to cover cash costs and depreciation. For grow/finish enterprises, this includes the purchase cost or transfer in value of the animal. *With other revenue adjustments* is the breakeven price adjusted for cull sales, other offspring sales, the cost of replacement stock, and any other miscellaneous income. This assumes that some costs can be covered by these other income sources. *With labor and management* is the final breakeven price to provide a labor and management return for the operator(s).

*Other Information* contains both economic and technical efficiency measures for each enterprise.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms have a certain livestock enterprise, that information is not reported. If there are fewer than 25 farms, the high and low groups are not reported.

**Livestock Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return Per Unit)**

**Hogs, Farrow To Finish -- Average Per Litter**

	<u>Avg. Of All Farms</u>	
Number of farms	5	
	Quantity	Value
Raised Hogs sold (lb)	2,109.1	1,355.93
Cull sales (lb)	143.9	69.30
Other income		0.43
Purchased (lb)	-52.1	-39.23
Inventory change (lb)	115.5	103.92
Gross margin		1,490.35
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	1,704.2	387.43
Complete Ration (lb.)	963.6	71.46
Barley (bu.)	0.1	0.40
Corn (bu.)	89.1	575.27
Straw (lb.)	14.3	0.60
Other feed stuffs (lb)	33.8	6.16
Breeding fees		23.74
Veterinary		49.11
Supplies		100.26
Fuel & oil		10.68
Repairs		22.89
Custom hire		6.30
Hired labor		8.99
Livestock leases		48.59
Utilities		36.15
Total direct expenses		1,348.03
Return over direct expense		142.32
<b>Overhead Expenses</b>		
Hired labor		87.18
RE & pers. property taxes		1.93
Farm insurance		17.96
Interest		16.27
Mach & bldg depreciation		53.95
Miscellaneous		31.23
Total overhead expenses		208.52
Total dir & ovhd expenses		1,556.55
Net return		-66.21
Labor & management charge		46.10
Net return over lbr & mgt		-112.31
<b>Cost of Production/Cwt. Carcass Sold</b>		
Total direct expense per unit		86.27
Total dir & ovhd expense per unit		99.62
With other revenue adjustments		97.86
With labor and management		100.81
Est. labor hours per unit		7.26
<b>Other Information</b>		
Average number of sows		145.3
Litters farrowed		305
Litters per sow		2.10
Litters per crate		9.65
Pigs born per litter		10.62
Pigs weaned per litter		9.38
Pigs weaned per sow		18.82
Pigs sold per litter		7.75
Percent substandard hogs		4
Lb. of feed / lb. of gain		3.34
Feed cost / cwt. of gain		44.94
Feed cost per litter		1,041.32
Avg wgt/Raised Hogs sold		272
Avg price / cwt.		64.29
Average carcass weight		210
Average price / cwt. carcass		85.28

**Livestock Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return Per Unit)**

**Hogs, Farrow To Finish -- Average Per Cwt. Carcass Sold**

	<u>Avg. Of All Farms</u>	
Number of farms	5	
	Quantity	Value
Raised Hogs sold (lb)	134.98	86.78
Cull sales (lb)	9.21	4.43
Other income		0.03
Purchased (lb)	-3.33	-2.51
Inventory change (lb)	7.39	6.65
Gross margin		95.38
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	109.06	24.79
Complete Ration (lb.)	61.67	4.57
Barley (bu.)	0.01	0.03
Corn (bu.)	5.70	36.82
Straw (lb.)	0.92	0.04
Other feed stuffs (lb)	2.16	0.39
Breeding fees		1.52
Veterinary		3.14
Supplies		6.42
Fuel & oil		0.68
Repairs		1.46
Custom hire		0.40
Hired labor		0.58
Livestock leases		3.11
Utilities		2.31
Total direct expenses		86.27
Return over direct expense		9.11
<b>Overhead Expenses</b>		
Hired labor		5.58
RE & pers. property taxes		0.12
Farm insurance		1.15
Interest		1.04
Mach & bldg depreciation		3.45
Miscellaneous		2.00
Total overhead expenses		13.34
Total dir & ovhd expenses		99.62
Net return		-4.24
Labor & management charge		2.95
Net return over lbr & mgt		-7.19
<b>Cost of Production/Cwt. Carcass Sold</b>		
Total direct expense per unit		86.27
Total dir & ovhd expense per unit		99.62
With other revenue adjustments		97.86
With labor and management		100.81
Est. labor hours per unit		0.46
<b>Other Information</b>		
Average number of sows		145.3
Litters farrowed		305
Litters per sow		2.10
Litters per crate		9.65
Pigs born per litter		10.62
Pigs weaned per litter		9.38
Pigs weaned per sow		18.82
Pigs sold per litter		7.75
Percent substandard hogs		4
Lb. of feed / lb. of gain		3.34
Feed cost / cwt. of gain		44.94
Feed cost per litter		1,041.32
Avg wgt/Raised Hogs sold		272
Avg price / cwt.		64.29
Average carcass weight		210
Average price / cwt. carcass		85.28

**Livestock Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return Per Unit)**

**Hogs, Weaning to Finish -- Average Per Head**

	<u>Avg. Of All Farms</u>	
Number of farms	5	
	Quantity	Value
Wean-Fin Pig sold (lb)	270.9	173.16
Cull sales (lb)	0.7	0.23
Other income		0.02
Purchased (lb)	-14.3	-43.99
Inventory change (lb)	3.5	7.25
Gross margin		136.67
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	104.5	24.27
Complete Ration (lb.)	98.0	13.43
Corn (bu.)	7.3	47.40
DDGS (lb.)	91.7	9.02
Other feed stuffs (lb)	0.0	4.43
Veterinary		2.45
Supplies		1.91
Contract production exp.		5.41
Fuel & oil		1.53
Repairs		1.98
Custom hire		0.61
Hired labor		1.13
Hauling and trucking		0.75
Marketing		0.70
Operating interest		0.76
Total direct expenses		115.78
Return over direct expense		20.89
<b>Overhead Expenses</b>		
Hired labor		2.04
Machinery leases		2.46
Building leases		1.09
Farm insurance		0.91
Utilities		0.67
Interest		0.79
Mach & bldg depreciation		2.91
Miscellaneous		0.41
Total overhead expenses		11.28
Total dir & ovhd expenses		127.06
Net return		9.62
Labor & management charge		3.83
Net return over lbr & mgt		5.79
<b>Cost of Production/Cwt. Carcass Sold</b>		
Total direct expense per unit		76.02
Total dir & ovhd expense per unit		81.65
With other revenue adjustments		81.65
With labor and management		83.57
Est. labor hours per unit		0.25
<b>Other Information</b>		
No. purchased or trans in		23,098
Number sold or trans out		20,948
Percentage death loss		5.0
Percent substandard hogs		0
Avg. daily gain (lb.)		1.43
Lb. of feed / lb. of gain		2.80
Feed cost per cwt. of gain		37.78
Feed cost per head		98.54
Average purchase weight		13
Avg wgt / Wean-Fin Pig sold		270
Avg purch price / head		39.80
Avg sales price / cwt.		63.92
Average carcass weight		201
Average price / cwt. carcass		86.34

**Livestock Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return Per Unit)**

**Hogs, Weaning to Finish -- Average Per Cwt. Carcass Sold**

	<u>Avg. Of All Farms</u>	
Number of farms	5	
	Quantity	Value
Wean-Fin Pig sold (lb)	135.27	86.46
Cull sales (lb)	0.33	0.11
Other income		0.01
Purchased (lb)	-7.14	-21.96
Inventory change (lb)	1.76	3.62
Gross margin		68.24
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	52.18	12.12
Complete Ration (lb.)	48.91	6.70
Corn (bu.)	3.64	23.67
DDGS (lb.)	45.79	4.50
Other feed stuffs (lb)	0.01	2.21
Veterinary		1.22
Supplies		0.96
Contract production exp.		2.70
Fuel & oil		0.76
Repairs		0.99
Custom hire		0.31
Hired labor		0.56
Hauling and trucking		0.37
Marketing		0.35
Operating interest		0.38
Total direct expenses		57.81
Return over direct expense		10.43
<b>Overhead Expenses</b>		
Hired labor		1.02
Machinery leases		1.23
Building leases		0.54
Farm insurance		0.45
Utilities		0.34
Interest		0.39
Mach & bldg depreciation		1.45
Miscellaneous		0.21
Total overhead expenses		5.63
Total dir & ovhd expenses		63.44
Net return		4.80
Labor & management charge		1.91
Net return over lbr & mgt		2.89
<b>Cost of Production/Cwt. Carcass Sold</b>		
Total direct expense per unit		76.02
Total dir & ovhd expense per unit		81.65
With other revenue adjustments		81.65
With labor and management		83.57
Est. labor hours per unit		0.13
<b>Other Information</b>		
No. purchased or trans in		23,098
Number sold or trans out		20,948
Percentage death loss		5.0
Percent substandard hogs		0
Avg. daily gain (lb.)		1.43
Lb. of feed / lb. of gain		2.80
Feed cost per cwt. of gain		37.78
Feed cost per head		98.54
Average purchase weight		13
Avg wgt / Wean-Fin Pig sold		270
Avg purch price / head		39.80
Avg sales price / cwt.		63.92
Average carcass weight		201
Average price / cwt. carcass		86.34

**Livestock Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return Per Unit)**

**Hogs, Weaning to Finish (Contract Grower) -- Average Per Pig Space**

	<b>Avg. Of All Farms</b>	
Number of farms	13	
	Quantity	Value
Other income		35.17
Gross margin		35.17
<b>Direct Expenses</b>		
Supplies		1.28
Contract production exp.		3.09
Fuel & oil		2.40
Repairs		3.15
Custom hire		1.08
Hired labor		0.28
Utilities		0.95
Operating interest		0.19
Total direct expenses		12.44
Return over direct expense		22.73
<b>Overhead Expenses</b>		
Hired labor		0.85
Building leases		2.83
RE & pers. property taxes		0.45
Farm insurance		1.12
Utilities		1.63
Dues & professional fees		0.16
Interest		4.01
Mach & bldg depreciation		7.20
Miscellaneous		0.33
Total overhead expenses		18.59
Total dir & ovhd expenses		31.02
Net return		4.15
Labor & management charge		4.84
Net return over lbr & mgt		-0.69
<b>Cost of Production Per Pig Space</b>		
Total direct expense per unit		-
Total dir & ovhd expense per unit		-
With other revenue adjustments		-
With labor and management		-
Est. labor hours per unit		0.32
<b>Other Information</b>		
Number of pigs		6,815
Pigs per pig space (per year)		2.40
Net return per 100 sq. ft.		55.99
Net return per labor hour		12.79
Square feet per pig space		7.41

**Livestock Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return Per Unit)**

**Beef Cow-Calf -- Average Per Cow**

	<u>Avg. Of All Farms</u>	
Number of farms	9	
	Quantity	Value
Beef Calves sold (lb)	186.5	244.76
Transferred out (lb)	397.6	627.50
Cull sales (lb)	52.4	140.04
Other income		25.39
Purchased (lb)	-53.1	-141.27
Transferred in (lb)	-2.5	-104.37
Inventory change (lb)	0.7	351.39
Gross margin		1,143.42
<b>Direct Expenses</b>		
Complete Ration (lb.)	250.7	47.47
Corn (bu.)	8.1	44.38
Corn Silage (lb.)	5,282.3	102.82
Hay, Alfalfa (lb.)	2,387.3	100.75
Hay, Grass (lb.)	2,768.6	114.50
Oats (bu.)	1.4	4.18
Pasture (aum)	3.1	56.83
Other feed stuffs (lb)	933.6	30.47
Breeding fees		22.23
Veterinary		34.24
Supplies		33.92
Fuel & oil		44.62
Repairs		51.75
Custom hire		3.90
Bedding		6.90
Total direct expenses		698.96
Return over direct expense		444.47
<b>Overhead Expenses</b>		
Hired labor		26.03
RE & pers. property taxes		3.72
Farm insurance		6.22
Utilities		15.27
Dues & professional fees		7.93
Mach & bldg depreciation		24.04
Miscellaneous		24.89
Total overhead expenses		108.10
Total dir & ovhd expenses		807.05
Net return		336.37
Labor & management charge		147.21
Net return over lbr & mgt		189.16
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		115.79
Total dir & ovhd expense per unit		133.70
With other revenue adjustments		92.61
With labor and management		117.00
Est. labor hours per unit		11.84
<b>Other Information</b>		
Number of cows		37.7
Pregnancy percentage		95.4
Pregnancy loss percentage		3.9
Culling percentage		13.6
Calving percentage		91.7
Weaning percentage		84.9
Calves sold per cow		0.95
Calf death loss percent		11.7
Cow death loss percent		2.7
Cows per FTE		236.4
Average weaning weight		557
Lb. weaned/exposed female		473
Feed cost per cow		501.39
Avg wgt/ Beef Calves sold		744
Avg price / cwt.		131.27

**Livestock Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return Per Unit)**

**Beef Finishing -- Average Per Head**

	<u>Avg. Of All Farms</u>	
Number of farms	11	
	Quantity	Value
Finish Beef sold (lb)	1,331.3	1,508.03
Transferred out (lb)	11.1	13.14
Other income		-4.24
Purchased (lb)	-354.1	-510.25
Transferred in (lb)	-51.5	-81.26
Inventory change (lb)	-251.3	-182.63
Gross margin		742.80
<b>Direct Expenses</b>		
Corn Gluten (lb.)	22.9	31.38
Corn Distillers Grn (dry) (lb.)	229.2	22.11
Protein Vit Minerals (lb.)	228.2	56.22
Complete Ration (lb.)	23.5	11.26
Corn (bu.)	50.9	368.58
Corn Silage (lb.)	3,630.9	70.26
Hay, Alfalfa (lb.)	338.6	15.04
DDGS (lb.)	533.3	32.84
Other feed stuffs (lb)	169.2	5.01
Veterinary		7.40
Supplies		5.82
Contract production exp.		11.50
Fuel & oil		15.35
Repairs		18.23
Custom hire		1.91
Hired labor		3.89
Hauling and trucking		21.59
Operating interest		18.26
Total direct expenses		716.65
Return over direct expense		26.15
<b>Overhead Expenses</b>		
Farm insurance		5.05
Utilities		2.96
Interest		9.09
Mach & bldg depreciation		27.46
Miscellaneous		6.08
Total overhead expenses		50.64
Total dir & ovhd expenses		767.29
Net return		-24.49
Labor & management charge		46.15
Net return over lbr & mgt		-70.64
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		110.58
Total dir & ovhd expense per unit		114.35
With other revenue adjustments		115.13
With labor and management		118.57
Est. labor hours per unit		2.21
<b>Other Information</b>		
No. purchased or trans in		162
Number sold or trans out		242
Percentage death loss		0.5
Avg. daily gain (lb.)		2.46
Lb. of conc / lb. of gain		5.63
Lb. of feed / lb. of gain		8.09
Feed cost per cwt. of gain		88.66
Feed cost per head		612.69
Average purchase weight		599
Avg wgt / Finish Beef sold		1,326
Avg purch price / cwt.		144.09
Avg sales price / cwt.		113.27



**Livestock Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return Per Unit)**

**Beef Finishing -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>	
Number of farms	11	
	Quantity	Value
Finish Beef sold (lb)	192.65	218.22
Transferred out (lb)	1.61	1.90
Other income		-0.61
Purchased (lb)	-51.24	-73.83
Transferred in (lb)	-7.46	-11.76
Inventory change (lb)	-36.36	-26.43
Gross margin		107.49
<b>Direct Expenses</b>		
Corn Gluten (lb.)	3.32	4.54
Corn Distillers Grn (dry) (lb.)	33.16	3.20
Protein Vit Minerals (lb.)	33.02	8.14
Complete Ration (lb.)	3.41	1.63
Corn (bu.)	7.37	53.34
Corn Silage (lb.)	525.40	10.17
Hay, Alfalfa (lb.)	49.00	2.18
DDGS (lb.)	77.16	4.75
Other feed stuffs (lb)	24.48	0.72
Veterinary		1.07
Supplies		0.84
Contract production exp.		1.66
Fuel & oil		2.22
Repairs		2.64
Custom hire		0.28
Hired labor		0.56
Hauling and trucking		3.12
Operating interest		2.64
Total direct expenses		103.70
Return over direct expense		3.78
<b>Overhead Expenses</b>		
Farm insurance		0.73
Utilities		0.43
Interest		1.32
Mach & bldg depreciation		3.97
Miscellaneous		0.88
Total overhead expenses		7.33
Total dir & ovhd expenses		111.03
Net return		-3.54
Labor & management charge		6.68
Net return over lbr & mgt		-10.22
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		110.58
Total dir & ovhd expense per unit		114.35
With other revenue adjustments		115.13
With labor and management		118.57
Est. labor hours per unit		0.32
<b>Other Information</b>		
No. purchased or trans in		162
Number sold or trans out		242
Percentage death loss		0.5
Avg. daily gain (lb.)		2.46
Lb. of conc / lb. of gain		5.63
Lb. of feed / lb. of gain		8.09
Feed cost per cwt. of gain		88.66
Feed cost per head		612.69
Average purchase weight		599
Avg wgt / Finish Beef sold		1.326
Avg purch price / cwt.		144.09
Avg sales price / cwt.		113.27

**Livestock Enterprise Analysis**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Net Return Per Unit)**

**Dairy -- Average Per Cow**

	<b>Avg. Of All Farms</b>	
Number of farms	5	
	Quantity	Value
Milk sold (hd)	23,889.2	4,776.39
Dairy Calves sold (hd)	0.1	83.23
Transferred out (hd)	-	29.53
Cull sales (hd)	0.1	94.56
Other income		43.76
Transferred in (hd)	0.4	-23.90
Inventory change (hd)	0.1	162.97
Dairy repl net cost		-554.98
Gross margin		4,611.56
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	5,439.5	910.06
Corn (bu.)	84.0	543.26
Corn Silage (lb.)	15,026.0	367.32
Hay, Alfalfa (lb.)	3,877.6	249.24
Haylage, Alfalfa (lb.)	267.0	7.34
Other feed stuffs (lb)	1,182.6	73.22
Breeding fees		36.94
Veterinary		87.42
BST		22.78
Supplies		120.62
Fuel & oil		57.14
Repairs		87.06
Custom hire		79.62
Hauling and trucking		49.58
Marketing		37.16
Total direct expenses		2,728.77
Return over direct expense		1,882.79
<b>Overhead Expenses</b>		
Hired labor		370.90
Farm insurance		27.09
Utilities		62.86
Dues & professional fees		4.62
Interest		77.00
Mach & bldg depreciation		210.54
Miscellaneous		33.80
Total overhead expenses		786.80
Total dir & ovhd expenses		3,515.58
Net return		1,095.99
Labor & management charge		131.09
Net return over lbr & mgt		964.90
<b>Cost of Production Per Cwt. Of Milk</b>		
Total direct expense per unit		11.42
Total dir & ovhd expense per unit		14.71
With other revenue adjustments		15.41
With labor and management		15.95
Est. labor hours per unit		37.31
<b>Other Information</b>		
Number of cows		353.5
Milk produced per cow		23,900
Total milk sold		8,445,320
Lb. of milk sold per FTE		1,793,046
Culling percentage		11.1
Turnover rate		17.7
Cow death loss percent		6.6
Percent of barn capacity		110.4
Feed cost per day		5.89
Feed cost per cwt. of milk		9.00
Feed cost per cow		2,150.44
Avg. milk price per cwt.		19.99

## Summary Tables

### Financial Summary by Years

A better picture of the current financial performance can be seen by comparing this year to previous years in the *Summary by Years* table. All items are taken from the annual report for that year. Monetary values are left in nominal terms unadjusted for inflation. The one exception is the *Net Farm Income (Constant \$)* using the Consumer Price Index (CPI-U) from the U.S. Department of Commerce. This shows the changes in “buying power” for the farmers, compared to the current year. The CPI used is reported below.

<u>Year</u>	<u>CPI-U</u> <u>1982-84=100</u>	<u>Year</u>	<u>CPI-U</u> <u>1982-84=100</u>
1992	140.3	2002	179.9
1993	144.5	2003	184.0
1994	148.2	2004	188.9
1995	152.4	2005	195.3
1996	156.9	2006	201.6
1997	160.5	2007	207.3
1998	163.0	2008	215.2
1999	166.6	2009	214.5
2000	172.2	2010	218.1
2001	177.0	2011	224.9

### Financial Summary by Farm Size (Gross Farm Income)

This table summarizes whole-farm financial performance by size of farm. Farms are categorized based on gross farm income.

### Financial Summary by Farm Type

This table summarizes whole-farm financial performance by type of farm. Farm type is assigned based on greater than 70 percent of sales from that commodity or combination of commodities.

### Financial Summary by Debt To Asset Ratio

This table summarizes whole-farm financial performance by debt level. Farms are categorized based on total farm and nonfarm Debt To Asset Ratio.

### Financial Summary by Age of Operator

This table summarizes whole-farm financial performance based on age of the primary operator.

SUMMARY OF THE WHOLE FARM ANALYSIS BY YEARS  
Southwestern Minnesota Farm Business Management Association  
(Overall averages for all farms reporting)

Row	Items	1992	1993	1994	1995	1996	1997	1998	1999	2000
		----	----	----	----	----	----	----	----	----
1	Number of Farms	201	202	202	216	203	208	210	216	212
	<b>Farm Income Statement</b>									
2	Gross Cash Farm Income	301,907	296,705	306,175	346,838	382,502	359,710	369,573	388,731	422,897
3	Total Cash Farm Expense	236,768	242,616	256,246	277,214	299,610	303,241	305,344	324,802	348,711
4	Inventory Change	-429	4,474	9,254	16,939	12,231	19,769	-21,057	15,633	25,296
5	Depr. & Cap. Adj.	-27,051	-26,997	-27,268	-29,288	-32,424	-35,640	-34,557	-35,800	-17,731
6	Net Farm Income from Operations	37,659	31,567	31,915	57,276	62,699	40,598	8,616	43,762	81,750
7	Gain of Loss on Capital Sales	0	0	0	0	0	0	0	0	0
8	Net Farm Income	37,659	31,567	31,915	57,276	62,699	40,598	8,616	43,762	81,750
9	Net Farm Income (Constant \$)	60,367	49,131	48,432	84,523	89,873	56,888	11,888	59,076	106,769
	<b>Profitability*</b>									
10	Rate of Return on Assets (%)	7	5	5	10	10	6	2	7	12
11	Rate of Return on Equity (%)	6	2	3	13	12	5	-6	7	19
12	Operating Profit Margin (%)	14	12	12	22	21	14	4	16	27
13	Asset Turnover Rate (%)	46	40	41	46	48	44	39	43	45
14	Value of Farm Production	244,243	191,194	207,729	247,690	277,026	262,396	250,717	274,411	313,232
15	Farm Interest Paid	17,943	15,667	17,837	22,084	22,337	22,282	25,358	27,488	27,002
	<b>Liquidity, Repayment and Efficiency</b>									
16	Current Ratio	n/a	1.9	1.8	1.9	2.0	1.6	1.5	1.6	1.7
17	Working Capital	n/a	99,295	91,719	106,941	118,955	91,023	76,325	95,737	112,896
18	Working Capital to Gross Revenue (%)	n/a	33	28	29	30	25	21	24	25
19	Term Debt Coverage Ratio	n/a	n/a	n/a	n/a	n/a	2.2	1.6	1.9	2.3
20	Operating Expense Ratio (%)	72.8	75.1	75.9	70.0	69.6	73.3	80.5	73.1	71.4
21	Interest Expense Ratio (%)	5.9	5.4	5.7	6.1	5.8	6.2	7.5	6.7	6.2
	<b>Solvency (Year-end, Sole Proprietors Only)*</b>									
22	No. of Sole Proprietors	180	178	179	184	173	180	183	185	181
23	Total Assets	596,525	844,030	901,807	944,208	982,750	1,016,308	1,066,565	1,061,579	1,150,838
24	Total Liabilities	227,131	396,899	431,390	452,253	462,505	490,140	522,994	517,040	545,689
25	Net Worth	369,394	447,132	470,418	491,955	520,245	526,168	543,571	544,539	605,149
26	Debt to Asset Ratio (%)	38	47	48	48	47	48	49	49	47
	<b>Acreage Information</b>									
27	Total Acres Owned	251	252	267	256	249	233	250	241	250
28	Total Crop Acres Farmed	586	600	612	625	658	648	697	709	730
29	Crop Acres Owned	203	204	204	211	204	200	219	204	214
30	Crop Acres Cash Rented	286	299	323	340	384	381	402	430	445
31	Crop Acres Share Rented	96	97	86	74	70	67	76	75	70
	<b>Crop Yields</b>									
32	Corn per acre (bu.)	126	61	143	119	133	126	161	156	150
33	Soybeans per acre (bu.)	38	20	46	43	42	42	49	45	46
	<b>Crop Prices Received (cash sales)</b>									
34	Corn per Bushel	2.20	2.11	2.24	2.30	3.04	2.39	1.97	1.66	1.68
35	Soybeans per Bushel	5.39	5.84	5.94	5.56	6.84	7.13	5.72	4.59	4.57
	<b>Household Information</b>									
36	No. Farms Reporting HseHld Info	136	131	134	151	131	123	122	125	120
37	Average Family Size	4.1	3.9	3.8	3.7	3.7	3.7	3.6	3.6	3.5
38	Family living expense	27,428	28,999	29,438	30,439	32,509	34,284	34,097	35,186	38,932
39	Total Family Use of Cash	45,638	45,897	42,179	43,315	47,584	58,051	48,197	50,326	62,349
40	Net Nonfarm Income	12,329	12,387	12,381	14,279	13,506	13,596	15,580	18,430	21,436

\* Beginning in 1993, profitability is analyzed using assets valued at adjusted cost basis while solvency is at estimated fair market value. Prior to 1993, profitability and solvency were analyzed using land valued with a conservative market value and all other assets valued at cost basis.

SUMMARY OF THE WHOLE FARM ANALYSIS BY YEARS (continued)  
Southwestern Minnesota Farm Business Management Association  
(Overall averages for all farms reporting)

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Row
----	----	----	----	----	----	----	----	----	----	----	----
207	188	175	125	107	110	107	99	95	97	107	1
433,698	428,084	504,022	496,771	579,201	609,886	731,897	876,375	878,404	970,471	1,150,686	2
358,506	352,995	400,605	404,743	477,476	494,409	592,841	720,364	743,487	781,053	898,752	3
-17,297	19,571	18,977	31,076	74,307	66,397	135,843	70,051	-21,159	178,977	136,582	4
-21,280	-24,654	-25,990	-24,741	-28,170	-27,176	-32,631	-39,437	-43,972	-48,085	-55,244	5
36,614	70,007	96,404	98,362	147,862	154,698	242,267	186,625	69,787	320,310	333,272	6
0	0	0	0	0	0	0	4,276	0	1,855	3,015	7
36,614	70,007	96,404	98,362	147,862	154,698	242,267	190,901	69,787	322,165	336,287	8
46,523	87,518	117,833	117,108	170,272	172,577	262,836	199,413	73,171	332,210	336,287	9
6	9	11	11	14	13	17	11	3	17	16	10
4	11	16	16	21	19	25	15	2	24	21	11
14	20	24	23	28	28	35	26	9	36	35	12
39	44	44	46	51	48	50	43	37	47	46	13
282,583	345,743	379,505	378,450	478,073	512,081	648,768	658,576	608,181	819,691	871,265	14
27,203	26,739	25,262	21,824	22,210	27,677	30,714	30,232	29,727	34,124	28,447	15
1.5	1.6	1.7	1.9	2.1	2.2	2.5	2.6	2.3	2.9	3.3	16
83,500	117,135	143,632	155,804	218,745	268,567	393,911	446,350	404,104	568,438	659,446	17
20	25	28	30	34	40	46	49	45	50	52	18
1.0	1.6	2.2	2.1	3.0	3.1	4.1	2.9	1.1	5.2	5.6	19
79.5	73.6	71.5	72.1	69.2	68.7	64.1	71.6	83.6	64.8	66.9	20
6.6	5.8	4.8	4.2	3.5	4.3	3.7	3.3	3.3	3.0	2.3	21
178	161	149	109	91	93	91	85	80	80	87	22
1,158,071	1,277,823	1,407,919	1,286,775	1,487,232	1,694,428	2,034,365	2,208,883	2,376,886	2,719,826	2,922,324	23
539,918	578,253	619,279	554,962	618,105	698,239	810,184	837,830	892,734	987,753	1,068,183	24
618,197	699,570	788,640	731,813	869,127	996,189	1,224,181	1,371,053	1,484,151	1,732,074	1,854,181	25
47	45	44	43	42	41	40	38	38	36	37	26
252	265	263	236	241	243	241	249	250	240	232	27
759	784	794	766	792	797	825	822	831	831	791	28
214	226	239	193	199	197	208	222	224	221	202	29
468	490	489	494	532	526	546	536	555	550	532	30
77	68	67	79	61	74	71	64	52	61	57	31
128	151	157	171	192	169	162	172	185	184	173	32
42	49	39	41	55	51	49	44	49	51	46	33
1.72	1.95	2.07	2.28	1.89	2.04	3.00	4.51	3.83	3.67	5.29	34
4.32	4.57	5.73	7.17	5.88	5.57	7.14	10.83	10.15	9.72	11.58	35
124	108	102	73	67	66	60	62	52	46	43	36
3.5	3.6	3.4	3.4	3.4	3.3	3.1	3.0	3.3	3.0	3.0	37
39,793	41,882	43,383	48,371	50,608	51,569	56,229	59,939	62,182	63,848	73,704	38
63,980	51,826	68,470	68,029	74,513	82,670	98,388	100,933	123,590	108,468	119,913	39
20,082	20,846	22,480	23,733	24,774	31,059	25,164	28,456	29,369	29,543	35,042	40

**Financial Summary**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Gross Farm Income)**

	<u>Avg. Of All Farms</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>Over 1,000,000</u>
Number of farms	107	10	25	37	31
<b>Income Statement</b>					
Gross cash farm income	1,150,686	167,914	383,562	666,870	2,800,933
Total cash farm expense	898,752	108,217	252,093	436,454	2,332,929
Net cash farm income	251,934	59,697	131,469	230,416	468,004
Inventory change	136,582	35,250	38,038	96,676	306,815
Depreciation	-55,244	-23,291	-32,087	-47,629	-99,247
Net farm income from operations	333,272	71,656	137,419	279,463	675,572
Gain or loss on capital sales	3,015	200	454	2,280	7,254
Average net farm income	336,287	71,856	137,874	281,744	682,826
Median net farm income	241,009	73,130	126,717	262,717	475,524
<b>Profitability (cost)</b>					
Rate of return on assets	15.7 %	8.6 %	11.5 %	14.7 %	17.6 %
Rate of return on equity	21.3 %	10.2 %	15.0 %	19.9 %	24.1 %
Operating profit margin	34.6 %	26.6 %	29.4 %	34.6 %	35.7 %
Asset turnover rate	45.5 %	32.3 %	39.0 %	42.5 %	49.3 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	950,626	165,327	422,995	728,211	2,005,419
Current liabilities	291,181	53,007	135,080	250,142	577,397
Current ratio	3.26	3.12	3.13	2.91	3.47
Working capital	659,446	112,320	287,915	478,069	1,428,022
Working capital to gross inc	52.4 %	57.7 %	70.2 %	64.3 %	46.9 %
Term debt coverage ratio	5.60	4.25	3.69	4.59	7.11
Replacement coverage ratio	3.93	2.44	2.50	3.13	5.19
<b>Solvency (end of year at market)</b>					
Number of farms	107	10	25	37	31
Total farm assets	2,825,658	1,045,021	1,706,186	2,686,765	4,803,023
Total farm liabilities	1,067,961	319,924	635,256	1,038,508	1,812,575
Total assets	3,109,470	1,191,566	2,001,709	3,060,302	5,042,233
Total liabilities	1,132,769	348,685	701,283	1,104,783	1,887,656
Net worth	1,976,701	842,881	1,300,426	1,955,519	3,154,577
Net worth change	318,987	90,625	167,452	294,365	580,707
Farm debt to asset ratio	38 %	31 %	37 %	39 %	38 %
Total debt to asset ratio	36 %	29 %	35 %	36 %	37 %
<b>Nonfarm Information</b>					
Net nonfarm income	35,042	50,547	42,090	26,674	35,842
Farms reporting living expenses	43	3	13	15	11
Total family living expense	73,704	-	72,726	76,414	70,683
Total living, invest, cap. purch	119,913	-	121,827	109,164	132,279
<b>Crop Acres</b>					
Total acres owned	232	173	160	236	333
Total crop acres	791	207	454	778	1,363
Total crop acres owned	202	72	154	219	289
Total crop acres cash rented	532	91	261	505	988
Total crop acres share rented	57	44	39	54	86

**Financial Summary**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Farm Type)**

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Hog</u>	<u>Crop and Hog</u>	<u>Crop and Beef</u>	<u>Other</u>
Number of farms	107	66	5	5	7	18
<b>Income Statement</b>						
Gross cash farm income	1,150,686	707,787	8,812,827	1,513,200	983,307	359,303
Total cash farm expense	898,752	481,357	8,374,700	1,209,868	714,391	238,608
Net cash farm income	251,934	226,430	438,126	303,332	268,916	120,696
Inventory change	136,582	88,893	891,525	235,130	23,168	46,106
Depreciation	-55,244	-46,433	-154,590	-68,032	-47,887	-29,055
Net farm income from operations	333,272	268,890	1,175,062	470,429	244,198	137,747
Gain or loss on capital sales	3,015	3,532	-	1,599	-	303
Average net farm income	336,287	272,422	1,175,062	472,028	244,198	138,050
Median net farm income	241,009	241,226	746,928	346,004	233,535	112,348
<b>Profitability (cost)</b>						
Rate of return on assets	15.7 %	14.0 %	19.4 %	18.4 %	12.9 %	13.9 %
Rate of return on equity	21.3 %	18.1 %	31.2 %	26.9 %	17.7 %	23.4 %
Operating profit margin	34.6 %	31.4 %	38.0 %	33.8 %	29.9 %	35.4 %
Asset turnover rate	45.5 %	44.7 %	50.9 %	54.5 %	43.1 %	39.3 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	950,626	808,449	3,870,894	1,123,009	999,781	253,794
Current liabilities	291,181	216,957	1,636,950	339,704	330,726	209,510
Current ratio	3.26	3.73	2.36	3.31	3.02	1.21
Working capital	659,446	591,492	2,233,945	783,304	669,055	44,284
Working capital to gross inc	52.4 %	76.5 %	23.4 %	46.1 %	68.9 %	11.3 %
Term debt coverage ratio	5.60	5.43	6.54	4.52	6.78	2.19
Replacement coverage ratio	3.93	3.51	5.54	3.75	3.79	1.87
<b>Solvency (end of year at market)</b>						
Number of farms	107	66	5	5	7	18
Total farm assets	2,825,658	2,551,464	7,415,711	3,331,499	2,232,461	1,507,250
Total farm liabilities	1,067,961	915,631	3,400,064	1,370,541	957,693	664,593
Total assets	3,109,470	2,849,187	7,758,677	3,578,612	2,374,993	1,736,946
Total liabilities	1,132,769	980,567	3,426,950	1,407,955	1,037,238	724,710
Net worth	1,976,701	1,868,621	4,331,727	2,170,657	1,337,755	1,012,236
Net worth change	318,987	279,260	897,797	415,500	233,949	115,545
Farm debt to asset ratio	38 %	36 %	46 %	41 %	43 %	44 %
Total debt to asset ratio	36 %	34 %	44 %	39 %	44 %	42 %
<b>Nonfarm Information</b>						
Net nonfarm income	35,042	37,506	58,401	30,628	29,268	29,166
Farms reporting living expenses	43	29	1	2	3	5
Total family living expense	73,704	73,677	-	-	-	79,281
Total living, invest, cap. purch	119,913	131,683	-	-	-	95,470
<b>Crop Acres</b>						
Total acres owned	232	242	215	273	126	122
Total crop acres	791	869	941	1,203	854	245
Total crop acres owned	202	217	246	341	124	58
Total crop acres cash rented	532	585	664	861	657	169
Total crop acres share rented	57	67	32	-	73	17

**Financial Summary**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Debt To Asset Ratio)**

	<u>Avg. Of All Farms</u>	<u>Less than 20%</u>	<u>20% - 40%</u>	<u>40% - 60%</u>	<u>60% - 80%</u>
Number of farms	107	17	43	33	12
<b>Income Statement</b>					
Gross cash farm income	1,150,686	734,396	648,593	2,147,433	970,825
Total cash farm expense	898,752	442,610	404,040	1,848,184	842,424
Net cash farm income	251,934	291,786	244,553	299,249	128,401
Inventory change	136,582	106,265	62,760	257,991	129,015
Depreciation	-55,244	-42,043	-43,026	-82,662	-47,408
Net farm income from operations	333,272	356,008	264,287	474,578	210,007
Gain or loss on capital sales	3,015	11,455	1,959	1,236	238
Average net farm income	336,287	367,463	266,246	475,814	210,245
Median net farm income	241,009	261,775	241,009	286,179	155,762
<b>Profitability (cost)</b>					
Rate of return on assets	15.7 %	16.3 %	14.3 %	16.9 %	15.2 %
Rate of return on equity	21.3 %	16.7 %	18.0 %	25.6 %	42.5 %
Operating profit margin	34.6 %	39.3 %	35.3 %	34.0 %	28.5 %
Asset turnover rate	45.5 %	41.6 %	40.4 %	49.7 %	53.4 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	950,626	1,053,741	726,845	1,353,412	645,330
Current liabilities	291,181	19,007	185,234	536,969	419,001
Current ratio	3.26	55.44	3.92	2.52	1.54
Working capital	659,446	1,034,734	541,611	816,444	226,329
Working capital to gross inc	52.4 %	126.1 %	78.1 %	34.6 %	21.2 %
Term debt coverage ratio	5.60	76.75	4.90	5.61	2.39
Replacement coverage ratio	3.93	6.68	3.31	4.45	2.18
<b>Solvency (end of year at market)</b>					
Number of farms	107	17	43	33	12
Total farm assets	2,825,658	3,176,055	2,501,293	3,527,124	1,934,975
Total farm liabilities	1,067,961	536,608	829,945	1,619,045	1,255,668
Total assets	3,109,470	3,511,277	2,845,638	3,774,466	2,054,650
Total liabilities	1,132,769	605,140	893,336	1,687,407	1,301,552
Net worth	1,976,701	2,906,137	1,952,302	2,087,059	753,098
Net worth change	318,987	411,202	267,537	424,550	125,104
Farm debt to asset ratio	38 %	17 %	33 %	46 %	65 %
Total debt to asset ratio	36 %	17 %	31 %	45 %	63 %
<b>Nonfarm Information</b>					
Net nonfarm income	35,042	39,195	36,518	30,616	32,870
Farms reporting living expenses	43	4	20	13	5
Total family living expense	73,704	-	69,659	69,159	101,435
Total living, invest, cap. purch	119,913	-	117,113	96,528	133,982
<b>Crop Acres</b>					
Total acres owned	232	356	234	224	97
Total crop acres	791	717	702	1,017	718
Total crop acres owned	202	214	212	224	111
Total crop acres cash rented	532	485	426	731	520
Total crop acres share rented	57	18	63	61	87



**Financial Summary**  
**Southwestern Minnesota Farm Business Management Association**  
**(Farms Sorted By Age Of Operator)**

	<u>Avg. Of All Farms</u>	<u>Less Than 31</u>	<u>31 - 40</u>	<u>41 - 50</u>	<u>51 - 60</u>	<u>Over 60</u>
Number of farms	107	6	14	17	46	24
<b>Income Statement</b>						
Gross cash farm income	1,150,686	286,174	766,799	697,994	1,684,598	888,074
Total cash farm expense	898,752	199,892	588,605	468,192	1,415,019	569,855
Net cash farm income	251,934	86,282	178,195	229,802	269,579	318,219
Inventory change	136,582	85,127	140,397	102,755	182,514	83,143
Depreciation	-55,244	-32,836	-45,824	-46,842	-66,882	-49,987
Net farm income from operations	333,272	138,573	272,768	285,715	385,211	351,374
Gain or loss on capital sales	3,015	-	1,974	632	4,317	3,568
Average net farm income	336,287	138,573	274,742	286,347	389,529	354,942
Median net farm income	241,009	148,085	264,475	261,949	237,656	257,071
<b>Profitability (cost)</b>						
Rate of return on assets	15.7 %	17.6 %	16.3 %	15.7 %	15.4 %	16.2 %
Rate of return on equity	21.3 %	44.6 %	24.6 %	19.8 %	22.1 %	18.7 %
Operating profit margin	34.6 %	38.0 %	33.7 %	33.3 %	34.3 %	36.1 %
Asset turnover rate	45.5 %	46.3 %	48.4 %	47.2 %	44.8 %	44.7 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	950,626	247,310	731,991	794,300	1,133,954	1,013,344
Current liabilities	291,181	119,508	252,255	166,863	457,313	126,444
Current ratio	3.26	2.07	2.90	4.76	2.48	8.01
Working capital	659,446	127,801	479,737	627,438	676,641	886,900
Working capital to gross inc	52.4 %	36.7 %	53.7 %	80.4 %	37.2 %	92.1 %
Term debt coverage ratio	5.60	4.05	5.28	5.44	4.99	8.83
Replacement coverage ratio	3.93	3.82	4.33	3.50	3.73	4.61
<b>Solvency (end of year at market)</b>						
Number of farms	107	6	14	17	46	24
Total farm assets	2,825,658	954,254	2,028,999	2,155,584	3,396,346	3,139,045
Total farm liabilities	1,067,961	652,503	952,657	775,654	1,412,885	785,033
Total assets	3,109,470	1,118,192	2,148,073	2,484,764	3,695,124	3,488,102
Total liabilities	1,132,769	720,495	1,014,344	861,587	1,471,927	846,956
Net worth	1,976,701	397,698	1,133,729	1,623,177	2,223,197	2,641,146
Net worth change	318,987	121,141	218,258	217,426	370,037	401,301
Farm debt to asset ratio	38 %	68 %	47 %	36 %	42 %	25 %
Total debt to asset ratio	36 %	64 %	47 %	35 %	40 %	24 %
<b>Nonfarm Information</b>						
Net nonfarm income	35,042	41,468	24,379	37,539	39,791	28,783
Farms reporting living expenses	43	1	5	7	21	9
Total family living expense	73,704	-	56,794	95,297	75,324	62,149
Total living, invest, cap. purch	119,913	-	108,839	118,719	122,295	125,477
<b>Crop Acres</b>						
Total acres owned	232	41	122	136	269	339
Total crop acres	791	315	778	782	850	811
Total crop acres owned	202	48	128	143	243	248
Total crop acres cash rented	532	267	573	622	528	518
Total crop acres share rented	57	-	76	18	79	45

## **Appendix I**

### **Whole Farm Analysis Procedures and Measures**

The whole-farm reports include summary financial statements and measures for all farms included in this report. Rounding of individual items may have caused minor discrepancies between those items and the printed totals which are calculated before rounding.

#### **Financial Summary**

This table summarizes key measures reported in several of the following tables.

##### ***Income Statement***

This section summarizes key totals from the Income Statement table. *Average Net Farm Income* is the mean or average farm earnings of the group calculated on an accrual adjusted basis. *Median Net Farm Income* is the farm earnings of the median or middle farm in the group. If it is lower than the average, the average earnings are skewed because some farms had much higher earnings than the rest of the group. If it is higher than the average, the average earnings are skewed because some farms had much lower earnings than the rest of the group.

##### ***Profitability***

See the Profitability Measures section below for an explanation of these measures.

##### ***Liquidity and Repayment***

See the Financial Standards Measures and Liquidity Measures sections below for an explanation of these measures.

##### ***Solvency***

This section summarizes key measures from the Balance Sheet reports.

##### ***Nonfarm Information***

This section summarizes non-farm earnings for all farms and family living withdrawals for those sole proprietors who kept accurate family living records. More detail is included on the Household and Personal Expenses and Nonfarm Summary pages.

##### ***Crop Acres***

This section summarizes acres used for cropping from the Crop Production and Marketing table.

#### **Financial Standards Measures**

This table contains the Farm Financial Standards Council's 21 financial measures for evaluating a farm's financial position and performance.

## ***Liquidity***

*Current Ratio* is calculated by dividing the total current farm assets by the total current farm liabilities.

*Working Capital* is calculated by subtracting current farm liabilities from current farm assets.

*Working Capital to Gross Income* is *Working Capital* divided by *Gross Revenues (accrual)*.

## ***Solvency***

*Farm Debt to Asset Ratio* is calculated by dividing the total farm liabilities by the total farm assets. It measures the proportion of farm assets financed by debt capital.

*Farm Equity to Asset Ratio* is calculated by dividing farm equity or net worth by the total farm assets. It measures the proportion of the farm assets financed by the owner's equity as opposed to debt. This is the opposite of the debt to asset ratio. These two measures always add up to 100% because they describe how total farm assets are financed.

*Farm Debt to Equity Ratio* measures farm debt relative to farm equity. It is calculated by dividing the total farm liabilities by the total farm net worth. The debt to equity ratio measures the amount of borrowed capital being employed for every dollar of equity capital.

## ***Profitability***

*Rate of Return on Farm Assets* can be thought of as the average interest rate being earned on all investments in the farm or ranch business. If assets are valued at market value, the rate of return on assets can be looked at as the “opportunity cost” of farming versus alternate investments. If assets are valued at cost value, the rate of return on assets more closely represents the actual return on the average dollar invested in the farm. The rate of return on farm assets is calculated as follows:  $\text{Rate of Return on Assets} = \text{Return on Farm Assets} \div \text{Average Farm Investment}$ , where:  $\text{Return on Farm Assets} = \text{Net Farm Income} + \text{Farm Interest} - \text{Value of Operator's Labor \& Management}$ , and  $\text{Average Farm Investment} = (\text{Beginning Total Farm Assets} + \text{Ending Total Farm Assets}) \div 2$ .

*Rate of Return on Farm Equity* represents the interest rate being earned on farm net worth. If assets are valued at market value, this return can be compared to returns available if the assets were liquidated and invested in alternate investments. If assets are valued at cost value, this more closely represents the actual return on the funds that have been invested or retained in the business. The rate of return on farm equity is calculated as follows:  $\text{Rate of Return on Equity} = \text{Return on Farm Equity} \div \text{Average Farm Net Worth}$ , where:  $\text{Return on Farm Equity} = \text{Net Farm Income} - \text{Value of Operator's Labor \& Management}$ , and  $\text{Average Farm Net Worth} = (\text{Beginning Farm Net Worth} + \text{Ending Farm Net Worth}) \div 2$ .

*Operating Profit Margin* is a measure of the operating efficiency of the business. It is calculated as follows:  $\text{Operating Profit Margin} = \text{Return to Farm Assets} \div \text{Value of Farm Production}$ . If expenses are held in line relative to the value of output produced, the farm will have a healthy operating profit margin. A low net profit margin may be caused by low prices, high operating expenses, or inefficient production.

*Net Farm Income* represents the returns to unpaid labor, management, and equity capital invested in the business.

EBITDA is Earnings Before Interest, Taxes, Depreciation and Amortization. It is Net Farm Income from Operations from the income statement plus interest expense and depreciation expense. This measure is common in commercial financial analysis but is not commonly used in agriculture.

### ***Repayment Capacity***

*Capital Debt Repayment Capacity* is *Net Farm Income From Operations* plus *Depreciation, Personal Income*, and *Interest on Term Debt* minus *Family Living/Owner Withdrawals, Payments on Personal Debt* and *Income Taxes Paid*. This represents total earnings available for debt repayment and cash capital replacement.

*Capital Debt Repayment Margin* is *Capital Debt Repayment Capacity* minus *Scheduled Term Debt Payments*. This is the amount by which earnings available for debt repayment exceeded payments due.

*Replacement Margin* is *Capital Debt Repayment Margin* minus *Cash Replacement Allowance*. This is the amount by which earnings available for debt repayment and replacement exceed payments due and cash replacement needs.

*Term Debt Coverage Ratio* measures whether the business generated enough income to cover term debt payments. It is calculated by dividing the funds generated by the business for debt repayment (net cash farm income + nonfarm income + interest expense - family living expense - income taxes) by total term debt payments (annual scheduled principal and interest payments on intermediate and long term debt). A ratio less than 1.0 indicates that the business did not generate sufficient cash to meet scheduled payments in the past year. A ratio greater than 1.0 indicates the business generated enough cash to pay all term debt payments.

*Replacement Coverage Ratio* measures whether the business generated enough income to cover scheduled term debt payments plus estimated cash capital replacement needs. A ratio less than 1.0 indicates that the business did not generate sufficient income to meet replacement needs. A ratio greater than 1.0 indicates the business generated enough income to pay all term debt payments and cover an allowance for capital replacement.

### ***Efficiency***

*Asset Turnover Rate* is a measure of efficiency in using capital. It is calculated as follows:  
$$\text{Asset Turnover Rate} = \text{Value of Farm Production} \div \text{Total Farm Assets}.$$

The last four ratios reflect the distribution of gross income to cover operating expenses and generate farm income. The sum of the operating expense ratio, the depreciation expense ratio, and the interest expense ratio equals the percent of gross income used to pay business expenses. The amount remaining is net farm income. The gross farm income used to calculate these ratios is the accrual gross farm income.

*Operating Expense Ratio* is calculated as (Total Farm Operating Expense - Farm Interest Expense) ÷ Gross Farm Income. This ratio indicates the percent of the gross farm income that

was used to pay operating expenses. Total farm operating expense is the accrual total operating expense.

*Depreciation Expense Ratio* is calculated as  $\text{Depreciation} \div \text{Gross Farm Income}$ . This ratio indicates the percent of the gross farm income that was used to cover depreciation and other capital adjustments.

*Interest Expense Ratio* is calculated as  $\text{Farm Interest Expense} \div \text{Gross Farm Income}$ . This ratio indicates the percent of the gross farm income used for farm interest expenses. This is the same ratio as the accrual interest as a percent of income from the Liquidity table.

*Net Farm Income Ratio* is calculated as  $\text{Net Farm Income} \div \text{Gross Farm Income}$ . This ratio indicates the percent of the gross farm income that remained after all expenses.

## **Farm Income Statement**

The Farm Income Statement is a summary of income, expenses, and resultant profit or loss from farming operations during the calendar year. The first section lists cash farm income from all sources. The second section lists *cash* expenses. “Interest” includes only interest actually paid. No opportunity charges on farm equity capital or unpaid labor are included. The difference between *Gross Cash Farm Income* and *Total Cash Expense* is the *Net Cash Farm Income*. This is net farm income on a *cash* basis.

The third and fourth sections deal with noncash changes in the farm business. The *Inventory Changes* and *Depreciation* sections are used to convert the cash income statement (Net Cash Farm Income) derived from the first two sections into an accrual income statement. The resulting “Net Farm Income” represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). In other words, it represents the return to all of the resources which are owned by the farm family and, hence, not purchased or paid a wage. However, it does not include any asset appreciation, debt forgiveness or asset repossessions.

## **Profitability Measures**

Profitability is measured using assets valued first at cost and then at market. The reports include five measures of profit followed by the values used to calculate the measures.

*Net Farm Income* is repeated from the Farm Income Statement report. When assets are valued at market, it includes the change in market valuation of capital for the year.

*Rate of Return on Assets* is the *Return to Farm Assets* divided by *Average Farm Assets*.

*Rate of Return on Equity* is the *Return to Farm Equity* divided by *Average Farm Equity*.

*Operating Profit Margin* is the *Return to Farm Assets* divided by *Value of Farm Production*.

*Asset Turnover Rate* is the *Value of Farm Production* divided by *Average Farm Assets*.

*Farm Interest Expense* is the accrued interest cost so it will be different from the cash interest paid shown in the Farm Income Statement.

*Value of Operator's Labor and Management* is its opportunity cost. It is assigned by farm within suggested guidelines.

*Return on Farm Assets* is calculated by adding *Farm Interest Expense* and *Net Farm Income* and then subtracting the *Value of Operator's Labor and Management*.

*Average Farm Assets* is the average of beginning and ending total farm assets for all farms, not just those included in the Balance Sheet report.

*Return to Farm Equity* is calculated by subtracting the *Value of Operator's Labor and Management* from *Net Farm Income*.

*Average Farm Equity* is the average of beginning and ending farm net worth.

*Value of Farm Production* is gross farm income minus feeder livestock and feed purchased and adjusted for inventory changes in crops, market livestock and breeding livestock.

## **Liquidity and Repayment Capacity Measures**

*Current Ratio* is total *Current Assets* divided by total *Current Liabilities*.

*Working Capital* is total *Current Assets* minus total *Current Liabilities*.

*Working Capital to Gross Income* is *Working Capital* divided by *Gross Revenues (accrual)*.

*Current Assets* are taken from the ending balance sheet and include all assets that will be sold or used up in production within one business year.

*Current Liabilities* are taken from the ending balance sheet and include all loans and other debt due to be repaid within one business year. Principal due within a twelve months on intermediate and long term loans is included.

*Gross Revenues (accrual)* is gross cash farm income from the income statement adjusted for inventory changes in crops and feed, market livestock, accounts receivable, hedging accounts, breeding livestock and other income related inventories.

*Net Farm Income from Operations* is from the Income Statement.

*Depreciation* is the total depreciation from the Income Statement. It is added as a source of repayment because it is a non-cash expense that was subtracted to arrive at *Net Farm Income From Operations*.

*Personal Income* is the average for all farms, not including *Gifts and Inheritances*.

*Family Living/Owner Withdrawals* is the amount of owner withdrawals for family living, partnership withdrawals, and corporate dividends. Reported withdrawals are adjusted to include any discrepancy with actual cash disappearance.

*Payments on personal debt* is the total principal payments made during the year on all non-farm loans.

*Income Taxes Paid* are total federal, state, and social security taxes paid during the year on farm and personal earnings.

*Interest on Term Debt* is the amount of interest paid on intermediate and long term loans during the year. Interest is added as a source of repayment because it was previously subtracted to arrive at *Net Farm Income from Operations*.

*Capital Debt Repayment Capacity* is *Net Farm Income From Operations* plus *Depreciation, Personal Income*, and *Interest on Term Debt* minus *Family Living/Owner Withdrawals*, *Payments on Personal Debt* and *Income Taxes Paid*. This represents total earnings available for debt repayment and cash capital replacement.

*Scheduled Term Debt Payments* is the scheduled amount of principal and interest payments due on farm intermediate and long term loans from the beginning balance sheet.

*Capital Debt Repayment Margin* is *Capital Debt Repayment Capacity* minus *Scheduled Term Debt Payments*. This is the amount by which earnings available for debt repayment exceeded payments due.

*Cash Replacement Allowance* is the estimated amount of cash needed to cover the portion of capital replacement needs that normally come from cash flow. It is estimated for each operator based on their financial structure.

*Replacement Margin* is *Capital Debt Repayment Margin* minus *Cash Replacement Allowance*. This is the amount by which earnings available for debt repayment and replacement exceed payments due and cash replacement needs.

*Term Debt Coverage Ratio* is *Capital Debt Repayment Capacity* divided by *Scheduled Term Debt Payments*. This is how many times scheduled payments are covered by repayment capacity.

*Replacement Coverage Ratio* is *Capital Debt Repayment Capacity* divided by the total of *Scheduled Term Debt Payments* and the *Cash Replacement Allowance*. This represents how many times scheduled payments and cash replacement needs are covered by repayment capacity.

## **Balance Sheets at Cost and Market Values**

These tables include all farm and personal assets and liabilities reported by these farms on their beginning and ending balance sheets. Government crop loans are treated consistently as loans

on these tables, meaning that the full asset value is included as an asset and total accrued interest and outstanding principal balances are included as liabilities. Capital assets are valued at original purchase price minus economic depreciation on the Cost Value table. Assets are valued at a conservative market value on the Market Value table. Deferred liabilities are included on the Market Value table. Deferred liabilities are an estimate of the taxes that would be due if the business was liquidated on the date of the balance sheet.

## **Statement of Cash Flows**

This table reports the sources from which cash was available or obtained and where that cash was used or remains at the end of the year.

## **Crop Production and Marketing Summary**

This table contains three sections. The first section reports average acreage by tenure and general use. The next two sections show average price received from cash sales and average yields for major crops.

## **Household and Personal Expenses**

For those farms that kept records, the household and personal expenses are summarized in this table. Since not all farms keep these records, the number of farms may be different for each group. Averages are determined by the number of farms keeping these records.

## **Operator and Labor Information**

This table has four sections. The first reports the averages for the number of operators per farm, the operator's age, and the number of years farming. The second section reports various measures and results per operator compared to per farm in other reports.

The third section reports the amount of labor used and the returns to that labor. *Total Unpaid Labor Hours* and *Total Hired Labor Hours* are based on farmers' estimates of labor use. No labor records are kept for unpaid labor. *Value of Farm Production/Hour* is the Value of Farm Production divided by Total Labor Hours per Farm. *Net Farm Income/Unpaid Hour* is Net Farm Income divided by Total Unpaid Labor Hours.

The fourth section reports the number of partnerships and withdrawals in each grouping.

## **Nonfarm Summary**

This table reports the income from nonfarm sources which is included in a farmer's total net income. Not all farms have nonfarm income, but the figure reported is the average over all farms not just those reporting nonfarm income. Also reported are the beginning and ending values for nonfarm assets for all farms (not just sole proprietors).



## Appendix II

# Crop Enterprise Analysis Procedures and Measures

The Crop Enterprise Analysis tables show the profitability of each crop enterprise produced by five or more farms.

*Gross Return* is the average Yield multiplied by the Value Per Unit plus any other production or income related to the crop. Value Per Unit for cash crops is the average sales price for crops sold before the end of the year and the average ending inventory value for crops remaining unsold. For feed crops, it is the estimated harvest-time value. LDP payments and other commodity-specific income are added to estimate the total value received for crop production.

*Direct Expenses* include expenses that are directly related to the production of the specific crop. Most direct expenses are directly assigned to production of the crop and simply divided by acres. Some, such as Fuel and Oil and Repairs, which are difficult to assign directly to specific fields or crops, are determined by allocating the total annual expense across all enterprises using allocation factors entered for each crop.

*Overhead Expenses* are also determined by allocating the total annual expense across all enterprises using allocation factors entered for each crop.

*Net Return per Acre* is the Gross Return per Acre minus Total Direct and Overhead Expenses.

*Net return with government payments* is Net Return per Acre plus Government Payments. Government Payments includes only direct payments and counter-cyclical payments. Payments that are directly attached to production of the crop, such as LDP and disaster payments are included in Gross Return. Because direct government payments have been decoupled from actual production, these payments are generally allocated to all crops excluding vegetables and pasture. This is done for each farm by allocating the direct payments from the whole farm to these crops.

*Net Return over Labor and Management* is calculated by allocating the farmer's charge for unpaid labor and management across all enterprises and subtracting it from Net Return With Government Payments.

*Cost of Production* is calculated by dividing the total expense for each category by the yield per acre. *Total Expense Less Government and Other Income* is total expense minus government payments, income from secondary products, and other income, divided by yield per acre.

*Machinery Cost Per Acre* is the sum of fuel and oil, repairs, custom hire expense, machinery lease payments, machinery depreciation, and interest on intermediate debt divided by acres.

*Estimated Labor Hours Per Acre* is calculated by allocating the farmer's estimate of total operator and hired labor hours for the year across all enterprises.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms have a certain crop enterprise, that information is not reported. If there are fewer than 25 farms, the high and low groups are not reported.

## Appendix III

# Livestock Enterprise Analysis Procedures and Measures

The Livestock Enterprise Analysis tables show the profitability of each livestock enterprise produced by five or more farms.

*Gross Margin* includes product and livestock sales, cull sales, the value of offspring transferred out of the enterprise, the value of inventory change from beginning to end of year, and any other income assigned to the enterprise. Livestock purchases and the value of animals transferred in from other enterprises are subtracted.

*Direct Expenses* include expenses that are directly related to the specific livestock enterprise. Feed and most other direct expenses are directly assigned based on farm records. Some, such as Fuel and Oil and Repairs, which are difficult to assign directly to enterprises, are determined by allocating the total annual expense across all enterprises using allocation factors entered for each farm.

*Overhead Expenses* are also determined by allocating the total annual expense across all enterprises using allocation factors entered for each farm.

*Net Return* is the Gross Return minus Total Direct and Overhead Expenses.

*Net Return over Labor and Management* is calculated by allocating the farmer's charge for unpaid labor and management across all enterprises and subtracting it from Net Return.

*Estimated Labor Hours* is calculated by allocating the farmer's estimate of total operator and hired labor hours for the year across all enterprises.

*Cost of Production* is calculated by dividing the total expense for each category by Total Production. For grow/finish enterprises, the Purchases and Transfers In are included in direct expense. Cull sales, other offspring sales, and any other miscellaneous income are subtracted and replacement purchases and transfers in are added to arrive at the cost *With other revenue adjustments*. *With Labor and Management* is the cost with other revenue adjustments plus the producer's charge for operator's labor and management. This is the breakeven price for the primary product to provide a return for operator labor and management.

The last section of each livestock table contains both economic and technical efficiency measures. *Lbs. feed per lb. of gain* is the pounds of total feed divided by Total production. For grains, these pounds per bushel are used: corn, 56; oats, 32; barley, 48; grain sorghum, 56; wheat, 60; and millet, 48. For these forages, the units are converted to pounds and then adjusted by these factors: alfalfa haylage, 0.5; corn silage, 0.33; oatlage, 0.5; sorghum silage, 0.33; and small grain silage, 0.33.

The calving and weaning percentages are calculated as the number of calves which are calved and weaned, respectively, divided by the number of cows which are supposed to bear young.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms have a certain livestock enterprise, that information is not reported. If there are fewer than 25 farms, the high and low groups are not reported.

## Appendix IV

### Prices Used In the Analysis Report

Item	Beginning Inventory	Feed	Ending Inventory
All Corn/bu.	5.89	6.55	6.25
Oats/bu.	3.00	3.69	3.40
All Wheat/bu.	7.25	8.51	8.90
Soybeans/bu.	13.38	12.67	11.46
Alfalfa hay/t. (avg quality)	90.00	110.00	110.00
Alfalfa hay/t. (dairy qual)	100.00	120.00	120.00
Alfalfa haylage/t	40.00	55.00	55.00
Grass/Mixed hay/r	80.00	100.00	100.00
Corn silage/t.	35.00	35.00	35.00
Oatlage/t.	14.00	15.00	16.00
Oats straw/bale/ton	3.00/70	3.00/70	3.75/125
Cornstalks/t.	25.00	25.00	30.00

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Enterprise production valued at actual selling price if sold or contracted, inventory price for balance. All feeds are valued on an as fed moisture basis. To correct for low-test weights on corn use: Bu. x test weight/56 lbs.

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#### Other Prices Used:

Pasture:	\$15.00/AUM
Value of milk used in home	\$ 2.50/gallon
Value of milk fed calves	\$ 1.50/gallon

Depreciation is calculated by using a 5% rate for buildings, 10% for machinery, 20% for beef cattle and sheep and 33% for breeding hogs and dairy cows. The economic depreciation is calculated by taking the beginning cost (book) value, plus new purchases (boot), less book value of sold items multiplied by the appropriate percentage rate.

Value of operator's labor is calculated by using this formula: For sole proprietors and partnerships, labor and management is valued at \$20,000 per operator plus 5% of the value of farm production, with a minimum of \$30,000 for a full-time farm operator.



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