

SOUTHWESTERN MINNESOTA
FARM BUSINESS MANAGEMENT ASSOCIATION

2017
ANNUAL REPORT

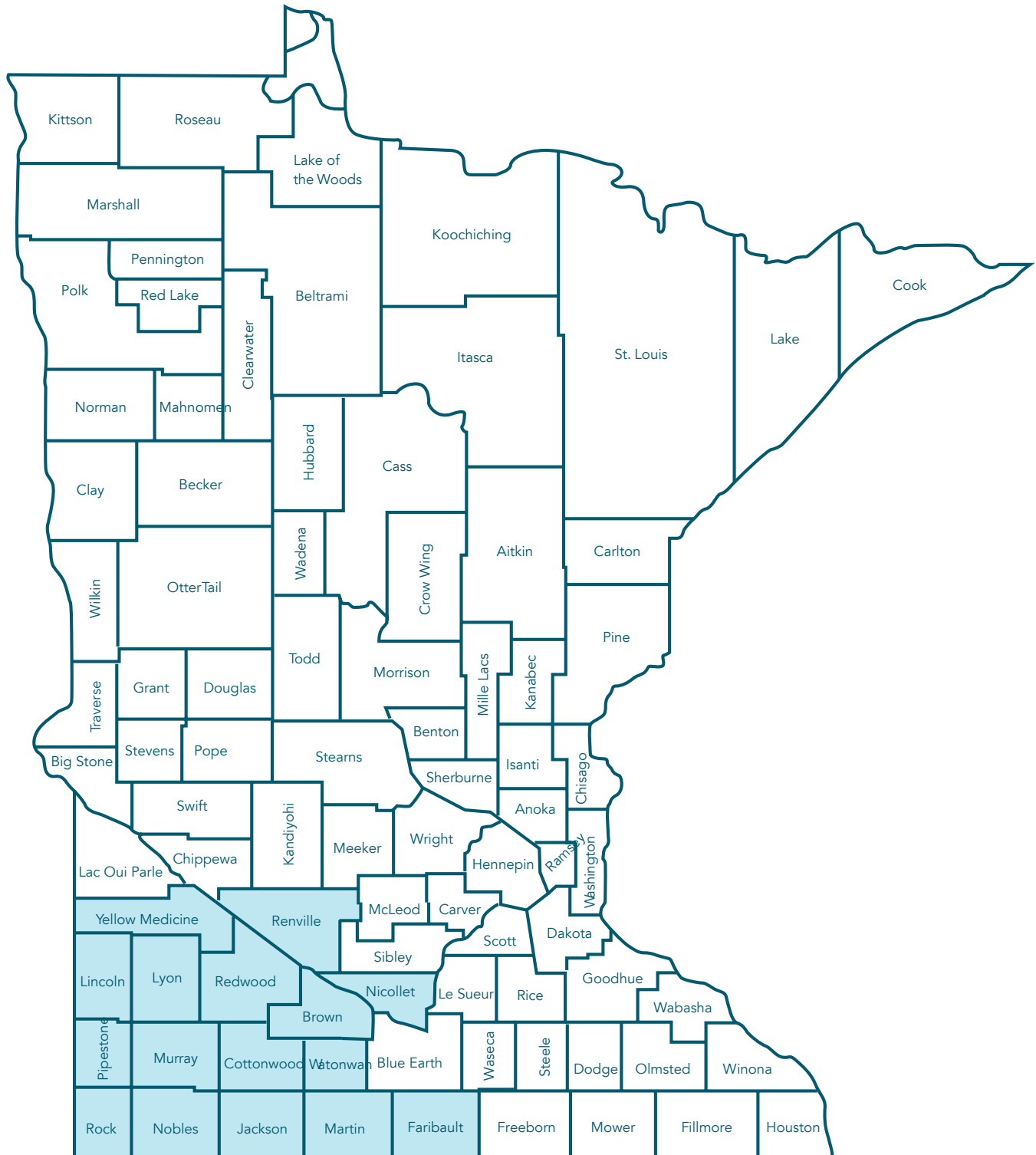


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Center for Farm Financial Management · Department of Applied Economics · University of Minnesota Extension
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SOUTHWEST MINNESOTA FARM BUSINESS MANAGEMENT ASSOCIATION

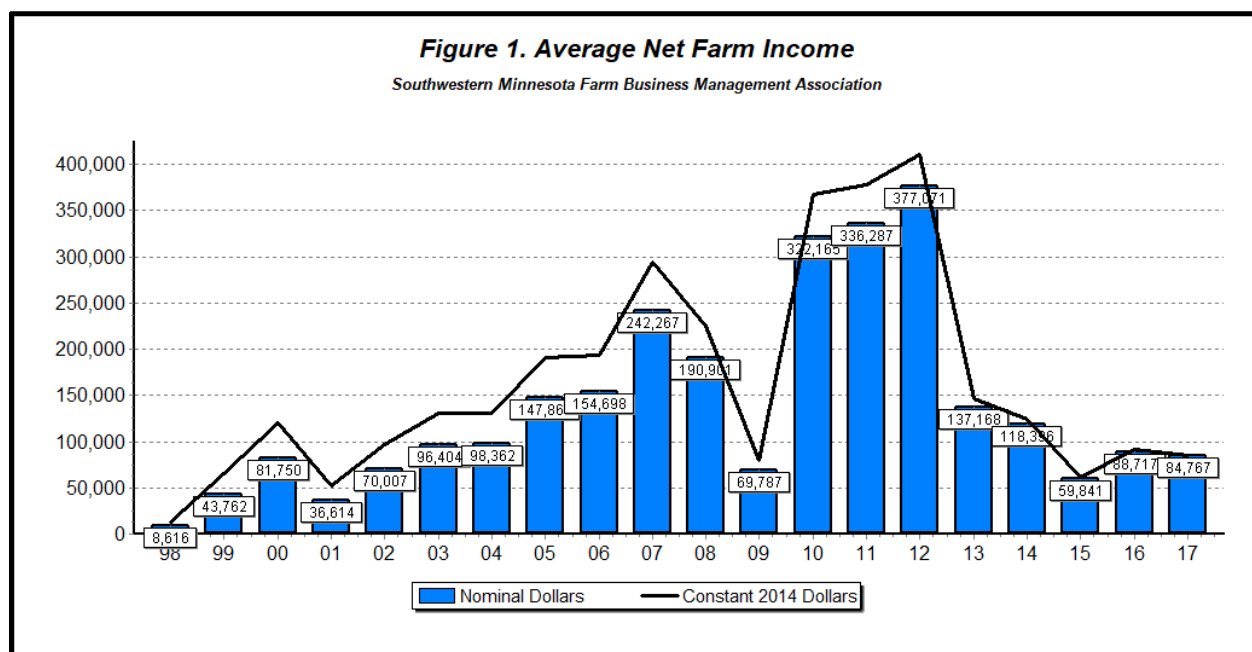


Executive Summary

2017 Annual Report of the Southwestern Minnesota Farm Business Management Association

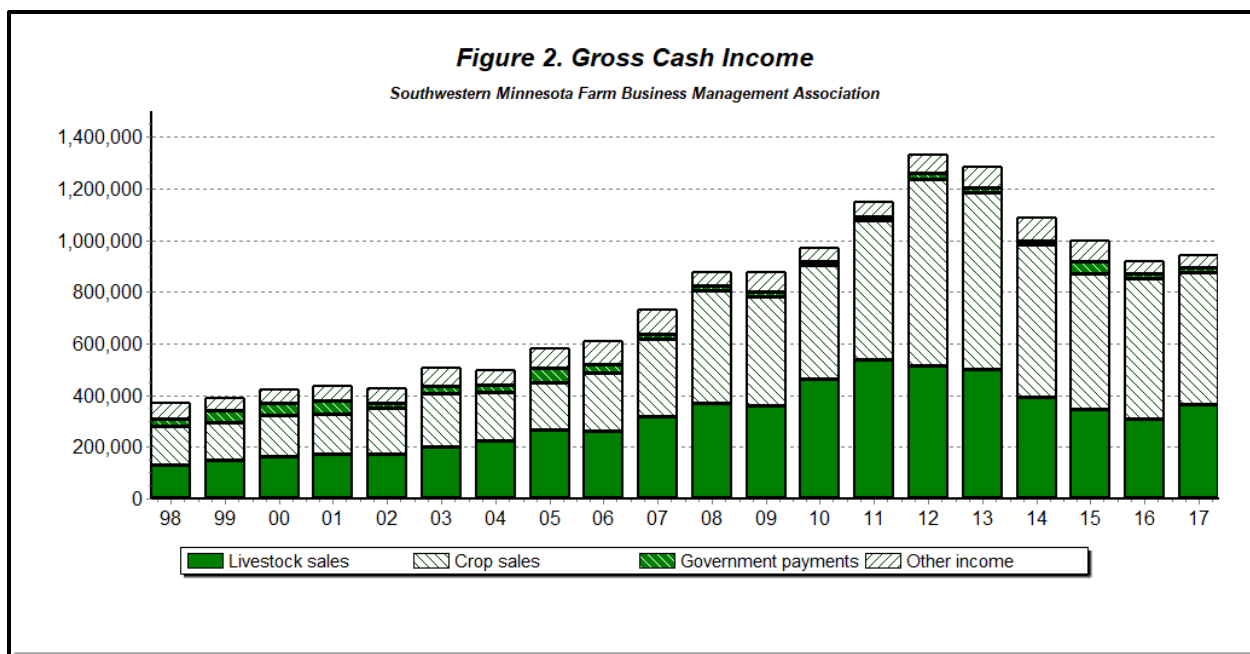
by Pauline A. Van Nurden, Donald L. Nitchie, Garen J. Paulson,
Tonya L. Knorr and Dale W. Nordquist

Even with a third consecutive year of record crop yields, profitability decreased slightly for the 104 farms included in the 2017 annual report of the Southwestern Minnesota Farm Business Management Association. The average farm earned \$84,767 in 2017, down from just under \$89,000 in 2016. Earnings received in the recent past are historically low compared to those received in the first half of the decade. The average farm earned a rate of return on assets of only 2%. Crop farm incomes declined due to lower yielding soybeans and lower prices received for corn. Earnings for all types of livestock operations were up somewhat from the previous year, but the median producer earned only \$32,800 from farm operations.



Highlights of association financial results for 2017:

- Median net farm income, or the income earned by the middle farm, was \$40,096. This value was below the average net farm income of the group, which is common. This year was like most years, where the average net farm income is skewed higher by high profits of larger operations.
- As is the case every year, incomes varied widely around the average. The average net farm income for the most profitable 20% of the farms was \$351,021 while the least profitable 20% experienced a loss of \$74,828. While still a serious level of concern, the average loss experienced on the low end was less than the previous year. High yields and increased livestock income likely shielded some of the most vulnerable farms from larger losses.



- Average gross cash income was up 3% from 2016, while cash expenses increased by 5%. Crop sales were down 5% while livestock sales increased by 17%.
- Crops accounted for 54% of gross sales while livestock sales were 38% (Figure 2). Government payments decreased by another 16% to \$18,952 per farm. These payments accounted for 2% of gross cash income. Payments reported are those actually accrued to 2016 production. Payments were significantly lower than previous years as most producers received reduced ARC payments for corn and no payments for other crops.
- The average farm earned a rate of return on assets (ROA) of 2% with assets valued at adjusted cost or book value. Rates of return have remained historically low for the last 5 years and fell 1% from 2016. The average rate of return on equity capital (ROE) was 1% (Figure 3).
- The average farm reported net worth growth of \$111,911, of which \$48,000 resulted from farm and non-farm earnings. The remaining \$64,000 resulted from increases in the estimated market value of capital assets.
- Member balance sheets remain strong. The debt-to-asset ratio of the average sole proprietor farm was constant at 32% with assets valued at estimated market value (Figure 4).
- The average farm's working capital eroded by \$11,000 after declining by over \$194,000 since 2014. Working capital for this group has declined by over 50% since the end of 2012. Yet working capital remained relatively strong at 39% of gross revenue.
- Debt repayment capacity declined slightly to an average of 1.27:1, meaning that the average farm generated \$1.27 in income from farm and nonfarm sources for each \$1.00 of scheduled debt payments.

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

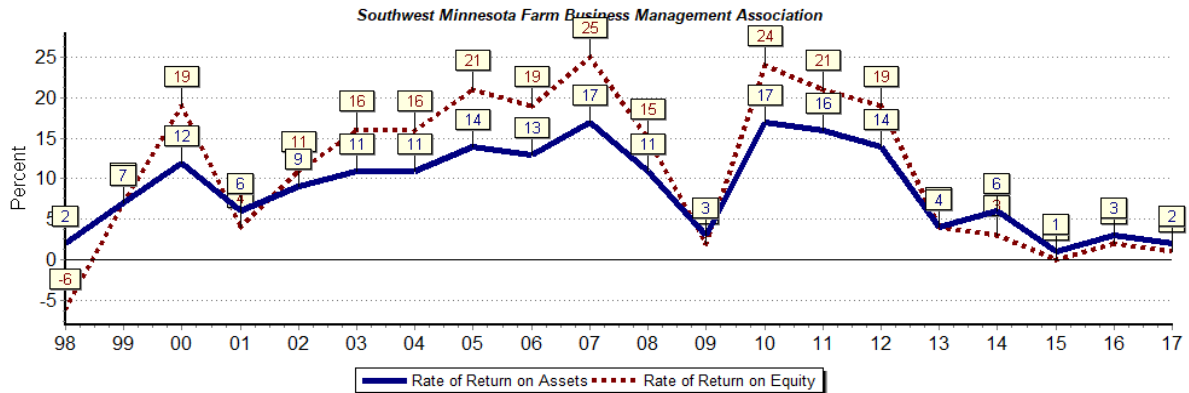


Figure 4: Ending Equity and Ending Debt to Asset Ratio

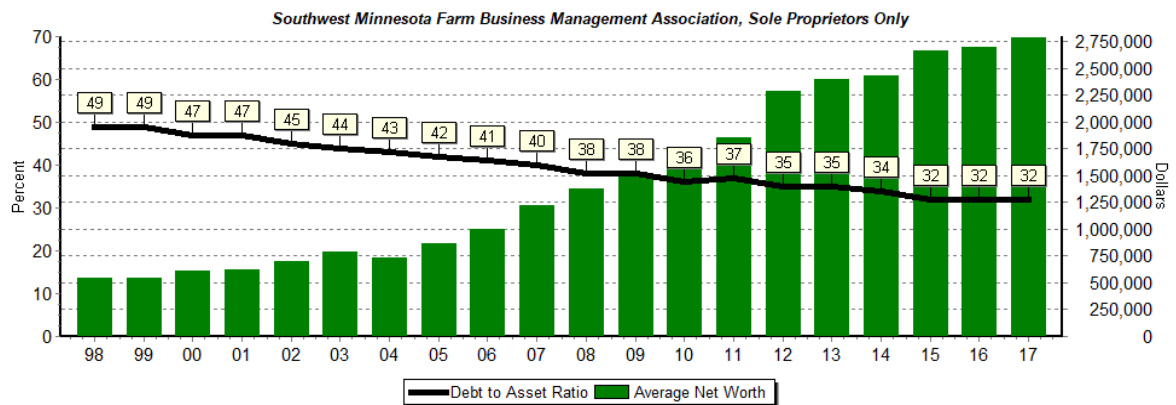
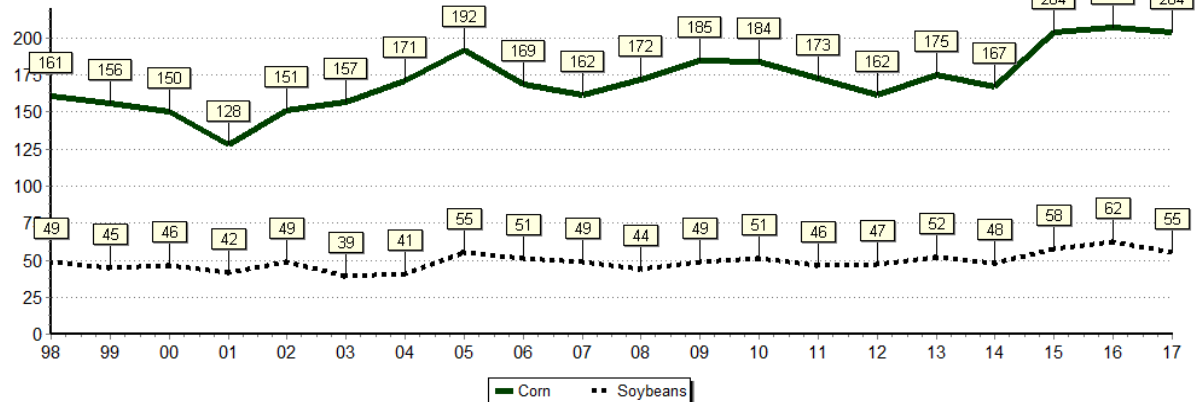
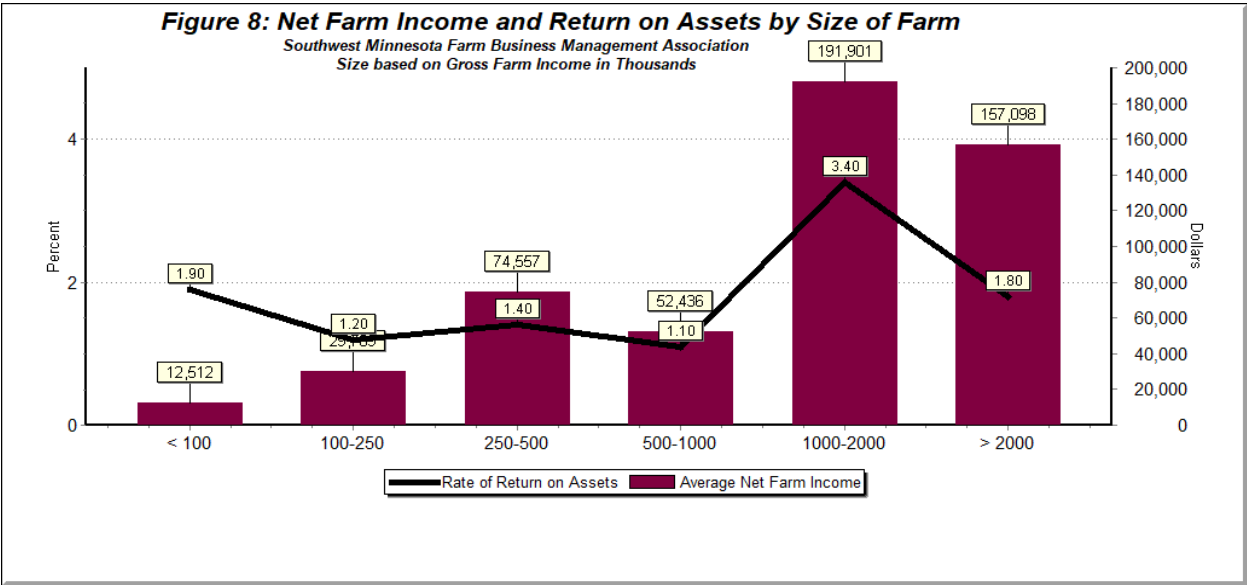
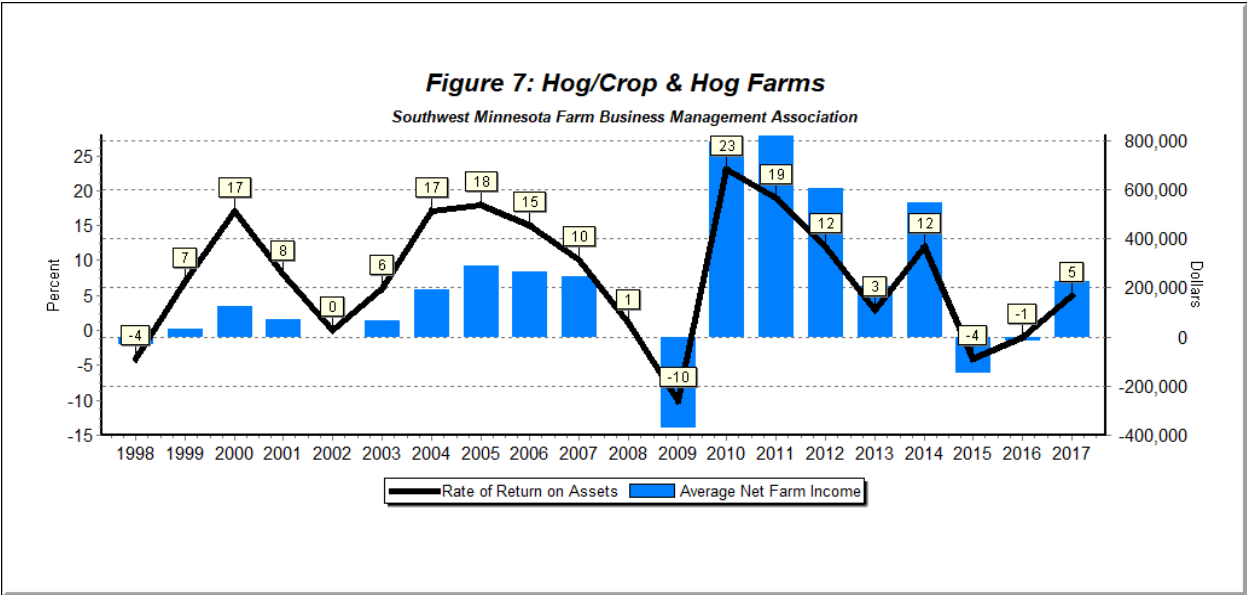
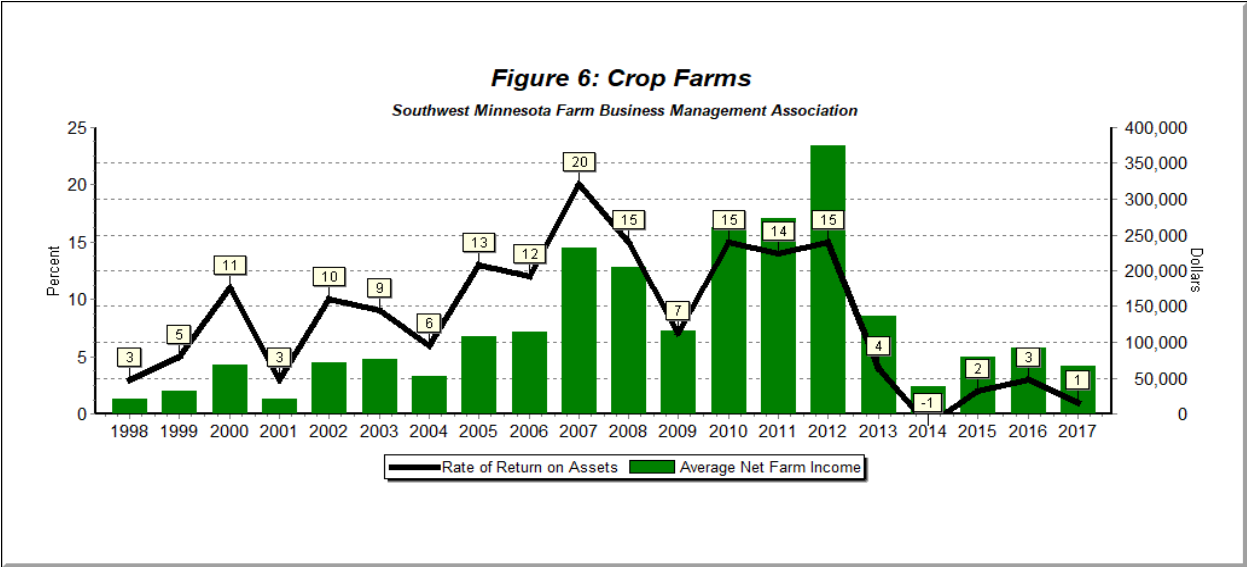


Figure 5: Average Corn and Soybean Yields





Crops

- Association members harvested near record crop for the third consecutive year. Corn yields averaged 204 bushels per acre, down from 207 in 2016. By comparison, the average corn yield for the ten prior years was 179 bushels per acre. Soybean yields were also down a bit and averaged 55 bushels per acre compared to 62 in 2016. Soybean yields were 8% higher than the association average for the previous 10 years.
- Crop prices continue to be trend below beginning of the decade levels. The average price received for corn continued its downward descent. The 2017 average price received was \$3.17 per bushel compared to \$3.38 in 2016. Soybeans prices rallied a bit moving to \$9.23 versus \$8.92 in 2016. By year-end, both corn and soybean prices had fallen further, just over \$3.00 for corn and under \$9.00 for soybeans.
- The cost to raise an acre of corn (with land rent) decreased again in 2017, down another 4%. This cost has decreased 15% since 2013. Several major expenses decreased including seed, fertilizer, chemicals, and depreciation. Cash rental rates on corn and soybean acres also continued to decline. The average cash rental rate was \$210 per acre, down almost 5% from 2016.
- The cost to produce a bushel of corn on cash rented land was down slightly at \$3.39. As has been the case since 2015, outstanding yields were the big contributor to low cost per unit. With normal yields of 175 bushels per acre, cost per bushel would have been \$4.02 per bushel. Soybean costs per bushel increased from \$8.62 in 2016 to \$9.51. This large increase is due to the lower yields per acre seen in 2017. These costs include a charge for unpaid labor and management, but do not include a charge for equity capital.

Type of Farm

- Crop farm earnings decreased from \$91,000 in 2016 to \$67,000 in 2017. This was true even though gross cash farm income was slightly higher in 2017. The difference was a much larger decrease in inventory values. The value of inventories decreased in both years, but the decline was much less in 2016. The average crop farm earned a 1% rate of return on assets (Figure 6). After all costs of production including the charge for unpaid operator labor and management, member farms lost an average of \$61 per acre on cash rented corn production and another \$30 on rented soybean land.
- Pork producers saw a much more profitable year in 2017, as compared to 2016. 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) made \$226,486 in 2017 as compared to a loss of \$16,373 in 2016. Prices for market hogs increased year over year, increasing to \$54.56 per hundred pounds of live weight in 2017 as compared to the \$52.92 received in 2016. The average pork producer made \$5 for every \$100 of assets invested (Figure 7).
- There were not enough specialized beef or dairy farms to summarize these farms by type.

Size of Farm

- Much like the previous year, 2017 was unusual in that net income did not increase with farm size (Figure 8). Farms with gross farm incomes between \$1 million and \$2 million had the highest net farm income while farms that grossed over \$2 million netted somewhat less. This was probably due to the large variability in profitability of the farms grossing over \$2 million. In this group the median net farm income was a \$56,000 loss.
- Rates of return were relatively consistent across size groups. Farms that grossed between \$1 million and \$2 million earned the highest rate of return on assets at 3.4%. The largest farm operations, those that grossed over \$2 million earned rates of return on assets of just 1.8%.

Debt Level

- Of the 104 farms in the report, 34 had debt-to-asset ratios above 40%, down from 41 the previous year. Only 8 of those farms had debt-to-assets of greater than 60%, down from 14 farms the previous year.
- Those farms with debt-to-assets 40% and higher had far lower average earnings than other farms in the association. This is likely to be expected, those farms with higher debt loads, have higher expenses, and thus lower profitability.

Operator Age

- There were 15 farms whose principle operator was 31-40 years of age among the 104 farms included in the report. This age group of farmers saw the highest average farm income for the year.
- Earnings did vary greatly with age of operator. As is often the case, the younger producers (those less than 30) saw some of the lowest returns. It is hard to explain why those ages 31-40 were most profitable while those between 41-50 had the lowest earnings.

Projected Profitability

The Projected Profitability report displays actual results for association members in 2017 along with projected financial results for 2018. Projected results are based on the authors' estimates of changes in revenue, operating expenses, interest rates, and asset values. Assumptions are displayed at the bottom of the page.

- **2017 All Farms Actual** – Average financial results for all farms in 2017. Balance sheet measures reflect the average position of association farms at the end of the year.
- **2017 Improved Margin Management** – Potential impacts of small changes in farm performance. If association farms had, on average, improved sales by 5% and cut costs by 5%, the net farm income of the average farm would have more than doubled.

- **2017 SW Association Crop Farms Actual** – Average financial results for the 69 crop farms in the association for 2017.
- **2018 SW Association Crop Farms Projected** – Average net income for member crop farms is expected to increase in 2018 because of slightly increased gross income and decreased operating expenses. Revenue increase is projected to be driven by an increase in crop prices, with a return to trend yields. Expenses are expected to decrease overall slightly again this year.
- **2017 Statewide Livestock Farms Actual** – Average financial results for the 466 farmers in the statewide database who received a major portion of their income from livestock and milk sales for 2017. This includes farms enrolled in Minnesota State Farm Business Management programs.
- **2018 Statewide Livestock Farms Projected** – Statewide livestock farm profits are projected to decrease in 2018. Down trending revenue is expected to be driven by reduced profitability for dairy producers. This group is expected to see the largest decrease in revenue for the year, with many producers losing \$2 per hundredweight produced currently. Unfortunately the outlook for the rest of the year does not improve significantly. In addition, income is expected to be down slightly for beef and hog producers. On top of this, feed expense is expected to increase in 2018 with the increase in feed grain prices.

The assumptions used to project these results are subjective. We offer these projections as a most likely scenario to help members consider management decisions in a period of tightening margins.

Full Report

The complete report provides additional information on whole farm financial performance as well as 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.

2017 Annual Report of the Southwestern Minnesota¹ Farm Business Management Association

by

by Pauline A. Van Nurden, Donald L. Nitchie, Garen J. Paulson,
Tonya L. Knorr and Dale W. Nordquist²

This report summarizes the individual farm records of the members of the Southwestern Minnesota Farm Business Management Association for 2017.

Whole-farm information and enterprise costs and returns are reported. The year-end analysis of the individual farms was performed by the Association fieldstaff 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 farm size, type of farm, debt to asset ratio, and operator age.

Of the 124 farms in the Southwestern Association, the data for 104 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.

The livestock enterprise summaries include data from both Southwest Minnesota Farm Management Association farms and Minnesota State Farm Business Management program farms. This provides a greater number of instances for each enterprise with the goal of providing more accurate benchmark information. Minnesota State FBM programs are distributed across the state and include over 2,000 participating farms. We thank the Minnesota State FBM program and participating producers for making this data available to be included in this report.

¹This report was partially funded by a Farm Business Management and Benchmarking Grant from the USDA National Institute of Food and Agriculture.

²Van Nurden and Nordquist are Extension Economists—Center for Farm Financial Management (CFFM), University of Minnesota, Twin Cities; Nitchie is Extension Educator—Farm Management and Fieldmen for the Association; Paulson and Knorr are financial analysts for the Association. Special thanks to Rann Loppnow, Software Development, CFFM; Brittni Lamoreux, Program Associate, CFFM; and Gretchen Thillen, Southwest Research and Outreach Center.

Southwestern Minnesota Farm Business Management Association

Distribution of Membership -- 2017

County	Number of Farm Units	Number of Records Submitted
Cottonwood	14	12
Faribault	2	2
Jackson	16	15
Lyon	9	3
Martin	1	1
Murray	11	16
Nobles	22	17
Pipestone	13	12
Redwood	12	7
Rock	5	5
Wabasha	2	3
Watonwan	8	5
Others ²	<u>9</u>	<u>6</u>
TOTAL	124	104

Officers and Directors

Mike Metz, President
Brent Pohlman, Vice President
Ian Sandager, Secretary-Treasurer

The directors of the Southwestern Minnesota Farm Business Management Association for 2017/2018 are: Wesley Beck, Mark Christensen, Jason Diemer, Ben Fast, Ryan Gravenhof and Jason Keller.

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Whole-Farm Reports

The whole-farm reports summarize the financial performance of member farms in 2017. Each table includes the average of the 104 farms included in the report and the average 20 percent of the farms with the lowest and highest profits (base on Net Farm Income). 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. All profitability and repayment capacity measures are based on accrual adjusted net farm income.

Financial Standards Measures

The Farm Financial Standards Council recommends that farms use these twenty-one measures as standard measures of farm financial performance. 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/index.php/order-the-guidelines/>

Farm Income Statement

The Income Statement calculates the accrual Net Farm Income generated by the average farm for year 2017. Net Farm Income is reported based on accrual adjustments to the cash income and expenses reported for the year. Net Farm Income is the income earned before any compensation for owner labor and management. If owner compensation was included in farm expenses, it has been excluded here to make all farms uniform. Net Farm Income represents the return to the operator's 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. On the cost-based table, intermediate and long term assets are shown at depreciated value using estimated economic, rather than tax, depreciation. 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.

Projected Profitability

Based on the past year's results and the author's estimates of changes in next year's production, prices and costs, this page projects the financial performance of these farms in the coming year.

Financial Summary
Southwest 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	104	20	21
Income Statement			
Gross cash farm income	941,931	1,503,303	1,751,977
Total cash farm expense	783,231	1,323,350	1,466,157
Net cash farm income	158,700	179,953	285,820
Inventory change	-7,784	-135,260	138,513
Depreciation	-74,624	-120,103	-115,185
Net farm income from operations	76,292	-75,409	309,148
Gain or loss on capital sales	8,475	582	41,873
Average net farm income	84,767	-74,828	351,021
Median net farm income	40,096	-67,427	227,952
Profitability (cost)			
Rate of return on assets	1.9 %	-2.8 %	6.3 %
Rate of return on equity	0.8 %	-10.0 %	7.5 %
Operating profit margin	6.5 %	-8.5 %	22.6 %
Asset turnover rate	29.7 %	32.7 %	27.9 %
Liquidity & Repayment (end of year)			
Current assets	803,844	1,189,167	1,289,018
Current liabilities	436,049	927,377	588,144
Current ratio	1.84	1.28	2.19
Working capital	367,795	261,790	700,874
Change in working capital	-11,429	-72,301	69,527
Working capital to gross inc	39.4 %	19.2 %	37.1 %
Term debt coverage ratio	1.27	0.15	2.76
Replacement coverage ratio	0.84	0.10	2.02
Term debt to EBITDA	2.44	6.79	1.36
Solvency (end of year at market)			
Number of farms	104	20	21
Total assets	4,196,248	5,320,037	6,974,913
Total liabilities	1,505,682	2,500,276	2,235,604
Net worth	2,690,566	2,819,761	4,739,309
Total net worth change	111,911	1,229	353,171
Farm debt to asset ratio	39 %	51 %	35 %
Total debt to asset ratio	36 %	47 %	32 %
Change in total net worth %	4 %	0 %	8 %
Nonfarm Information			
Net nonfarm income	38,552	46,923	31,058
Farms reporting living expenses	45	5	10
Total family living expense	69,964	64,259	69,655
Total living, invest, cap. purch	116,348	102,253	152,794
Crop Acres			
Total crop acres	940	1,714	992
Total crop acres owned	233	313	304
Total crop acres cash rented	661	1,322	602
Total crop acres share rented	46	79	86
Machinery value per crop acre	511	443	629

Financial Standards Measures
Southwest 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	104	20	21
Liquidity			
Current ratio	1.84	1.28	2.19
Working capital	367,795	261,790	700,874
Working capital to gross inc	39.4 %	19.2 %	37.1 %
Solvency (market)			
Farm debt to asset ratio	39 %	51 %	35 %
Farm equity to asset ratio	61 %	49 %	65 %
Farm debt to equity ratio	0.64	1.02	0.53
Profitability (cost)			
Rate of return on farm assets	1.9 %	-2.8 %	6.3 %
Rate of return on farm equity	0.8 %	-10.0 %	7.5 %
Operating profit margin	6.5 %	-8.5 %	22.6 %
Net farm income	84,767	-74,828	351,021
EBITDA	185,965	116,876	471,580
Repayment Capacity			
Capital debt repayment capacity	109,183	19,214	373,433
Capital debt repayment margin	23,019	-108,694	238,057
Replacement margin	-21,026	-180,669	188,759
Term debt coverage ratio	1.27	0.15	2.76
Replacement coverage ratio	0.84	0.10	2.02
Efficiency			
Asset turnover rate (cost)	29.7 %	32.7 %	27.9 %
Operating expense ratio	80.1 %	91.5 %	75.0 %
Depreciation expense ratio	8.0 %	8.8 %	6.1 %
Interest expense ratio	3.8 %	5.3 %	2.5 %
Net farm income ratio	9.1 %	-5.5 %	18.6 %

Farm Income Statement
Southwest 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	104	20	21
Cash Farm Income			
Corn	248,647	419,308	178,967
Corn Silage	11,246	-	50,371
Hay, Alfalfa	2,571	518	2,464
Hay, Mixed	32,480	166,634	59
Oats	283	-	-
Soybeans	208,484	393,843	201,728
Soybeans Seed	1,045	-	-
Sugar Beets	895	-	-
Sunflowers	90	-	446
Sweet Corn, Processing	692	-	2,411
Wheat, Spring	1,424	4,818	-
Barley	302	-	-
Miscellaneous crop income	2,946	7,823	521
Beef Bulls	195	1,013	-
Beef Cow-Calf, Beef Calves	794	600	-
Beef Replacement Heifers	130	675	-
Beef Backgrounding	533	2,772	-
Beef Finishing	41,023	123,149	55,445
Dairy, Milk	82,450	12,329	366,289
Dairy, Dairy Calves	750	-	3,643
Dairy Replacement Heifers	4,519	-	1,857
Dairy Finishing	19,715	761	69,262
Hogs, Farrow To Finish, Raised Hog	3,922	-	-
Hogs, Feeder Pig Prod, Feeder Pigs	187	-	-
Hogs, Finish Feeder Pigs	7,992	13,641	26,413
Sheep, Feeder Lamb Prod, Fdr Lambs	150	-	-
Sheep, Market Lamb Prod, Mkt Lambs	2,438	-	11,883
Hogs, Farrow to Weaning, Weaning P	1,545	-	7,651
Hogs, Weaning to Finish	175,162	255,034	624,577
Dairy Feeder	174	-	-
Cull breeding livestock	2,484	1,812	9,031
Misc. livestock income	250	17	721
Crop government payments	9,016	8,716	14,826
CRP payments	772	66	937
Other government payments	9,164	11,336	10,849
Custom work income	26,859	24,324	54,560
Patronage dividends, cash	6,722	8,953	13,011
Crop insurance income	4,940	3,775	10,809
Property insurance income	1,981	3,136	6,400
Contract livestock income	16,061	16,377	8,046
Other farm income	10,900	21,877	18,801
Gross Cash Farm Income	941,931	1,503,303	1,751,977

Farm Income Statement (continued)
Southwest 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	104	20	21
Cash Farm Expense			
Seed and plants	78,083	140,506	83,474
Fertilizer	62,145	111,926	69,034
Crop chemicals	37,030	64,675	38,081
Crop insurance	14,338	24,016	15,579
Drying expense	6,363	7,309	5,860
Storage	799	1,162	606
Crop miscellaneous	2,414	7,264	1,584
Crop consultants	2,514	4,860	2,066
Feeder livestock purchase	75,111	59,400	284,415
Purchased feed	111,187	116,655	408,019
Breeding fees	1,636	218	6,170
Veterinary	6,955	8,657	21,199
Supplies	7,845	3,476	25,104
DHIA	84	200	-
Contract production exp.	16,905	20,509	62,055
Livestock leases	364	-	1,535
Livestock consultants	166	-	823
Interest	33,554	70,652	42,823
Fuel & oil	24,404	50,789	31,848
Repairs	48,804	88,994	74,818
Custom hire	13,629	18,017	19,417
Hired labor	29,882	60,615	57,618
Land rent	137,253	299,020	124,114
Machinery leases	11,534	32,597	14,538
Building leases	1,598	1,963	190
Real estate taxes	8,778	13,444	14,409
Farm insurance	13,056	19,651	20,037
Utilities	10,304	9,877	19,484
Hauling and trucking	3,210	6,608	7,325
Marketing	3,162	7,607	4,653
Dues & professional fees	3,568	4,861	4,148
Purchase of resale items	10,834	55,152	94
Miscellaneous	5,724	12,673	5,037
Total cash expense	783,231	1,323,350	1,466,157
Net cash farm income	158,700	179,953	285,820
Inventory Changes			
Prepays and supplies	-3,483	7,278	-17,436
Accounts receivable	2,556	22,379	3,595
Hedging accounts	-6,947	-28,061	-5,585
Other current assets	750	-489	-
Crops and feed	-7,062	-3,747	21,001
Market livestock	-5,349	-127,575	83,186
Breeding livestock	2,304	-2,410	11,248
Other assets	4,455	3,106	21,612
Accounts payable	6,487	-4,210	25,316
Accrued interest	-1,495	-1,531	-4,424
Total inventory change	-7,784	-135,260	138,513
Net operating profit	150,916	44,693	424,333
Depreciation			
Machinery and equipment	-53,408	-91,928	-74,040
Titled vehicles	-2,388	-4,332	-78
Buildings and improvements	-18,828	-23,842	-41,068
Total depreciation	-74,624	-120,103	-115,185
Net farm income from operations	76,292	-75,409	309,148
Gain or loss on capital sales	8,475	582	41,873
Net farm income	84,767	-74,828	351,021

Profitability Measures
Southwest 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	104	20	21
Profitability (assets valued at cost)			
Net farm income from operations	76,292	-75,409	309,148
Rate of return on assets	1.9 %	-2.8 %	6.3 %
Rate of return on equity	0.8 %	-10.0 %	7.5 %
Operating profit margin	6.5 %	-8.5 %	22.6 %
Asset turnover rate	29.7 %	32.7 %	27.9 %
Farm interest expense	35,049	72,183	47,247
Value of operator lbr and mgmt.	63,730	93,048	86,635
Return on farm assets	47,611	-96,274	269,759
Average farm assets	2,478,977	3,471,135	4,283,429
Return on farm equity	12,562	-168,457	222,512
Average farm equity	1,559,030	1,690,087	2,973,380
Value of farm production	735,601	1,135,788	1,194,506
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>High 20%</u>
Number of farms	104	20	21
Profitability (assets valued at market)			
Net farm income from operations	122,958	7,456	350,068
Rate of return on assets	2.6 %	-0.3 %	5.3 %
Rate of return on equity	2.7 %	-3.6 %	6.7 %
Operating profit margin	12.8 %	-1.2 %	26.0 %
Asset turnover rate	20.3 %	23.5 %	20.2 %
Farm interest expense	35,049	72,183	47,247
Value of operator lbr and mgmt.	63,730	93,048	86,635
Return on farm assets	94,277	-13,409	310,680
Average farm assets	3,615,463	4,823,774	5,916,397
Return on farm equity	59,228	-85,592	263,433
Average farm equity	2,205,580	2,391,716	3,903,985
Value of farm production	735,601	1,135,788	1,194,506

Liquidity & Repayment Capacity Measures
Southwest 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	104	20	21
Liquidity			
Current ratio	1.84	1.28	2.19
Working capital	367,795	261,790	700,874
Working capital to gross inc	39.4 %	19.2 %	37.1 %
Current assets	803,844	1,189,167	1,289,018
Current liabilities	436,049	927,377	588,144
Gross revenues (accrual)	932,732	1,366,995	1,887,033
Repayment capacity			
Net farm income from operations	76,292	-75,409	309,148
Depreciation	74,624	120,103	115,185
Personal income	38,552	46,923	31,058
Family living/owner withdrawals	-80,817	-93,423	-78,056
Cash discrepancy	28	201	58
Payments on personal debt	-2,650	-3,455	-1,388
Income taxes paid	-21,152	-15,336	-41,585
Interest on term debt	24,333	39,811	39,071
Capital debt repayment capacity	109,183	19,214	373,433
Scheduled term debt payments	-86,164	-127,908	-135,376
Capital debt repayment margin	23,019	-108,694	238,057
Cash replacement allowance	-44,045	-71,975	-49,298
Replacement margin	-21,026	-180,669	188,759
Term debt coverage ratio	1.27	0.15	2.76
Replacement coverage ratio	0.84	0.10	2.02

Balance Sheet at Market Values
Southwest 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	104		20		21	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Assets						
Current Farm Assets						
Cash and checking balance	63,058	53,058	67,923	50,107	69,436	61,750
Prepaid expenses & supplies	113,006	109,523	141,599	148,878	194,072	176,635
Growing crops	109	15	569	80	0	0
Accounts receivable	32,452	35,008	42,376	64,755	82,775	86,370
Hedging accounts	6,845	5,983	15,158	11,925	7,023	9,214
Crops held for sale or feed	509,448	502,386	883,354	879,607	566,443	587,444
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	103,034	97,684	161,391	33,816	284,418	367,604
Other current assets	-657	187	0	0	0	0
Total current farm assets	827,295	803,844	1,312,369	1,189,167	1,204,167	1,289,018
Intermediate Farm Assets						
Breeding livestock	40,644	46,034	39,204	38,688	130,503	149,679
Machinery and equipment	694,481	692,905	1,058,259	1,071,306	859,112	857,379
Titled vehicles	31,288	37,143	54,005	59,148	37,680	49,722
Other intermediate assets	78,439	84,732	59,181	62,278	294,914	317,247
Total intermediate farm assets	844,851	860,813	1,210,649	1,231,420	1,322,209	1,374,026
Long Term Farm Assets						
Farm land	1,364,080	1,423,690	1,717,743	1,745,255	2,041,742	2,198,168
Buildings and improvements	464,816	526,792	549,785	567,310	966,522	1,191,508
Other long-term assets	53,046	61,698	59,236	64,613	102,804	142,631
Total long-term farm assets	1,881,941	2,012,180	2,326,764	2,377,178	3,111,068	3,532,307
Total Farm Assets	3,554,088	3,676,838	4,849,783	4,797,765	5,637,444	6,195,351
Total Nonfarm Assets	484,994	519,410	477,734	522,272	709,275	779,562
Total Assets	4,039,082	4,196,248	5,327,517	5,320,037	6,346,719	6,974,913
Liabilities						
Current Farm Liabilities						
Accrued interest	10,830	12,325	24,286	25,818	8,755	13,179
Accounts payable	38,549	32,062	61,271	65,481	104,006	78,690
Current notes	336,861	330,006	804,624	744,002	363,755	397,376
Government crop loans	0	0	0	0	0	0
Principal due on term debt	61,830	61,656	88,097	92,076	96,305	98,899
Total current farm liabilities	448,071	436,049	978,279	927,377	572,821	588,144
Total intermediate farm liabs	78,053	93,325	122,333	144,226	86,620	144,713
Total long term farm liabilities	376,402	407,994	670,707	719,176	552,590	675,210
Total farm liabilities	902,526	937,368	1,771,318	1,790,778	1,212,030	1,408,067
Total nonfarm liabilities	55,444	50,685	59,423	53,198	50,747	57,264
Total liabs excluding deferreds	957,970	988,053	1,830,741	1,843,977	1,262,777	1,465,330
Total deferred liabilities	502,457	517,628	678,245	656,299	697,803	770,273
Total liabilities	1,460,426	1,505,682	2,508,986	2,500,276	1,960,580	2,235,604
Retained earnings	1,880,181	1,928,320	2,093,780	1,983,069	3,361,411	3,652,125
Market valuation equity	698,474	762,246	724,751	836,692	1,024,727	1,087,184
Net worth (farm and nonfarm)	2,578,655	2,690,566	2,818,531	2,819,761	4,386,138	4,739,309
Net worth excluding deferreds	3,081,112	3,208,194	3,496,776	3,476,060	5,083,941	5,509,583
Net worth change		111,911		1,229		353,171
Percent net worth change		4 %		0 %		8 %
Ratio Analysis						
Current farm liabilities / assets	54 %	54 %	75 %	78 %	48 %	46 %
Intermediate farm liab. / assets	9 %	11 %	10 %	12 %	7 %	11 %
Long term farm liab. / assets	20 %	20 %	29 %	30 %	18 %	19 %
Total debt to asset ratio	36 %	36 %	47 %	47 %	31 %	32 %
Debt to assets excl deferreds	24 %	24 %	34 %	35 %	20 %	21 %

Balance Sheet at Cost Values
Southwest 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	104		20		21	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Assets						
Current Farm Assets						
Cash and checking balance	63,058	53,058	67,923	50,107	69,436	61,750
Prepaid expenses & supplies	113,006	109,523	141,599	148,878	194,072	176,635
Growing crops	109	15	569	80	0	0
Accounts receivable	32,452	35,008	42,376	64,755	82,775	86,370
Hedging accounts	6,845	5,983	15,158	11,925	7,023	9,214
Crops held for sale or feed	509,448	502,386	883,354	879,607	566,443	587,444
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	103,034	97,684	161,391	33,816	284,418	367,604
Other current assets	-657	187	0	0	0	0
Total current farm assets	827,295	803,844	1,312,369	1,189,167	1,204,167	1,289,018
Intermediate Farm Assets						
Breeding livestock	34,270	39,724	25,662	24,529	120,437	142,152
Machinery and equipment	473,929	463,578	730,394	718,424	637,132	636,121
Titled vehicles	19,106	21,761	34,662	34,254	18,519	25,867
Other intermediate assets	69,322	75,296	36,914	38,075	274,906	297,239
Total intermediate farm assets	596,628	600,360	827,632	815,283	1,050,994	1,101,379
Long Term Farm Assets						
Farmland	657,622	696,940	917,569	945,049	1,079,311	1,189,250
Buildings and improvements	317,397	355,374	413,377	409,050	627,797	796,181
Other long-term assets	47,025	55,468	53,300	59,475	94,684	134,076
Total long-term farm assets	1,022,044	1,107,782	1,384,246	1,413,573	1,801,793	2,119,507
Total Farm Assets	2,445,968	2,511,986	3,524,247	3,418,023	4,056,954	4,509,904
Total Nonfarm Assets	392,183	404,387	400,274	409,022	567,234	607,552
Total Assets	2,838,151	2,916,373	3,924,521	3,827,046	4,624,188	5,117,456
Liabilities						
Current Farm Liabilities						
Accrued interest	10,830	12,325	24,286	25,818	8,755	13,179
Accounts payable	38,549	32,062	61,271	65,481	104,006	78,690
Current notes	336,861	330,006	804,624	744,002	363,755	397,376
Government crop loans	0	0	0	0	0	0
Principal due on term debt	61,830	61,656	88,097	92,076	96,305	98,899
Total current farm liabilities	448,071	436,049	978,279	927,377	572,821	588,144
Total intermediate farm liabs	78,053	93,325	122,333	144,226	86,620	144,713
Total long term farm liabilities	376,402	407,994	670,707	719,176	552,590	675,210
Total farm liabilities	902,526	937,368	1,771,318	1,790,778	1,212,030	1,408,067
Total nonfarm liabilities	55,444	50,685	59,423	53,198	50,747	57,264
Total liabilities	957,970	988,053	1,830,741	1,843,977	1,262,777	1,465,330
Net worth (farm and nonfarm)	1,880,181	1,928,320	2,093,780	1,983,069	3,361,411	3,652,125
Net worth change		48,138		-110,711		290,714
Percent net worth change		3 %		-5 %		9 %
Ratio Analysis						
Current farm liabilities / assets	54 %	54 %	75 %	78 %	48 %	46 %
Intermediate farm liab. / assets	13 %	16 %	15 %	18 %	8 %	13 %
Long term farm liab. / assets	37 %	37 %	48 %	51 %	31 %	32 %
Total debt to asset ratio	34 %	34 %	47 %	48 %	27 %	29 %

Statement Of Cash Flows
Southwest 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	104	20	21
Beginning cash (farm & nonfarm)	78,143	98,769	86,782
Cash Provided By Operating Activities			
Gross cash farm income	941,931	1,503,303	1,751,977
Total cash farm expense	-783,231	-1,323,350	-1,466,157
Net cash from hedging transactions	-6,085	-24,828	-7,776
Cash provided by operating	152,615	155,125	278,044
Cash Provided By Investing Activities			
Sale of breeding livestock	1,512	2,772	1,093
Sale of machinery & equipment	11,046	37,478	3,324
Sale of titled vehicles	679	1,507	-
Sale of farm land	8,646	-	42,786
Sale of farm buildings	805	3,748	-
Sale of other farm assets	387	159	2
Sale of nonfarm assets	23,795	2,833	39,437
Purchase of breeding livestock	-5,031	-4,050	-11,559
Purchase of machinery & equip.	-54,010	-118,557	-76,100
Purchase of titled vehicles	-5,620	-4,717	-7,426
Purchase of farm land	-39,567	-27,512	-111,108
Purchase of farm buildings	-57,365	-22,277	-209,451
Purchase of other farm assets	-10,349	-4,388	-40,115
Purchase of nonfarm assets	-26,053	-10,895	-56,910
Cash provided by investing	-151,125	-143,898	-426,027
Cash Provided By Financing Activities			
Money borrowed	548,774	1,183,935	807,624
Principal payments	-513,717	-1,174,012	-589,357
Personal income	38,552	46,923	31,058
Family living/owner withdrawals	-80,779	-93,323	-78,056
Income and social security tax	-20,587	-15,759	-36,466
Capital contributions	8,289	25,000	15,823
Capital distributions	-1,804	-6,380	-
Dividends paid	-38	-100	-
Cash gifts and inheritances	18,955	8,400	29,961
Gifts given	-8,825	-	-43,450
Other cash flows	-	-	-
Cash provided by financing	-11,181	-25,315	137,138
Net change in cash balance	-9,690	-14,088	-10,844
Ending cash (farm & nonfarm)	68,480	84,882	75,995
Discrepancy	-28	-201	-58

Crop Production and Marketing Summary
Southwest 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	104	20	21
Acreage Summary			
Total acres owned	226	278	314
Total crop acres	940	1,714	992
Crop acres owned	233	313	304
Crop acres cash rented	661	1,322	602
Crop acres share rented	46	79	86
Total pasture acres	8	27	1
Percent crop acres owned	25 %	18 %	31 %
Mach invest/crop acre cost	511	443	629
Mach invest/crop acre market	763	654	868
Average Price Received (Cash Sales Only)			
Soybeans per bushel	9.23	9.18	9.50
Corn per bushel	3.17	3.14	3.17
Hay, Grass per ton	76.72	-	-
Hay, Alfalfa per ton	94.61	-	-
Wheat, Spring per bushel	4.51	-	-
Corn Silage per ton	30.77	-	-
Average Yield Per Acre			
Corn (bushel)	203.71	190.96	211.48
Soybeans (bushel)	55.19	54.64	57.78
Hay, Alfalfa (ton)	4.97	4.21	-
Corn Silage (ton)	24.24	22.11	24.78
Hay, Grass (ton)	1.99	1.97	-
Oats (bushel)	123.30	-	-
Wheat, Spring (bushel)	63.74	-	-

Household and Personal Expenses
Southwest 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	45	5	10
Average family size	2.6	2.2	2.7
Family Living Expenses			
Food and meals expense	8,796	8,636	9,134
Medical care	5,426	5,645	6,311
Health insurance	6,012	3,298	6,287
Cash donations	5,778	2,623	5,636
Household supplies	7,302	4,797	6,055
Clothing	2,534	2,066	3,287
Personal care	3,028	1,394	1,810
Child / Dependent care	585	-	1,520
Alimony and child support	-	-	-
Gifts	4,410	3,131	7,129
Education	1,454	87	2,905
Recreation	4,254	2,893	3,550
Utilities (household share)	3,262	5,205	2,538
Personal vehicle operating exp	3,552	2,419	3,340
Household real estate taxes	844	2,032	95
Dwelling rent	-	-	-
Household repairs	2,115	3,009	1,039
Personal interest	1,074	2,238	8
Disability / Long term care ins	653	875	696
Life insurance payments	3,102	6,572	3,884
Personal property insurance	426	685	353
Miscellaneous	5,052	5,661	3,795
Total cash family living expense	69,661	63,268	69,372
Family living from the farm	302	991	283
Total family living	69,964	64,259	69,655
Other Nonfarm Expenditures			
Income taxes	23,758	21,803	29,748
Furnishing & appliance purchases	14	-	168
Nonfarm vehicle purchases	2,232	-3,726	4,224
Nonfarm real estate purchases	15,111	-	45,892
Other nonfarm capital purchases	999	-	-2,438
Nonfarm savings & investments	4,573	20,908	5,828
Total other nonfarm expenditures	46,687	38,985	83,422
Total cash family living investment & nonfarm capital purch	116,348	102,253	152,794

Operator and Labor Information
Southwest 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	104	20	21
Operator Information			
Average number of operators	1.2	1.2	1.2
Average age of operators	52.9	53.7	55.7
Average number of years farming	28.8	28.5	34.0
Results Per Operator			
Working capital	306,006	218,158	588,734
Total assets (market)	3,491,278	4,433,364	5,858,927
Total liabilities	1,252,727	2,083,564	1,877,907
Net worth (market)	2,238,551	2,349,800	3,981,020
Net worth excl deferred liabs	2,669,218	2,896,717	4,628,049
Gross farm income	776,033	1,139,163	1,585,108
Total farm expense	712,558	1,202,004	1,325,424
Net farm income from operations	63,475	-62,841	259,684
Net nonfarm income	32,075	39,102	26,089
Family living & tax withdrawals	84,815	90,465	100,450
Total acres owned	188.0	231.8	264.0
Total crop acres	781.7	1,428.5	833.5
Crop acres owned	193.9	260.8	255.0
Crop acres cash rented	549.8	1,101.8	505.9
Crop acres share rented	38.0	66.0	72.5
Total pasture acres	6.4	22.7	1.0
Labor Analysis			
Number of farms	104	20	21
Total unpaid labor hours	2,182	2,940	2,569
Total hired labor hours	1,477	3,473	2,803
Total labor hours per farm	3,659	6,413	5,372
Unpaid hours per operator	1,816	2,450	2,158
Value of farm production / hour	201.03	177.10	222.36
Net farm income / unpaid hour	34.96	-25.65	120.34
Average hourly hired labor wage	21.75	20.57	22.27

Nonfarm Summary
Southwest 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	104	20	21
Nonfarm Income			
Personal wages & salary	19,364	19,887	16,604
Net nonfarm business income	4,169	6,608	5,270
Personal rental income	5,228	15,762	2,504
Personal interest income	713	199	1,009
Personal cash dividends	25	-	-
Tax refunds	1,094	909	350
Other nonfarm income	7,959	3,558	5,322
Total nonfarm income	38,552	46,923	31,058
Gifts and inheritances	18,955	8,400	29,961
Nonfarm Assets (market)			
Checking & savings	15,423	34,775	14,245
Stocks & bonds	61,584	126,155	129,809
Other current assets	5,734	19,384	3,191
Furniture & appliances	10,910	6,920	8,807
Nonfarm vehicles	21,065	22,135	18,812
Cash value of life ins.	19,951	21,754	31,713
Retirement accounts	144,237	140,103	183,788
Other intermediate assets	22,006	12,603	47,506
Nonfarm real estate	122,307	86,073	96,388
Personal bus. investment	41,972	5,300	199,547
Other long term assets	54,222	47,071	45,756
Total nonfarm assets	519,410	522,272	779,562
Nonfarm Liabilities			
Accrued interest	120	92	29
Accounts payable	1,715	7,293	222
Current notes	254	-	-
Princ due on term debt	2,724	3,343	2,091
Total current liabilities	26,148	28,151	46,810
Intermediate liabilities	4,736	4,714	2,110
Long term liabilities	19,801	20,333	8,344
Total nonfarm liabilities	50,685	53,198	57,264
Nonfarm net worth	468,725	469,074	722,298
Nonfarm debt to asset ratio	10 %	10 %	7 %

Projected Profitability

Southwest Minnesota Farm Business Management Association

	2017 All Farms Actual	2017 Improved Margin Mgmt.	2017 SW Assn Crop Farms Actual	2018 SW Assn Crop Farms Projected	2017 Statewide Lvst Farms Actual	2018 Statewide Lvst Farms Projected
Liquidity						
Current ratio	1.8	1.9	2.0	2.1	1.6	1.6
Working capital to gross	39%	42%	55%	56%	18%	17%
Solvency¹						
Debt to asset	25%	25%	23%	23%	37%	37%
Debt to equity	0.34	0.34	0.30	0.30	0.59	0.59
Profitability						
Rate of return on assets ²	1%	4%	1%	1%	2%	0%
Operating profit margin	7%	17%	3%	7%	8%	-1%
Net farm income ³	\$81,552	\$168,000	\$62,308	\$81,000	\$60,922	\$-12,000
Repayment capacity						
Term debt coverage	1.3	2.3	1.0	1.2	1.2	0.5
Replacement coverage	0.8	1.5	0.6	0.8	1.0	0.4
Efficiency						
Asset turnover rate	20%	22%	20%	20%	27%	25%
Operating expense ratio	81%	73	80%	76%	85%	91%
Net worth growth						
Net worth change	4%	7%	3%	3%	4%	0%

	2017 All Farms Actual	2017 Improved Margin Mgmt.	2017 SW Assn Crop Farms Actual	2018 SW Assn Crop Farms Projected	2017 Statewide Lvst Farms Actual	2018 Statewide Lvst Farms Projected
Projected Changes						
Gross income	-	+5%	-	2%	-	-5%
Operating expenses	-	-5%	-	-2%	-	1%
Interest rates	-	-	-	1%	-	1%
Current assets	-	+5%	-	2%	-	-3%
Noncurrent assets	-	-	-	0%	-	0%

¹ Assets at estimated market value excluding deferred liabilities.

² Assets at estimated market value, returns excluding change in market valuation.

³ Differs from previous tables because Owner Wages and Benefits are treated as expenses. In previous tables, owner wages and benefits are moved to Value of Operator Labor and Management to improve comparative analysis.

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, crop insurance proceeds and any disaster payments that might have been received. It does not include government payments that are decoupled from production such as ARC and PLC 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 ARC and PLC 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 deducting an opportunity cost for unpaid operator 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
Southwest 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 farms	64	12	13
Acres	153.78	127.20	136.63
Yield per acre (bu.)	212.34	193.92	218.35
Operator's share of yield %	100.00	100.00	100.00
Value per bu.	3.08	3.06	3.15
Other product return per acre	0.43	-	-
Total product return per acre	655.02	593.78	686.87
Hedging gains/losses per acre	-1.75	-0.80	0.79
Crop insurance per acre	5.31	14.56	16.94
Other crop income per acre	17.40	6.78	48.29
Gross return per acre	675.98	614.32	752.90
Direct Expenses			
Seed and plants	117.69	122.77	111.82
Fertilizer	99.20	109.19	99.02
Crop chemicals	31.56	30.42	27.13
Cover crop expense	0.72	0.64	1.91
Crop insurance	15.76	20.29	22.70
Drying expense	16.89	17.83	16.93
Storage	1.63	1.26	1.78
Fuel & oil	18.05	19.59	17.23
Repairs	47.66	35.88	34.70
Custom hire	9.35	9.34	8.88
Machinery leases	3.79	14.06	1.25
Utilities	0.33	0.78	-
Hauling and trucking	0.96	1.31	-
Marketing	0.97	1.51	1.53
Operating interest	9.89	15.23	4.53
Miscellaneous	2.16	2.78	1.85
Total direct expenses per acre	376.62	402.87	351.27
Return over direct exp per acre	299.37	211.45	401.63
Overhead Expenses			
Hired labor	12.29	21.54	5.90
Machinery leases	1.36	2.06	0.07
RE & pers. property taxes	29.44	34.06	26.86
Farm insurance	11.91	9.80	9.35
Utilities	6.23	6.50	5.60
Dues & professional fees	3.45	2.28	4.99
Interest	66.94	141.62	49.06
Mach & bldg depreciation	72.25	57.69	63.90
Miscellaneous	5.16	6.37	7.37
Total overhead expenses per acre	209.01	281.92	173.11
Total dir & ovhd expenses per acre	585.63	684.80	524.38
Net return per acre	90.36	-70.48	228.52
Government payments	14.54	13.41	10.37
Net return with govt pmts	104.90	-57.07	238.89
Labor & management charge	54.27	50.50	69.47
Net return over lbr & mgt	50.63	-107.57	169.42
Cost of Production			
Total direct expense per bu.	1.77	2.08	1.61
Total dir & ovhd exp per bu.	2.76	3.53	2.40
Less govt & other income	2.59	3.36	2.05
With labor & management	2.84	3.62	2.37
Net value per unit	3.07	3.06	3.15
Machinery cost per acre	143.39	135.15	121.09
Est. labor hours per acre	2.60	2.21	2.94

Crop Enterprise Analysis
Southwest 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 farms	88	17	18
Acres	379.21	263.40	295.53
Yield per acre (bu.)	200.58	207.68	212.97
Operator's share of yield %	100.00	100.00	100.00
Value per bu.	3.08	3.09	3.09
Other product return per acre	0.07	-	-
Total product return per acre	617.97	641.13	658.32
Hedging gains/losses per acre	-0.59	-8.32	5.30
Crop insurance per acre	16.34	0.39	13.92
Other crop income per acre	9.10	4.90	9.79
Gross return per acre	642.82	638.10	687.32
Direct Expenses			
Seed and plants	113.94	122.63	99.71
Fertilizer	87.12	105.96	81.77
Crop chemicals	29.13	33.67	36.52
Cover crop expense	0.15	0.56	0.24
Crop insurance	16.26	16.91	17.26
Drying expense	14.92	20.29	11.99
Storage	1.22	4.23	-
Fuel & oil	21.13	22.73	18.97
Repairs	37.11	51.77	23.90
Custom hire	9.73	13.76	14.60
Hired labor	0.52	-	0.04
Land rent	211.17	211.53	182.89
Machinery leases	9.01	8.56	0.19
Hauling and trucking	0.35	0.69	-
Marketing	2.38	4.81	0.66
Operating interest	11.69	15.47	4.93
Miscellaneous	2.57	0.62	1.10
Total direct expenses per acre	568.39	634.19	494.76
Return over direct exp per acre	74.43	3.91	192.56
Overhead Expenses			
Hired labor	12.04	20.81	5.23
Machinery leases	1.59	4.07	1.35
Building leases	1.03	-	-
Farm insurance	9.97	15.16	9.72
Utilities	4.89	6.98	5.97
Dues & professional fees	3.19	3.88	3.95
Interest	3.28	5.65	2.57
Mach & bldg depreciation	56.14	79.35	54.97
Miscellaneous	3.90	6.88	5.05
Total overhead expenses per acre	96.04	142.78	88.82
Total dir & ovhd expenses per acre	664.43	776.98	583.58
Net return per acre	-21.61	-138.88	103.74
Government payments	12.54	12.18	21.86
Net return with govt pmts	-9.07	-126.70	125.60
Labor & management charge	52.26	53.71	54.38
Net return over lbr & mgt	-61.33	-180.41	71.22
Cost of Production			
Total direct expense per bu.	2.83	3.05	2.32
Total dir & ovhd exp per bu.	3.31	3.74	2.74
Less govt & other income	3.13	3.70	2.50
With labor & management	3.39	3.96	2.76
Net value per unit	3.08	3.05	3.12
Machinery cost per acre	130.17	170.71	108.59
Est. labor hours per acre	2.24	2.82	2.36

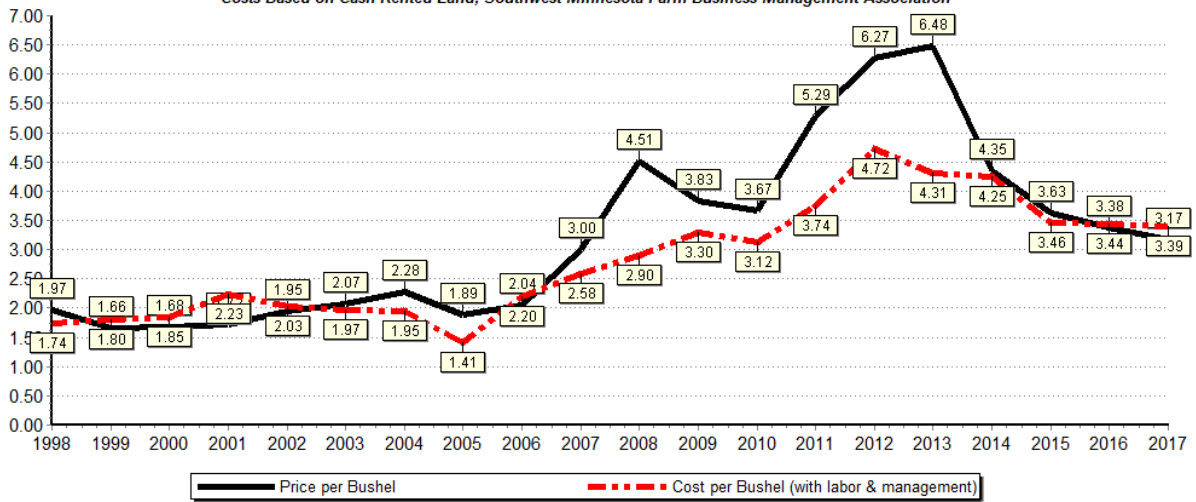
Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Corn on Share Rent

	<u>Avg. Of All Farms</u>
Number of farms	18
Acres	139.25
Yield per acre (bu.)	208.18
Operators share of yield %	53.58
Value per bu.	3.08
Other product return per acre	0.46
Total product return per acre	344.11
Crop insurance per acre	0.48
Other crop income per acre	3.55
Gross return per acre	348.15
Direct Expenses	
Seed and plants	68.26
Fertilizer	58.76
Crop chemicals	20.41
Crop insurance	10.63
Drying expense	8.05
Storage	0.83
Fuel & oil	16.77
Repairs	37.37
Custom hire	16.32
Machinery leases	1.52
Marketing	0.74
Operating interest	9.37
Miscellaneous	1.23
Total direct expenses per acre	250.28
Return over direct exp per acre	97.87
Overhead Expenses	
Hired labor	6.10
Machinery leases	2.62
Building leases	1.64
Farm insurance	6.18
Utilities	4.51
Dues & professional fees	4.12
Interest	5.74
Mach & bldg depreciation	69.56
Miscellaneous	3.30
Total overhead expenses per acre	103.77
Total dir & ovhd expenses per acre	354.05
Net return per acre	-5.91
Government payments	7.17
Net return with govt pmts	1.26
Labor & management charge	51.48
Net return over lbr & mgt	-50.22
Cost of Production	
Total direct expense per bu.	2.24
Total dir & ovhd exp per bu.	3.17
Less govt & other income	3.07
With labor & management	3.53
Net value per unit	3.08
Machinery cost per acre	143.59
Est. labor hours per acre	2.35

Figure 9: Corn Price and Cost of Production

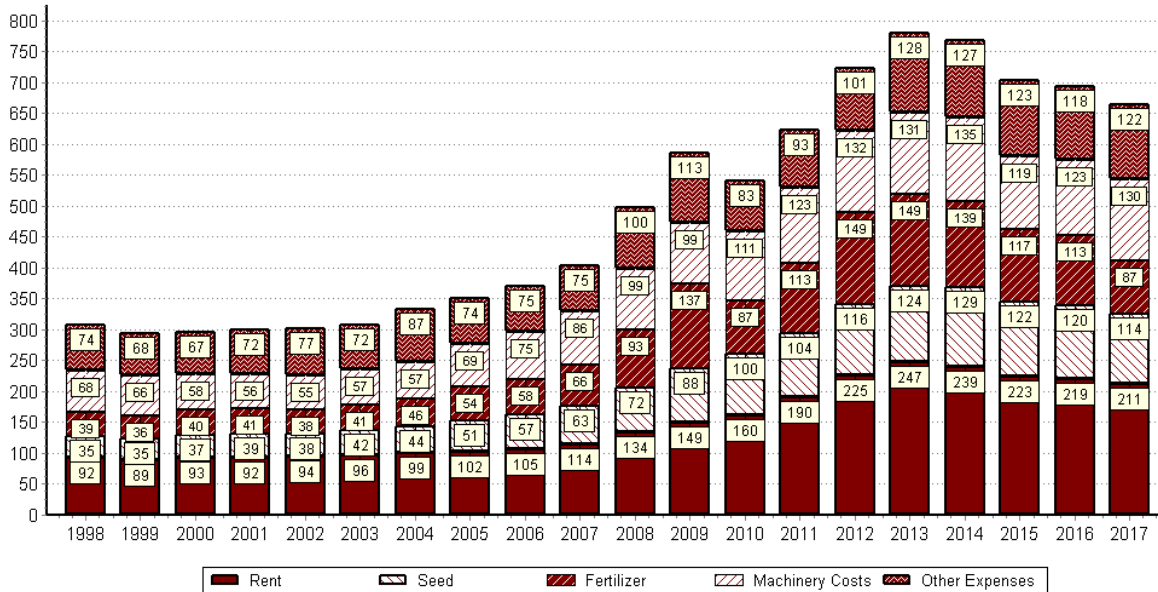
Costs Based on Cash Rented Land, Southwest Minnesota Farm Business Management Association



Price does not include LDP payments and other government support

Figure 10: Corn Cost Per Acre

Cash Rented, Southwest Minnesota Farm Business Management Association



Machinery costs include fuel, repairs, custom hire, lease expense, interest, and depreciation.

Crop Enterprise Analysis
Southwest 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 farms	64	12	13
Acres	168.86	147.89	125.86
Yield per acre (bu.)	57.31	54.50	58.75
Operators share of yield %	100.00	100.00	100.00
Value per bu.	8.90	8.81	8.89
Total product return per acre	509.85	479.99	522.40
Hedging gains/losses per acre	-1.90	-11.71	2.81
Crop insurance per acre	3.27	0.06	16.40
Other crop income per acre	9.23	10.95	12.86
Gross return per acre	520.45	479.29	554.46
Direct Expenses			
Seed and plants	52.64	48.22	52.98
Fertilizer	29.42	22.23	27.53
Crop chemicals	46.26	41.37	40.17
Cover crop expense	0.60	0.06	-
Crop insurance	17.22	14.57	14.13
Storage	0.43	-	1.76
Fuel & oil	15.02	13.29	14.01
Repairs	37.20	48.78	23.95
Custom hire	10.18	7.23	6.94
Machinery leases	4.41	10.26	0.51
Marketing	1.33	1.48	0.33
Operating interest	7.79	13.46	2.05
Miscellaneous	2.39	1.68	4.27
Total direct expenses per acre	224.89	222.63	188.63
Return over direct exp per acre	295.56	256.66	365.83
Overhead Expenses			
Hired labor	9.23	9.22	3.85
Machinery leases	1.44	2.31	0.07
RE & pers. property taxes	28.81	35.06	28.30
Farm insurance	10.56	11.46	8.00
Utilities	5.05	6.27	4.67
Dues & professional fees	2.92	2.72	3.26
Interest	61.12	139.09	11.45
Mach & bldg depreciation	54.21	55.57	48.50
Miscellaneous	3.19	4.74	2.76
Total overhead expenses per acre	176.53	266.43	110.86
Total dir & ovhd expenses per acre	401.42	489.07	299.48
Net return per acre	119.03	-9.78	254.98
Government payments	13.09	12.09	14.16
Net return with govt pmts	132.12	2.31	269.14
Labor & management charge	41.37	35.30	47.52
Net return over lbr & mgt	90.75	-32.99	221.62
Cost of Production			
Total direct expense per bu.	3.92	4.08	3.21
Total dir & ovhd exp per bu.	7.00	8.97	5.10
Less govt & other income	6.59	8.76	4.31
With labor & management	7.31	9.41	5.12
Net value per unit	8.86	8.59	8.94
Machinery cost per acre	116.45	127.27	87.31
Est. labor hours per acre	2.06	1.50	1.90

Crop Enterprise Analysis
Southwest 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 farms	90	18	18
Acres	337.77	310.78	248.99
Yield per acre (bu.)	54.28	49.00	59.11
Operators share of yield %	100.00	100.00	100.00
Value per bu.	8.96	8.84	8.95
Total product return per acre	486.28	433.21	529.25
Hedging gains/losses per acre	-1.22	-7.79	-
Crop insurance per acre	6.68	1.75	26.43
Other crop income per acre	16.98	6.45	15.59
Gross return per acre	508.73	433.62	571.27
Direct Expenses			
Seed and plants	52.76	52.19	58.04
Fertilizer	29.34	23.20	24.85
Crop chemicals	46.32	46.59	42.00
Crop insurance	16.32	21.17	20.06
Storage	0.43	0.31	0.70
Fuel & oil	16.70	20.35	16.04
Repairs	28.72	38.35	26.11
Custom hire	7.37	16.49	8.06
Hired labor	0.65	-	0.03
Land rent	208.02	197.45	187.20
Machinery leases	9.45	4.82	4.12
Marketing	2.37	1.97	0.65
Operating interest	9.22	13.38	4.70
Miscellaneous	3.12	1.64	1.17
Total direct expenses per acre	430.79	437.90	393.73
Return over direct exp per acre	77.94	-4.27	177.54
Overhead Expenses			
Hired labor	9.65	11.00	2.56
Machinery leases	1.13	1.31	1.19
Building leases	0.92	-	1.16
Farm insurance	7.55	12.16	8.54
Utilities	3.98	5.83	5.17
Dues & professional fees	2.44	2.15	4.37
Interest	2.51	2.50	2.05
Mach & bldg depreciation	45.48	54.68	44.57
Miscellaneous	2.85	1.99	5.04
Total overhead expenses per acre	76.51	91.63	74.65
Total dir & ovhd expenses per acre	507.30	529.53	468.39
Net return per acre	1.43	-95.91	102.88
Government payments	10.42	16.79	20.29
Net return with govt pmts	11.85	-79.12	123.18
Labor & management charge	41.56	37.04	49.65
Net return over lbr & mgt	-29.72	-116.16	73.53
Cost of Production			
Total direct expense per bu.	7.94	8.94	6.66
Total dir & ovhd exp per bu.	9.35	10.81	7.92
Less govt & other income	8.74	10.46	6.87
With labor & management	9.51	11.21	7.71
Net value per unit	8.94	8.68	8.95
Machinery cost per acre	105.00	128.22	96.36
Est. labor hours per acre	1.75	1.75	2.06

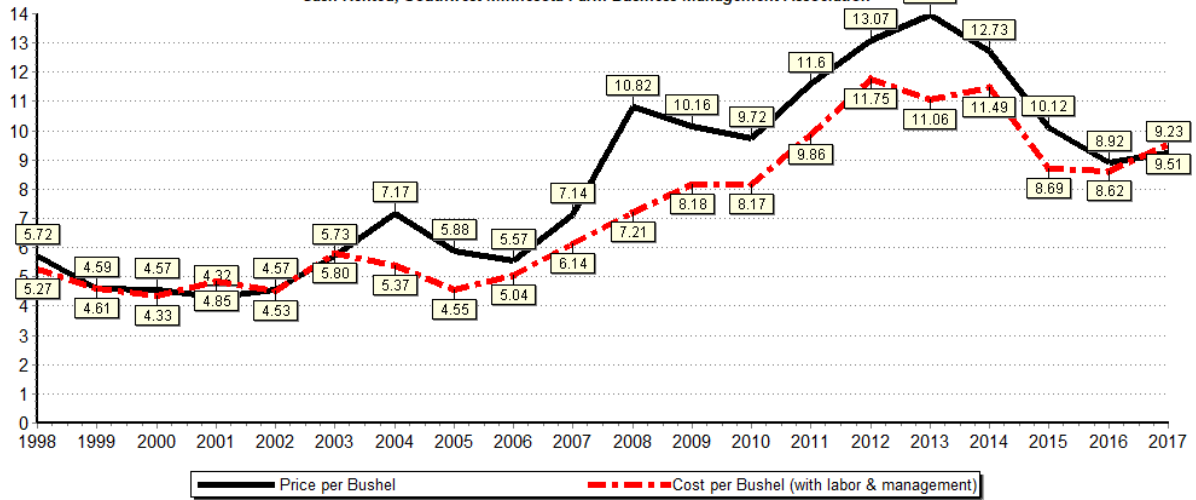
Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Net Return)

Soybeans on Share Rent

	<u>Avg. Of All Farms</u>
Number of farms	14
Acres	148.28
Yield per acre (bu.)	57.60
Operators share of yield %	54.79
Value per bu.	8.91
Total product return per acre	281.10
Crop insurance per acre	2.23
Other crop income per acre	2.05
Gross return per acre	285.38
Direct Expenses	
Seed and plants	34.03
Fertilizer	13.40
Crop chemicals	29.51
Crop insurance	11.30
Storage	1.01
Fuel & oil	13.28
Repairs	32.69
Custom hire	19.87
Machinery leases	1.43
Marketing	0.47
Operating interest	5.45
Miscellaneous	0.30
Total direct expenses per acre	162.76
Return over direct exp per acre	122.62
Overhead Expenses	
Hired labor	5.83
Machinery leases	0.84
Building leases	1.49
Farm insurance	4.93
Utilities	3.51
Dues & professional fees	2.87
Interest	3.01
Mach & bldg depreciation	54.25
Miscellaneous	2.75
Total overhead expenses per acre	79.48
Total dir & ovhd expenses per acre	242.23
Net return per acre	43.14
Government payments	4.28
Net return with govt pmts	47.42
Labor & management charge	42.40
Net return over lbr & mgt	5.02
Cost of Production	
Total direct expense per bu.	5.16
Total dir & ovhd exp per bu.	7.68
Less govt & other income	7.40
With labor & management	8.75
Net value per unit	8.91
Machinery cost per acre	120.51
Est. labor hours per acre	2.01

Figure 11: Soybean Price and Cost of Production

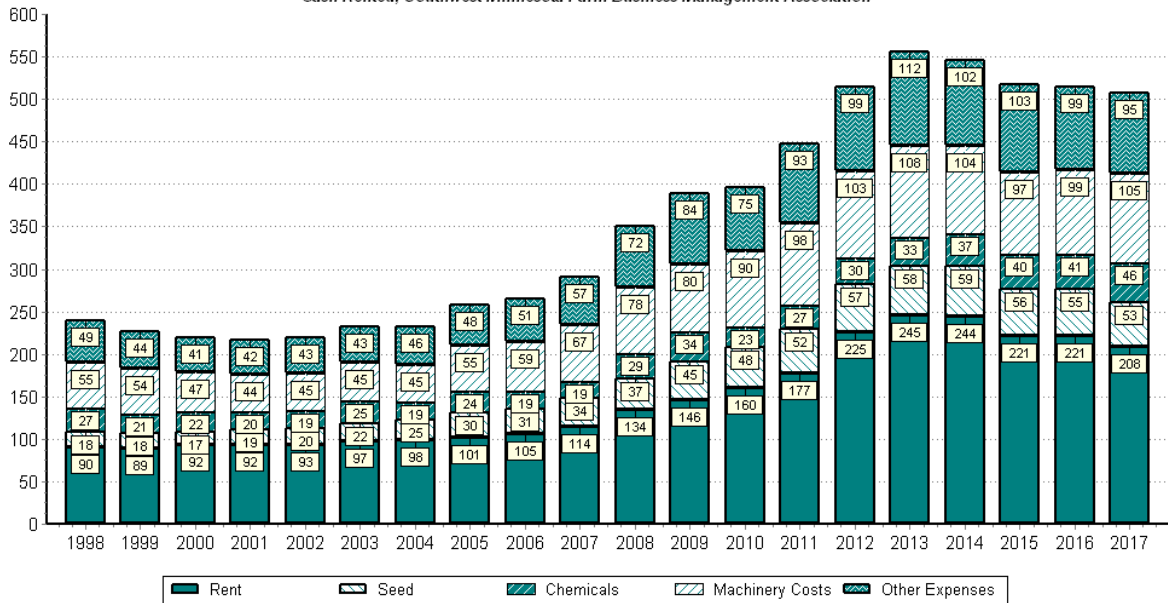
Cash Rented, Southwest Minnesota Farm Business Management Association



Does not include LDP payments and other government support

Figure 12: Soybean Cost Per Acre

Cash Rented, Southwest Minnesota Farm Business Management Association



Machinery costs include fuel, repairs, custom hire, lease payments, interest and depreciation.

Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Crop Tenure Type)

Corn Silage

	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	10	10
Acres	87.29	83.52
Yield per acre (ton)	22.63	25.20
Operators share of yield %	100.00	100.00
Value per ton	28.86	29.37
Total product return per acre	653.09	740.10
Crop insurance per acre	1.00	0.10
Other crop income per acre	4.35	2.95
Gross return per acre	658.44	743.14
Direct Expenses		
Seed and plants	116.77	104.04
Fertilizer	68.38	85.31
Crop chemicals	38.55	33.68
Cover crop expense	0.69	-
Crop insurance	12.91	10.87
Fuel & oil	16.76	10.58
Repairs	40.94	30.19
Custom hire	35.62	11.39
Land rent	-	206.02
Machinery leases	9.13	21.71
Marketing	0.05	2.72
Operating interest	3.89	6.33
Miscellaneous	3.65	-
Total direct expenses per acre	347.34	522.85
Return over direct exp per acre	311.10	220.30
Overhead Expenses		
Hired labor	18.21	7.01
Machinery leases	3.52	1.78
RE & pers. property taxes	34.93	-
Farm insurance	5.67	3.15
Utilities	4.46	5.75
Dues & professional fees	2.52	1.63
Interest	51.47	2.72
Mach & bldg depreciation	74.04	63.27
Miscellaneous	2.29	1.86
Total overhead expenses per acre	197.10	87.16
Total dir & ovhd expenses per acre	544.44	610.01
Net return per acre	114.00	133.14
Government payments	15.50	14.34
Net return with govt pmts	129.50	147.47
Labor & management charge	48.00	45.77
Net return over lbr & mgt	81.50	101.70
Cost of Production		
Total direct expense per ton	15.35	20.75
Total dir & ovhd exp per ton	24.06	24.21
Less govt & other income	23.14	23.52
With labor & management	25.26	25.33
Net value per unit	28.86	29.37
Machinery cost per acre	180.46	133.10
Est. labor hours per acre	2.03	1.72

Crop Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Farms Sorted By Crop Tenure Type)

Hay, Alfalfa

	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	6	10
Acres	98.67	86.20
Yield per acre (ton)	5.42	4.68
Operators share of yield %	100.00	100.00
Value per ton	87.96	109.57
Total product return per acre	476.40	512.61
Other crop income per acre	5.67	0.34
Gross return per acre	482.07	512.95
Direct Expenses		
Seed and plants	0.65	2.29
Fertilizer	50.70	52.32
Crop chemicals	7.28	35.56
Crop insurance	-	16.81
Fuel & oil	14.38	18.39
Repairs	31.21	27.32
Custom hire	27.75	6.70
Hired labor	-	0.93
Land rent	-	187.78
Machinery leases	1.76	-
Marketing	-	1.79
Operating interest	3.48	9.96
Miscellaneous	5.00	1.16
Total direct expenses per acre	142.22	361.00
Return over direct exp per acre	339.85	151.95
Overhead Expenses		
Hired labor	7.30	12.26
Machinery leases	5.62	7.67
RE & pers. property taxes	39.99	-
Farm insurance	6.37	8.69
Utilities	3.78	5.16
Dues & professional fees	2.41	2.20
Interest	52.74	4.77
Mach & bldg depreciation	108.81	36.85
Miscellaneous	4.31	4.75
Total overhead expenses per acre	231.34	82.35
Total dir & ovhd expenses per acre	373.56	443.35
Net return per acre	108.51	69.60
Government payments	17.40	1.33
Net return with govt pmts	125.91	70.93
Labor & management charge	56.65	41.43
Net return over lbr & mgt	69.26	29.50
Cost of Production		
Total direct expense per ton	26.26	77.17
Total dir & ovhd exp per ton	68.97	94.77
Less govt & other income	64.71	94.41
With labor & management	75.17	103.27
Net value per unit	87.96	109.57
Machinery cost per acre	183.04	96.38
Est. labor hours per acre	2.11	3.11

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

CRP on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	19
Acres	28.84
Yield per acre (\$)	144.74
Operators share of yield %	100.00
Value per \$	1.00
Other product return per acre	2.37
Total product return per acre	147.11
Gross return per acre	147.11
Direct Expenses	
Crop chemicals	2.56
Fuel & oil	2.83
Repairs	4.73
Custom hire	0.55
Operating interest	0.72
Total direct expenses per acre	11.39
Return over direct exp per acre	135.72
Overhead Expenses	
Hired labor	2.41
RE & pers. property taxes	17.18
Farm insurance	1.23
Utilities	1.17
Dues & professional fees	0.39
Interest	24.91
Mach & bldg depreciation	12.22
Miscellaneous	0.88
Total overhead expenses per acre	60.40
Total dir & ovhd expenses per acre	71.79
Net return per acre	75.33
Government payments	-
Net return with govt pmts	75.33
Labor & management charge	7.60
Net return over lbr & mgt	67.73
Cost of Production	
Total direct expense per \$	0.08
Total dir & ovhd exp per \$	0.50
Less govt & other income	0.48
With labor & management	0.53
Net value per unit	1.00
Machinery cost per acre	19.08
Est. labor hours per acre	0.42

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 unit.

The livestock enterprise summaries include data from both Southwest Minnesota Farm Management Association farms and Minnesota State Farm Business Management program farms. This provides a greater numbers farms reporting for each enterprise, providing more accurate benchmark information. Minnesota State FBM programs are distributed across the state and include over 2,000 participating farms. We want to thank the Minnesota State FBM program and participating producers for making this data available to be included in this report.

The “Dairy” table, if included, 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 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 deducting an opportunity cost for unpaid labor and management. This is the return to equity capital.

Cost of Production 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
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Hogs, Farrow To Finish -- Average Per Litter

	<u>Avg. Of All Farms</u>	
Number of farms	9	
	Quantity	Value
Raised Hogs sold (lb)	2,380.3	1,240.07
Transferred out (lb)	16.5	8.57
Cull sales (lb)	31.0	18.96
Other income		0.56
Purchased (lb)	-20.7	-13.33
Inventory change (lb)	4.6	64.07
Gross margin		1,318.91
Direct Expenses		
Protein Vit Minerals (lb.)	3,084.9	468.35
Complete Ration (lb.)	1.3	0.28
Corn (bu.)	101.6	313.39
Other feed stuffs (lb)	87.1	11.31
Breeding fees		20.98
Veterinary		44.55
Supplies		42.37
Fuel & oil		10.36
Repairs		15.90
Custom hire		3.88
Hired labor		51.06
Operating interest		12.58
Total direct expenses		994.99
Return over direct expense		323.92
Overhead Expenses		
Hired labor		14.87
Building leases		83.92
RE & pers. property taxes		1.29
Farm insurance		19.11
Utilities		21.11
Interest		7.18
Mach & bldg depreciation		22.66
Miscellaneous		5.07
Total overhead expenses		175.21
Total dir & ovhd expenses		1,170.20
Net return		148.71
Labor & management charge		47.04
Net return over lbr & mgt		101.67
Cost of Production/Cwt. Carcass Sold		
Total direct expense per unit		57.66
Total dir & ovhd expense per unit		67.82
With other revenue adjustments		66.26
With labor and management		68.98
Est. labor hours per unit		3.22
Other Information		
Average number of sows		323.6
Litters farrowed		696
Litters per sow		2.15
Litters per crate		6.21
Pigs born per litter		10.56
Pigs weaned per litter		8.00
Pigs weaned per sow		16.66
Pigs sold per litter		8.67
Percent substandard hogs		2
Lb. of feed / lb. of gain		3.69
Feed cost / cwt. of gain		32.89
Feed cost per litter		793.32
Hired labor per sow		141.92
Avg wgt/Raised Hogs sold		275
Avg price / cwt.		52.10
Average carcass weight		203
Average price / cwt. carcass		71.21

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

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

	<u>Avg. Of All Farms</u>	
Number of farms	9	
	Quantity	Value
Raised Hogs sold (lb)	137.95	71.87
Transferred out (lb)	0.96	0.50
Cull sales (lb)	1.80	1.10
Other income		0.03
Purchased (lb)	-1.20	-0.77
Inventory change (lb)	0.27	3.71
Gross margin		76.44
Direct Expenses		
Protein Vit Minerals (lb.)	178.78	27.14
Complete Ration (lb.)	0.07	0.02
Corn (bu.)	5.89	18.16
Other feed stuffs (lb)	5.05	0.66
Breeding fees		1.22
Veterinary		2.58
Supplies		2.46
Fuel & oil		0.60
Repairs		0.92
Custom hire		0.23
Hired labor		2.96
Operating interest		0.73
Total direct expenses		57.66
Return over direct expense		18.77
Overhead Expenses		
Hired labor		0.86
Building leases		4.86
RE & pers. property taxes		0.07
Farm insurance		1.11
Utilities		1.22
Interest		0.42
Mach & bldg depreciation		1.31
Miscellaneous		0.29
Total overhead expenses		10.15
Total dir & ovhd expenses		67.82
Net return		8.62
Labor & management charge		2.73
Net return over lbr & mgt		5.89
Cost of Production/Cwt. Carcass Sold		
Total direct expense per unit		57.66
Total dir & ovhd expense per unit		67.82
With other revenue adjustments		66.26
With labor and management		68.98
Est. labor hours per unit		0.19
Other Information		
Average number of sows		323.6
Litters farrowed		696
Litters per sow		2.15
Litters per crate		6.21
Pigs born per litter		10.56
Pigs weaned per litter		8.00
Pigs weaned per sow		16.66
Pigs sold per litter		8.67
Percent substandard hogs		2
Lb. of feed / lb. of gain		3.69
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Average carcass weight		203
Average price / cwt. carcass		71.21

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Hogs, Finish Feeder Pigs -- Average Per Head

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	26		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Finish Hogs sold (lb)	278.1	142.43	242.6	125.38	280.1	148.66
Transferred out (lb)	2.5	1.76	13.4	7.67	-	-
Cull sales (lb)	1.5	0.33	0.2	0.06	1.6	0.43
Other income		0.99		-		0.54
Purchased (lb)	-41.2	-55.47	-39.2	-42.06	-51.2	-66.75
Transferred in (lb)	-5.1	-7.40	-	-15.52	-	-
Inventory change (lb)	3.5	6.79	13.0	5.36	5.3	9.57
Gross margin		89.43		80.88		92.45
Direct Expenses						
Protein Vit Minerals (lb.)	149.1	23.90	38.9	7.85	154.7	27.71
Complete Ration (lb.)	174.6	12.00	546.3	33.44	-	-
Corn (bu.)	6.6	21.51	4.4	14.22	7.3	23.68
DDGS, dry (lb.)	7.3	0.43	22.1	1.24	27.4	1.60
Other feed stuffs (lb)	5.8	0.40	12.6	0.88	-	-
Veterinary		1.33		1.97		0.18
Supplies		1.56		1.97		1.30
Contract production exp.		2.89		1.06		-
Fuel & oil		0.50		0.81		0.88
Repairs		1.21		1.82		1.70
Custom hire		0.39		0.50		0.87
Livestock leases		0.43		2.48		-
Hauling and trucking		2.18		2.86		0.67
Operating interest		1.18		1.14		0.58
Total direct expenses		69.91		72.23		59.17
Return over direct expense		19.52		8.65		33.28
Overhead Expenses						
Hired labor		1.11		1.69		0.69
Building leases		6.59		5.28		4.00
RE & pers. property taxes		0.26		0.54		0.49
Farm insurance		1.06		1.41		1.46
Utilities		0.71		1.88		0.79
Interest		0.80		0.75		0.77
Mach & bldg depreciation		2.14		1.95		2.69
Miscellaneous		0.57		0.72		0.62
Total overhead expenses		13.25		14.20		11.51
Total dir & ovhd expenses		83.15		86.44		70.68
Net return		6.28		-5.56		21.77
Labor & management charge		2.70		3.32		3.89
Net return over lbr & mgt		3.58		-8.88		17.87
Cost of Production/Cwt. Carcass Sold						
Total direct expense per unit		61.47		68.94		55.73
Total dir & ovhd expense per unit		67.96		76.82		61.27
With other revenue adjustments		67.51		76.82		61.09
With labor and management		68.83		78.66		62.97
Est. labor hours per unit		0.21		0.34		0.26
Other Information						
No. purchased or trans in	10,220		8,456		3,448	
Number sold or trans out	9,356		7,604		3,010	
Percentage death loss	3.5		3.6		3.2	
Percent substandard hogs	2		1		2	
Avg. daily gain (lb.)	1.80		1.74		1.76	
Lb. of feed / lb. of gain	2.95		3.78		2.51	
Feed cost per cwt. of gain	24.32		25.05		22.43	
Feed cost per head	58.24		57.63		52.98	
Hired labor per head	1.25		1.73		0.69	
Average purchase weight	41		52		43	
Avg wgt / Finish Hogs sold	275		273		271	
Avg purch price / head	55.64		55.32		56.40	
Avg sales price / cwt.	51.21		51.69		53.06	
Average carcass weight	205		205		205	
Average price / cwt. carcass	69.14		69.25		71.00	

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Hogs, Finish Feeder Pigs -- Average Per Cwt. Carcass Sold

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	26		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Finish Hogs sold (lb)	136.15	69.72	134.43	69.49	134.88	71.57
Transferred out (lb)	1.23	0.86	7.45	4.25	-	-
Cull sales (lb)	0.74	0.16	0.12	0.03	0.77	0.21
Other income		0.48		-		0.26
Purchased (lb)	-20.19	-27.16	-21.71	-23.31	-24.65	-32.14
Transferred in (lb)	-2.51	-3.62	-	-8.60	-	-
Inventory change (lb)	1.72	3.33	7.19	2.97	2.55	4.61
Gross margin		43.78		44.83		44.51
Direct Expenses						
Protein Vit Minerals (lb.)	73.00	11.70	21.57	4.35	74.49	13.34
Complete Ration (lb.)	85.45	5.87	302.78	18.53	-	-
Corn (bu.)	3.23	10.53	2.46	7.88	3.53	11.40
DDGS, dry (lb.)	3.57	0.21	12.25	0.69	13.18	0.77
Other feed stuffs (lb)	2.86	0.20	7.00	0.49	-	-
Veterinary		0.65		1.09		0.09
Supplies		0.76		1.09		0.62
Contract production exp.		1.41		0.59		-
Fuel & oil		0.25		0.45		0.43
Repairs		0.59		1.01		0.82
Custom hire		0.19		0.28		0.42
Livestock leases		0.21		1.37		-
Hauling and trucking		1.07		1.58		0.32
Operating interest		0.58		0.63		0.28
Total direct expenses		34.22		40.03		28.49
Return over direct expense		9.56		4.79		16.02
Overhead Expenses						
Hired labor		0.54		0.94		0.33
Building leases		3.23		2.92		1.93
Farm insurance		0.52		0.78		0.70
Utilities		0.35		1.04		0.38
Interest		0.39		0.42		0.37
Mach & bldg depreciation		1.05		1.08		1.30
Miscellaneous		0.40		0.70		0.54
Total overhead expenses		6.48		7.87		5.54
Total dir & ovhd expenses		40.71		47.91		34.03
Net return		3.07		-3.08		10.48
Labor & management charge		1.32		1.84		1.88
Net return over lbr & mgt		1.75		-4.92		8.61
Cost of Production/Cwt. Carcass Sold						
Total direct expense per unit		61.47		68.94		55.73
Total dir & ovhd expense per unit		67.96		76.82		61.27
With other revenue adjustments		67.51		76.82		61.09
With labor and management		68.83		78.66		62.97
Est. labor hours per unit		0.10		0.19		0.13
Other Information						
No. purchased or trans in	10,220		8,456		3,448	
Number sold or trans out	9,356		7,604		3,010	
Percentage death loss	3.5		3.6		3.2	
Percent substandard hogs	2		1		2	
Avg. daily gain (lb.)	1.80		1.74		1.76	
Lb. of feed / lb. of gain	2.95		3.78		2.51	
Feed cost per cwt. of gain	24.32		25.05		22.43	
Feed cost per head	58.24		57.63		52.98	
Hired labor per head	1.25		1.73		0.69	
Average purchase weight	41		52		43	
Avg wgt / Finish Hogs sold	275		273		271	
Avg purch price / head	55.64		55.32		56.40	
Avg sales price / cwt.	51.21		51.69		53.06	
Average carcass weight	205		205		205	
Average price / cwt. carcass	69.14		69.25		71.00	

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Hogs, Weaning to Finish -- Average Per Head

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	28		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Wean-Fin Pig sold (lb)	268.6	146.56	327.5	169.13	253.9	147.92
Transferred out (lb)	1.6	1.52	0.9	1.00	1.1	0.55
Cull sales (lb)	1.4	0.48	-	-	0.8	0.29
Other income		2.57		0.02		-0.11
Purchased (lb)	-13.8	-38.72	-13.1	-38.94	-12.6	-37.97
Transferred in (lb)	-1.9	-7.43	-0.1	-0.33	-	-
Inventory change (lb)	7.7	4.77	-52.3	-33.44	21.4	13.08
Gross margin		109.76		97.45		123.76
Direct Expenses						
Protein Vit Minerals (lb.)	157.6	27.28	132.1	23.68	143.2	20.10
Complete Ration (lb.)	67.4	6.38	196.2	17.53	82.3	9.15
Corn (bu.)	7.4	23.54	9.5	30.20	7.6	23.58
Protein Supplement (lb.)	4.4	0.72	45.7	7.44	-	-
DDGS, dry (lb.)	82.3	4.52	5.1	0.32	103.8	5.47
Other feed stuffs (lb)	4.9	1.64	1.6	0.21	19.3	6.31
Veterinary		3.81		5.24		3.24
Supplies		3.62		3.55		2.74
Contract production exp.		5.48		10.90		10.24
Repairs		1.77		2.57		2.64
Custom hire		1.92		0.15		1.89
Hired labor		1.91		2.84		2.53
Hauling and trucking		1.71		3.33		1.11
Operating interest		0.86		1.74		1.26
Total direct expenses		85.15		109.70		90.26
Return over direct expense		24.61		-12.25		33.50
Overhead Expenses						
Building leases		6.61		-		-
Farm insurance		0.93		1.22		0.90
Utilities		0.53		1.11		0.48
Interest		0.85		0.51		1.10
Mach & bldg depreciation		2.84		2.66		4.01
Miscellaneous		1.64		1.51		0.34
Total overhead expenses		13.41		7.02		6.82
Total dir & ovhd expenses		98.56		116.72		97.08
Net return		11.20		-19.27		26.68
Labor & management charge		4.07		4.84		3.68
Net return over lbr & mgt		7.13		-24.10		23.00
Cost of Production/Cwt. Carcass Sold						
Total direct expense per unit		63.36		74.64		61.59
Total dir & ovhd expense per unit		70.11		77.51		65.24
With other revenue adjustments		68.87		77.51		65.33
With labor and management		70.92		79.49		67.30
Est. labor hours per unit		0.26		0.40		0.27
Other Information						
No. purchased or trans in		20,506		9,116		23,937
Number sold or trans out		18,195		11,858		20,219
Percentage death loss		5.8		5.2		6.6
Percent substandard hogs		2		1		2
Avg. daily gain (lb.)		1.46		1.28		1.46
Lb. of feed / lb. of gain		2.79		3.29		3.06
Feed cost per cwt. of gain		24.29		30.19		24.42
Feed cost per head		64.07		79.38		64.62
Hired labor per head		2.76		2.84		2.53
Average purchase weight		15		14		13
Avg wgt / Wean-Fin Pig sold		265		270		250
Avg purch price / head		41.15		41.39		37.75
Avg sales price / cwt.		54.56		51.65		58.27
Average carcass weight		199		203		187
Average price / cwt. carcass		73.28		69.05		78.80

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

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

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	28		5		6	
	Quantity	Value	Quantity	Value	Quantity	Value
Wean-Fin Pig sold (lb)	135.16	73.74	134.01	69.22	136.16	79.34
Transferred out (lb)	0.78	0.77	0.39	0.41	0.57	0.29
Cull sales (lb)	0.71	0.24	-	-	0.41	0.16
Other income		1.29		0.01		-0.06
Purchased (lb)	-6.94	-19.48	-5.36	-15.94	-6.75	-20.37
Transferred in (lb)	-0.98	-3.74	-0.06	-0.13	-	-
Inventory change (lb)	3.85	2.40	-21.38	-13.68	11.48	7.01
Gross margin		55.22		39.88		66.38
Direct Expenses						
Protein Vit Minerals (lb.)	79.28	13.72	54.04	9.69	76.83	10.78
Complete Ration (lb.)	33.90	3.21	80.30	7.17	44.14	4.91
Corn (bu.)	3.72	11.84	3.87	12.36	4.06	12.65
Protein Supplement (lb.)	2.22	0.36	18.71	3.04	-	-
DDGS, dry (lb.)	41.42	2.27	2.09	0.13	55.67	2.94
Other feed stuffs (lb)	2.49	0.83	0.65	0.09	10.34	3.39
Veterinary		1.92		2.14		1.74
Supplies		1.82		1.45		1.47
Contract production exp.		2.76		4.46		5.49
Repairs		0.89		1.05		1.42
Custom hire		0.96		0.06		1.01
Hired labor		0.96		1.16		1.36
Hauling and trucking		0.86		1.36		0.60
Operating interest		0.43		0.71		0.68
Total direct expenses		42.84		44.89		48.42
Return over direct expense		12.38		-5.01		17.97
Overhead Expenses						
Building leases		3.33		-		-
Farm insurance		0.47		0.50		0.48
Utilities		0.27		0.45		0.26
Interest		0.43		0.21		0.59
Mach & bldg depreciation		1.43		1.09		2.15
Miscellaneous		0.83		0.62		0.18
Total overhead expenses		6.75		2.87		3.66
Total dir & ovhd expenses		49.59		47.77		52.07
Net return		5.64		-7.89		14.31
Labor & management charge		2.05		1.98		1.97
Net return over lbr & mgt		3.59		-9.86		12.34
Cost of Production/Cwt. Carcass Sold						
Total direct expense per unit		63.36		74.64		61.59
Total dir & ovhd expense per unit		70.11		77.51		65.24
With other revenue adjustments		68.87		77.51		65.33
With labor and management		70.92		79.49		67.30
Est. labor hours per unit		0.13		0.17		0.14
Other Information						
No. purchased or trans in		20,506		9,116		23,937
Number sold or trans out		18,195		11,858		20,219
Percentage death loss		5.8		5.2		6.6
Percent substandard hogs		2		1		2
Avg. daily gain (lb.)		1.46		1.28		1.46
Lb. of feed / lb. of gain		2.79		3.29		3.06
Feed cost per cwt. of gain		24.29		30.19		24.42
Feed cost per head		64.07		79.38		64.62
Hired labor per head		2.76		2.84		2.53
Average purchase weight		15		14		13
Avg wgt / Wean-Fin Pig sold		265		270		250
Avg purch price / head		41.15		41.39		37.75
Avg sales price / cwt.		54.56		51.65		58.27
Average carcass weight		199		203		187
Average price / cwt. carcass		73.28		69.05		78.80

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Hogs, Finish Feeder Pigs (Contract Grower) -- Average Per Pig Space

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	38		7		8	
	Quantity	Value	Quantity	Value	Quantity	Value
Transferred out (lb)	-	21.27	-	12.52	-	24.85
Other income		17.57		23.66		17.03
Gross margin		38.84		36.17		41.88
Direct Expenses						
Supplies		1.83		3.23		1.09
Fuel & oil		1.26		1.39		1.02
Repairs		3.34		4.54		1.83
Custom hire		0.40		0.71		0.68
Hired labor		1.79		0.77		1.64
Livestock leases		0.06		0.37		-
Utilities		1.08		1.59		1.07
Operating interest		0.43		0.10		1.64
Total direct expenses		10.19		12.70		8.97
Return over direct expense		28.65		23.47		32.91
Overhead Expenses						
Hired labor		0.47		0.00		0.42
Building leases		0.29		-		-
RE & pers. property taxes		0.69		1.87		0.25
Farm insurance		2.03		2.29		1.46
Utilities		2.04		1.48		1.56
Dues & professional fees		0.27		0.67		0.12
Interest		3.82		8.30		2.58
Mach & bldg depreciation		8.13		10.33		5.77
Miscellaneous		0.77		1.21		0.66
Total overhead expenses		18.50		26.15		12.84
Total dir & ovhd expenses		28.70		38.85		21.81
Net return		10.15		-2.68		20.07
Labor & management charge		7.34		7.23		7.37
Net return over lbr & mgt		2.80		-9.91		12.70
Cost of Production Per Pig Space						
Total direct expense per unit		10.19		12.70		8.97
Total dir & ovhd expense per unit		28.70		38.85		21.81
Est. labor hours per unit		0.46		0.58		0.29
Other Information						
Number of pigs		6,355		6,280		5,727
Pigs per pig space (per year)		2.38		2.88		2.10
Pigs per 100 sq. ft. (per yr)		31.10		38.52		28.61
Net return per 100 sq. ft.		132.53		-35.89		273.16
Net return per labor hour		22.08		-4.65		69.61
Square feet per pig space		7.66		7.47		7.35

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

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

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	64		12		13	
	Quantity	Value	Quantity	Value	Quantity	Value
Transferred out (lb)	15.3	20.40	74.8	25.61	4.3	22.69
Other income		18.98		7.76		21.39
Gross margin		39.38		33.37		44.07
Direct Expenses						
Supplies		1.33		2.67		0.47
Fuel & oil		1.53		1.70		1.19
Repairs		4.09		5.56		3.57
Custom hire		1.45		0.57		0.97
Hired labor		1.18		1.75		0.35
Utilities		1.32		1.06		2.08
Operating interest		0.25		0.38		0.15
Total direct expenses		11.16		13.68		8.78
Return over direct expense		28.22		19.68		35.29
Overhead Expenses						
Hired labor		0.51		0.52		0.47
Building leases		0.61		3.32		-
RE & pers. property taxes		0.97		1.44		0.34
Farm insurance		2.05		2.44		1.64
Utilities		1.64		2.01		1.47
Dues & professional fees		0.28		0.69		0.01
Interest		4.52		6.30		3.29
Mach & bldg depreciation		7.36		8.40		5.18
Miscellaneous		0.84		1.32		0.52
Total overhead expenses		18.78		26.44		12.92
Total dir & ovhd expenses		29.94		40.12		21.71
Net return		9.44		-6.76		22.37
Labor & management charge		6.20		7.27		6.44
Net return over lbr & mgt		3.24		-14.03		15.93
Cost of Production Per Pig Space						
Total direct expense per unit		11.16		13.68		8.78
Total dir & ovhd expense per unit		29.94		40.12		21.71
Est. labor hours per unit		0.34		0.30		0.24
Other Information						
Number of pigs		7,164		5,998		7,206
Pigs per pig space (per year)		2.45		2.59		2.38
Pigs per 100 sq. ft. (per yr)		32.53		35.40		31.94
Net return per 100 sq. ft.		125.41		-92.32		300.63
Net return per labor hour		27.55		-22.19		92.16
Square feet per pig space		7.52		7.32		7.44

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	139		27		28	
	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	308.2	433.70	94.3	125.23	416.5	581.26
Transferred out (lb)	180.4	288.19	242.9	365.24	179.9	270.01
Cull sales (lb)	87.3	107.17	150.3	111.31	100.9	91.98
Other income		6.75		6.29		9.34
Purchased (lb)	-31.1	-139.40	-32.9	-53.02	-88.5	-216.63
Transferred in (lb)	-19.6	-47.31	-50.0	-44.44	-21.0	-37.73
Inventory change (lb)	-0.6	103.88	-3.4	-37.00	12.3	258.03
Gross margin		754.81		473.60		963.77
Direct Expenses						
Protein Vit Minerals (lb.)	304.0	45.45	295.7	55.72	307.8	47.00
Complete Ration (lb.)	105.9	9.82	271.5	15.24	187.4	18.40
Corn Silage (lb.)	4,500.8	66.76	5,331.7	77.87	5,967.0	90.02
Hay, Alfalfa (lb.)	1,284.5	55.81	4,304.3	182.65	869.9	38.05
Hay, Grass (lb.)	3,707.2	111.69	2,434.1	73.16	1,650.9	45.09
Pasture (aum)	3.8	55.20	2.4	37.84	2.2	32.01
Hay (lb.)	1,245.4	36.90	-	-	2,476.2	70.56
Other feed stuffs (lb)	2,041.1	33.34	1,063.4	14.71	3,590.0	56.25
Veterinary		33.94		37.28		39.20
Supplies		39.26		40.85		42.29
Fuel & oil		25.36		31.18		21.32
Repairs		44.76		66.63		33.85
Custom hire		5.72		0.15		7.58
Utilities		5.01		11.73		1.94
Operating interest		14.64		21.83		9.42
Total direct expenses		583.66		666.84		552.99
Return over direct expense		171.15		-193.24		410.78
Overhead Expenses						
Hired labor		6.72		15.43		7.87
RE & pers. property taxes		7.20		16.39		3.75
Farm insurance		14.23		27.99		10.76
Utilities		12.49		15.16		9.22
Interest		40.81		61.50		22.34
Mach & bldg depreciation		41.56		99.71		32.02
Miscellaneous		20.70		20.25		17.56
Total overhead expenses		143.73		256.43		103.52
Total dir & ovhd expenses		727.39		923.27		656.51
Net return		27.43		-449.67		307.26
Labor & management charge		101.19		142.38		103.08
Net return over lbr & mgt		-73.76		-592.05		204.18
Cost of Production Per Cwt. Produced						
Total direct expense per unit		110.66		164.40		91.78
Total dir & ovhd expense per unit		137.91		227.62		108.97
With other revenue adjustments		136.09		232.22		101.87
With labor and management		155.28		267.32		118.98
Est. labor hours per unit		9.16		12.59		7.42
Other Information						
Number of cows		79.1		44.3		95.1
Pregnancy percentage		95.3		96.0		98.5
Pregnancy loss percentage		1.6		1.4		1.5
Culling percentage		12.1		12.4		9.6
Calving percentage		93.8		94.7		97.0
Weaning percentage		88.2		87.5		93.9
Calves sold per cow		0.83		0.80		0.92
Calf death loss percent		5.2		6.4		3.3
Cow death loss percent		2.2		4.0		1.9
Cows per FTE		305.6		222.3		377.2
Average weaning weight		539		549		540
Lb. weaned/exposed female		475		481		508
Feed cost per cow		414.96		457.19		397.38
Avg wgt/ Beef Calves sold		661		591		696
Avg price / cwt.		140.73		132.78		139.57

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	139		27		28	
	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	58.43	82.23	23.25	30.87	69.12	96.48
Transferred out (lb)	34.20	54.64	59.89	90.04	29.87	44.82
Cull sales (lb)	16.55	20.32	37.05	27.44	16.75	15.27
Other income		1.28		1.55		1.55
Purchased (lb)	-5.90	-26.43	-8.11	-13.07	-14.69	-35.96
Transferred in (lb)	-3.72	-8.97	-12.33	-10.96	-3.48	-6.26
Inventory change (lb)	-0.11	19.70	-0.84	-9.12	2.04	42.83
Gross margin		143.11		116.76		159.97
Direct Expenses						
Protein Vit Minerals (lb.)	57.64	8.62	72.91	13.74	51.09	7.80
Complete Ration (lb.)	20.08	1.86	66.94	3.76	31.11	3.05
Corn Silage (lb.)	853.37	12.66	1,314.45	19.20	990.39	14.94
Hay, Alfalfa (lb.)	243.54	10.58	1,061.15	45.03	144.38	6.32
Hay, Grass (lb.)	702.89	21.18	600.08	18.04	274.01	7.48
Pasture (aum)	0.71	10.47	0.60	9.33	0.36	5.31
Hay (lb.)	236.14	7.00	-	-	410.99	11.71
Other feed stuffs (lb)	386.99	6.32	262.17	3.63	595.86	9.34
Veterinary		6.43		9.19		6.51
Supplies		8.53		10.11		8.28
Fuel & oil		4.81		7.69		3.54
Repairs		8.49		16.43		5.62
Utilities		0.95		2.89		0.32
Operating interest		2.78		5.38		1.56
Total direct expenses		110.66		164.40		91.78
Return over direct expense		32.45		-47.64		68.18
Overhead Expenses						
Hired labor		1.27		3.80		1.31
RE & pers. property taxes		1.37		4.04		0.62
Farm insurance		2.70		6.90		1.79
Utilities		2.37		3.74		1.53
Interest		7.74		15.16		3.71
Mach & bldg depreciation		7.88		24.58		5.31
Miscellaneous		3.93		4.99		2.91
Total overhead expenses		27.25		63.22		17.18
Total dir & ovhd expenses		137.91		227.62		108.97
Net return		5.20		-110.86		51.00
Labor & management charge		19.19		35.10		17.11
Net return over lbr & mgt		-13.99		-145.96		33.89
Cost of Production Per Cwt. Produced						
Total direct expense per unit		110.66		164.40		91.78
Total dir & ovhd expense per unit		137.91		227.62		108.97
With other revenue adjustments		136.09		232.22		101.87
With labor and management		155.28		267.32		118.98
Est. labor hours per unit		1.74		3.11		1.23
Other Information						
Number of cows		79.1		44.3		95.1
Pregnancy percentage		95.3		96.0		98.5
Pregnancy loss percentage		1.6		1.4		1.5
Culling percentage		12.1		12.4		9.6
Calving percentage		93.8		94.7		97.0
Weaning percentage		88.2		87.5		93.9
Calves sold per cow		0.83		0.80		0.92
Calf death loss percent		5.2		6.4		3.3
Cow death loss percent		2.2		4.0		1.9
Cows per FTE		305.6		222.3		377.2
Average weaning weight		539		549		540
Lb. weaned/exposed female		475		481		508
Feed cost per cow		414.96		457.19		397.38
Avg wgt/ Beef Calves sold		661		591		696
Avg price / cwt.		140.73		132.78		139.57

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Beef Finishing -- Average Per Head

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	79		15		16	
	Quantity	Value	Quantity	Value	Quantity	Value
Finish Beef sold (lb)	1,364.8	1,632.47	1,350.0	1,549.96	1,273.8	1,563.41
Transferred out (lb)	14.4	21.13	6.5	7.46	19.4	32.02
Cull sales (lb)	0.1	0.06	-	-	-	-
Other income		-1.71		-23.46		28.11
Purchased (lb)	-622.4	-936.63	-602.5	-906.71	-467.6	-633.37
Transferred in (lb)	-53.0	-77.87	-54.1	-86.36	-79.6	-110.16
Inventory change (lb)	-6.7	78.04	-99.3	-20.40	17.4	120.59
Gross margin		715.51		520.49		1,000.61
Direct Expenses						
Protein Vit Minerals (lb.)	326.8	59.57	305.5	90.76	330.3	59.13
Complete Ration (lb.)	154.8	15.37	87.4	12.04	1,019.7	76.49
Corn (bu.)	54.9	168.44	55.3	162.00	53.4	169.43
Corn Silage (lb.)	2,245.5	30.07	2,476.8	36.34	2,282.8	10.26
Hay, Alfalfa (lb.)	289.6	13.21	296.3	10.72	367.0	12.55
Hay, Grass (lb.)	321.7	11.72	324.2	10.43	414.7	14.48
DDGS, dry (lb.)	807.5	27.15	655.2	40.95	65.1	5.60
Other feed stuffs (lb)	1,405.6	31.21	2,872.8	18.80	1,676.7	35.59
Veterinary		16.03		9.43		12.11
Supplies		30.99		25.20		13.87
Contract production exp.		12.04		-		6.10
Fuel & oil		12.92		17.49		6.76
Repairs		24.27		22.88		27.92
Hauling and trucking		12.32		10.04		17.79
Operating interest		15.27		17.57		12.19
Total direct expenses		480.59		484.66		480.26
Return over direct expense		234.92		35.83		520.34
Overhead Expenses						
RE & pers. property taxes		2.80		9.52		1.70
Farm insurance		10.94		10.75		12.65
Utilities		6.98		9.45		2.90
Interest		7.52		18.58		2.40
Mach & bldg depreciation		38.27		63.86		17.78
Miscellaneous		17.61		13.98		23.81
Total overhead expenses		84.12		126.13		61.24
Total dir & ovhd expenses		564.72		610.79		541.50
Net return		150.79		-90.30		459.11
Labor & management charge		41.36		51.96		36.04
Net return over lbr & mgt		109.44		-142.27		423.07
Cost of Production Per Cwt. Produced						
Total direct expense per unit		102.23		109.74		84.74
Total dir & ovhd expense per unit		108.33		119.04		89.47
With other revenue adjustments		108.96		121.47		87.87
With labor and management		111.96		125.30		90.66
Est. labor hours per unit		2.97		3.40		3.38
Other Information						
No. purchased or trans in		219		159		125
Number sold or trans out		215		169		117
Percentage death loss		0.8		1.4		1.8
Avg. daily gain (lb.)		2.74		2.34		2.19
Lb. of conc / lb. of gain		7.10		6.95		6.41
Lb. of feed / lb. of gain		9.37		10.08		9.20
Feed cost per cwt. of gain		50.72		62.72		49.86
Feed cost per head		356.74		382.04		383.53
Hired labor per head		17.53		8.02		7.97
Average purchase weight		670		720		544
Avg wgt / Finish Beef sold		1,358		1,352		1,297
Avg purch price / cwt.		150.48		150.48		135.45
Avg sales price / cwt.		119.61		114.81		122.74

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Beef Finishing -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	79		15		16	
	Quantity	Value	Quantity	Value	Quantity	Value
Finish Beef sold (lb)	194.03	232.08	221.61	254.44	165.58	203.23
Transferred out (lb)	2.05	3.00	1.07	1.22	2.52	4.16
Cull sales (lb)	0.01	0.01	-	-	-	-
Other income		-0.24		-3.85		3.65
Purchased (lb)	-88.49	-133.15	-98.91	-148.85	-60.78	-82.33
Transferred in (lb)	-7.54	-11.07	-8.87	-14.18	-10.34	-14.32
Inventory change (lb)	-0.95	11.09	-16.30	-3.35	2.26	15.68
Gross margin		101.72		85.44		130.07
Direct Expenses						
Protein Vit Minerals (lb.)	46.45	8.47	50.16	14.90	42.93	7.69
Complete Ration (lb.)	22.00	2.19	14.36	1.98	132.55	9.94
Corn (bu.)	7.81	23.95	9.08	26.59	6.95	22.03
Corn Silage (lb.)	319.22	4.28	406.59	5.97	296.75	1.33
Hay, Alfalfa (lb.)	41.16	1.88	48.65	1.76	47.70	1.63
Hay, Grass (lb.)	45.74	1.67	53.22	1.71	53.91	1.88
DDGS, dry (lb.)	114.79	3.86	107.55	6.72	8.47	0.73
Other feed stuffs (lb)	199.83	4.44	471.61	3.09	217.96	4.63
Veterinary		2.28		1.55		1.57
Supplies		4.41		4.14		1.80
Contract production exp.		1.71		-		0.79
Fuel & oil		1.84		2.87		0.88
Repairs		3.45		3.76		3.63
Hauling and trucking		1.75		1.65		2.31
Operating interest		2.17		2.88		1.58
Total direct expenses		68.32		79.56		62.43
Return over direct expense		33.40		5.88		67.64
Overhead Expenses						
RE & pers. property taxes		0.40		1.56		0.22
Farm insurance		1.55		1.76		1.64
Utilities		0.99		1.55		0.38
Interest		1.07		3.05		0.31
Mach & bldg depreciation		5.44		10.48		2.31
Miscellaneous		2.50		2.29		3.09
Total overhead expenses		11.96		20.71		7.96
Total dir & ovhd expenses		80.28		100.27		70.39
Net return		21.44		-14.82		59.68
Labor & management charge		5.88		8.53		4.69
Net return over lbr & mgt		15.56		-23.35		55.00
Cost of Production Per Cwt. Produced						
Total direct expense per unit		102.23		109.74		84.74
Total dir & ovhd expense per unit		108.33		119.04		89.47
With other revenue adjustments		108.96		121.47		87.87
With labor and management		111.96		125.30		90.66
Est. labor hours per unit		0.42		0.56		0.44
Other Information						
No. purchased or trans in		219		159		125
Number sold or trans out		215		169		117
Percentage death loss		0.8		1.4		1.8
Avg. daily gain (lb.)		2.74		2.34		2.19
Lb. of conc / lb. of gain		7.10		6.95		6.41
Lb. of feed / lb. of gain		9.37		10.08		9.20
Feed cost per cwt. of gain		50.72		62.72		49.86
Feed cost per head		356.74		382.04		383.53
Hired labor per head		17.53		8.02		7.97
Average purchase weight		670		720		544
Avg wgt / Finish Beef sold		1,358		1,352		1,297
Avg purch price / cwt.		150.48		150.48		135.45
Avg sales price / cwt.		119.61		114.81		122.74

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Dairy -- Average Per Cow

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	396		79		80	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	24,488.0	4,387.85	22,840.7	3,952.25	25,020.8	4,720.69
Dairy Calves sold (hd)	0.3	45.33	0.3	81.14	0.3	35.90
Transferred out (hd)	0.6	35.85	0.6	19.10	0.6	46.95
Cull sales (hd)	0.3	233.83	0.3	215.57	0.3	211.10
Other income		47.18		37.01		44.90
Purchased (hd)	0.0	-31.95	0.0	-36.05	0.0	-34.99
Transferred in (hd)	0.4	-60.77	0.4	-27.65	0.4	-87.76
Inventory change (hd)	0.0	51.26	0.0	-35.94	0.1	119.87
Dairy repl net cost		-574.59		-684.40		-472.29
Gross margin		4,134.11		3,521.03		4,584.82
Direct Expenses						
Protein Vit Minerals (lb.)	3,338.1	686.73	2,232.6	479.10	3,838.6	711.06
Complete Ration (lb.)	2,699.5	335.86	2,345.5	546.90	4,675.7	234.75
Corn (bu.)	65.6	207.07	71.1	223.46	61.9	187.43
Corn Silage (lb.)	18,093.7	290.01	18,290.4	297.77	18,142.9	273.11
Hay, Alfalfa (lb.)	3,045.0	159.81	3,833.9	216.74	2,253.7	120.36
Haylage, Alfalfa (lb.)	4,512.1	134.48	4,345.3	120.72	4,038.2	132.61
Other feed stuffs (lb)	2,695.3	122.59	2,381.7	100.55	3,699.2	194.89
Breeding fees		47.94		53.67		43.86
Veterinary		114.70		125.83		115.73
Supplies		326.38		321.67		306.61
Fuel & oil		69.67		67.25		65.27
Repairs		153.08		154.97		162.24
Custom hire		71.03		92.01		72.43
Hired labor		355.95		429.63		289.37
Utilities		38.52		68.19		32.74
Bedding		80.81		76.61		60.96
Total direct expenses		3,194.63		3,375.06		3,003.42
Return over direct expense		939.48		145.97		1,581.41
Overhead Expenses						
Hired labor		98.81		79.64		105.83
Building leases		57.83		90.46		21.49
Farm insurance		46.98		53.84		41.50
Utilities		60.93		43.26		64.68
Interest		88.80		125.49		79.16
Mach & bldg depreciation		168.06		185.91		181.16
Miscellaneous		58.39		59.82		58.27
Total overhead expenses		579.79		638.42		552.10
Total dir & ovhd expenses		3,774.42		4,013.48		3,555.52
Net return		359.70		-492.45		1,029.30
Labor & management charge		191.23		161.49		237.68
Net return over lbr & mgt		168.47		-653.94		791.63
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		12.97		14.70		11.93
Total dir & ovhd expense per unit		15.32		17.48		14.13
With other revenue adjustments		16.44		19.44		14.76
With labor and management		17.22		20.15		15.70
Est. labor hours per unit		41.62		42.76		38.48
Other Information						
Number of cows		205.6		161.5		240.7
Milk produced per cow		24,637		22,955		25,170
Total milk sold		5,034,455		3,687,706		6,023,433
Lb. of milk sold per FTE		1,647,545		1,495,715		1,820,743
Culling percentage		29.9		29.0		27.2
Turnover rate		36.6		37.1		33.5
Cow death loss percent		6.2		7.3		5.8
Percent of barn capacity		113.4		105.4		111.7
Feed cost per day		5.31		5.44		5.08
Feed cost per cwt. of milk		7.86		8.65		7.37
Feed cost per cow		1,936.55		1,985.24		1,854.21
Hired labor per cow		454.76		509.27		395.20
Avg. milk price per cwt.		17.92		17.30		18.87
Milk price / feed margin		10.06		8.66		11.50

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Dairy -- Average Per Cwt. Of Milk

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	396		79		80	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	99.39	17.81	99.50	17.22	99.41	18.76
Dairy Calves sold (hd)	0.00	0.18	0.00	0.35	0.00	0.14
Transferred out (hd)	0.00	0.15	0.00	0.08	0.00	0.19
Cull sales (hd)	0.00	0.95	0.00	0.94	0.00	0.84
Other income		0.19		0.16		0.18
Purchased (hd)	0.00	-0.13	0.00	-0.16	0.00	-0.14
Transferred in (hd)	0.00	-0.25	0.00	-0.12	0.00	-0.35
Inventory change (hd)	0.00	0.21	0.00	-0.16	0.00	0.48
Dairy repl net cost		-2.33		-2.98		-1.88
Gross margin		16.78		15.34		18.22
Direct Expenses						
Protein Vit Minerals (lb.)	13.55	2.79	9.73	2.09	15.25	2.83
Complete Ration (lb.)	10.96	1.36	10.22	2.38	18.58	0.93
Corn (bu.)	0.27	0.84	0.31	0.97	0.25	0.74
Corn Silage (lb.)	73.44	1.18	79.68	1.30	72.08	1.09
Hay, Alfalfa (lb.)	12.36	0.65	16.70	0.94	8.95	0.48
Haylage, Alfalfa (lb.)	18.31	0.55	18.93	0.53	16.04	0.53
Other feed stuffs (lb)	10.94	0.50	10.38	0.44	14.70	0.77
Breeding fees		0.19		0.23		0.17
Veterinary		0.47		0.55		0.46
Supplies		1.32		1.40		1.22
Fuel & oil		0.28		0.29		0.26
Repairs		0.62		0.68		0.64
Custom hire		0.29		0.40		0.29
Hired labor		1.44		1.87		1.15
Utilities		0.16		0.30		0.13
Bedding		0.33		0.33		0.24
Total direct expenses		12.97		14.70		11.93
Return over direct expense		3.81		0.64		6.28
Overhead Expenses						
Hired labor		0.40		0.35		0.42
Building leases		0.23		0.39		0.09
Farm insurance		0.19		0.23		0.16
Utilities		0.25		0.19		0.26
Interest		0.36		0.55		0.31
Mach & bldg depreciation		0.68		0.81		0.72
Miscellaneous		0.24		0.26		0.23
Total overhead expenses		2.35		2.78		2.19
Total dir & ovhd expenses		15.32		17.48		14.13
Net return		1.46		-2.15		4.09
Labor & management charge		0.78		0.70		0.94
Net return over lbr & mgt		0.68		-2.85		3.15
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		12.97		14.70		11.93
Total dir & ovhd expense per unit		15.32		17.48		14.13
With other revenue adjustments		16.44		19.44		14.76
With labor and management		17.22		20.15		15.70
Est. labor hours per unit		0.17		0.19		0.15
Other Information						
Number of cows		205.6		161.5		240.7
Milk produced per cow		24,637		22,955		25,170
Total milk sold		5,034,455		3,687,706		6,023,433
Lb. of milk sold per FTE		1,647,545		1,495,715		1,820,743
Culling percentage		29.9		29.0		27.2
Turnover rate		36.6		37.1		33.5
Cow death loss percent		6.2		7.3		5.8
Percent of barn capacity		113.4		105.4		111.7
Feed cost per day		5.31		5.44		5.08
Feed cost per cwt. of milk		7.86		8.65		7.37
Feed cost per cow		1,936.55		1,985.24		1,854.21
Hired labor per cow		454.76		509.27		395.20
Avg. milk price per cwt.		17.92		17.30		18.87
Milk price / feed margin		10.06		8.66		11.50

2017 Annual Report

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Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Dairy Replacement Heifers -- Average Per Head

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	364		72		73	
	Quantity	Value	Quantity	Value	Quantity	Value
Replacements sold (hd)	0.1	46.23	0.2	57.29	0.1	67.05
Transferred out (hd)	0.4	567.40	0.5	386.17	0.4	669.12
Cull sales (hd)	0.0	3.80	0.0	4.08	0.0	3.79
Other income		1.61		1.64		1.74
Purchased (hd)	0.0	-20.38	0.0	-7.24	0.1	-64.38
Transferred in (hd)	0.6	-123.52	0.6	-140.39	0.6	-114.11
Inventory change (hd)	0.1	44.21	0.0	-70.02	0.2	143.50
Gross margin		519.35		231.54		706.70
Direct Expenses						
Protein Vit Minerals (lb.)	455.8	88.33	578.2	132.34	379.8	64.24
Milk (lb.)	109.4	17.04	151.8	26.17	70.5	12.28
Complete Ration (lb.)	389.5	60.04	601.6	102.01	327.2	51.51
Corn (bu.)	5.7	17.62	9.8	30.43	3.2	10.37
Corn Silage (lb.)	4,312.0	62.99	5,246.9	80.79	2,112.4	32.57
Hay, Alfalfa (lb.)	897.8	50.20	1,233.9	68.19	795.8	48.88
Hay, Grass (lb.)	654.9	23.96	978.7	37.78	626.7	20.82
Haylage, Alfalfa (lb.)	1,010.2	29.89	724.9	22.24	556.3	15.71
Hay (lb.)	97.5	4.43	358.3	17.74	39.4	0.85
Other feed stuffs (lb)	1,239.0	49.79	1,777.9	75.02	1,103.7	41.33
Breeding fees		17.51		15.63		19.52
Veterinary		19.12		24.21		11.36
Supplies		32.00		40.64		27.01
Contract production exp.		81.04		58.41		136.65
Repairs		25.21		26.84		18.19
Custom hire		4.89		14.39		4.50
Hired labor		42.36		39.64		37.40
Bedding		19.76		18.97		18.58
Total direct expenses		646.16		831.43		571.78
Return over direct expense		-126.81		-599.89		134.92
Overhead Expenses						
Hired labor		24.92		26.66		4.78
Utilities		12.00		11.58		10.67
Interest		15.84		21.83		12.26
Mach & bldg depreciation		29.87		32.96		19.85
Miscellaneous		26.20		27.74		17.27
Total overhead expenses		108.83		120.77		64.83
Total dir & ovhd expenses		754.99		952.20		636.61
Net return		-235.64		-720.66		70.09
Labor & management charge		33.01		41.27		24.79
Net return over lbr & mgt		-268.65		-761.93		45.30
Cost of Production Per Head Per Day						
Total direct expense per unit		2.03		2.86		1.65
Total dir & ovhd expense per unit		2.33		3.19		1.82
With other revenue adjustments		2.33		3.19		1.82
With labor and management		2.42		3.30		1.89
Est. labor hours per unit		6.89		6.94		6.09
Other Information						
No. purchased or trans in		113		74		167
Number sold or trans out		95		78		120
Average number of head		178		124		232
Percentage death loss		6.8		9.0		4.5
Feed cost per average head		404.29		592.72		298.56
Hired labor per average head		67.28		66.30		42.18
Feed cost/head sold/trans		752.90		946.88		577.16
Total cost/head sold/trans		1,643.06		1,925.65		1,335.53
Feed cost per head per day		1.11		1.62		0.82
Avg. purchase weight		11		-		12
Avg. purch price / head		649.67		1,846.06		592.02
Avg. sales price / head		457.09		331.37		773.58

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Dairy and Repl Heifers -- Average Per Cow

	Avg. Of All Farms		Low 20%		High 20%	
Number of farms	329		65		66	
	Quantity	Value	Quantity	Value	Quantity	Value
Milk sold (hd)	24,763.6	4,428.22	22,983.0	3,963.55	25,035.2	4,729.29
Dairy Calves sold (hd)	-	76.20	-	112.94	-	64.44
Transferred out (hd)	-	16.32	-	10.04	-	19.11
Cull sales (hd)	-	239.39	-	220.20	-	213.83
Other income	-	47.26	-	41.48	-	37.79
Purchased (hd)	-	-41.31	-	-34.39	-	-74.76
Transferred in (hd)	-	-9.98	-	-6.56	-	-8.48
Inventory change (hd)	-	95.74	-	-60.63	-	245.26
Gross margin		4,851.99		4,246.64		5,227.04
Direct Expenses						
Protein Vit Minerals (lb.)	3,704.3	749.45	2,344.5	519.31	3,946.2	756.01
Complete Ration (lb.)	2,406.2	406.15	3,022.0	639.99	1,921.9	302.49
Corn (bu.)	71.3	225.63	80.2	252.56	63.9	193.18
Corn Silage (lb.)	21,659.7	343.66	21,914.3	352.05	21,027.6	316.64
Hay, Alfalfa (lb.)	3,793.5	199.36	4,173.0	222.72	2,595.5	141.92
Haylage, Alfalfa (lb.)	5,339.0	154.74	5,891.8	162.52	4,961.5	154.60
Other feed stuffs (lb)	4,284.3	201.01	4,459.1	183.46	5,121.0	286.32
Breeding fees		64.86		71.90		60.45
Veterinary		132.63		151.97		133.63
Supplies		344.11		338.63		319.18
Contract production exp.		121.10		132.32		103.26
Fuel & oil		80.24		76.95		75.51
Repairs		173.48		175.27		183.86
Custom hire		77.70		90.11		82.12
Hired labor		431.84		475.44		373.97
Utilities		41.21		74.16		33.39
Bedding		102.10		85.57		87.95
Total direct expenses		3,849.26		4,004.93		3,604.50
Return over direct expense		1,002.73		241.70		1,622.54
Overhead Expenses						
Hired labor		94.90		94.32		70.65
Building leases		73.14		106.65		29.67
Interest		99.28		151.30		94.76
Mach & bldg depreciation		190.67		207.64		208.15
Miscellaneous		184.53		175.24		181.39
Total overhead expenses		642.51		735.15		584.61
Total dir & ovhd expenses		4,491.77		4,740.08		4,189.11
Net return		360.22		-493.45		1,037.93
Labor & management charge		201.66		177.80		238.32
Net return over lbr & mgt		158.56		-671.24		799.61
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		15.45		17.33		14.30
Total dir & ovhd expense per unit		18.03		20.51		16.62
With other revenue adjustments		16.42		19.38		14.75
With labor and management		17.23		20.15		15.69
Est. labor hours per unit		48.92		48.93		45.74
Other Information						
Number of cows		214.4		172.4		237.6
Milk produced per cow		24,911		23,106		25,202
Total milk sold		5,309,953		3,961,495		5,947,998
Lb. of milk sold per FTE		1,417,290		1,315,131		1,532,613
Culling percentage		30.2		29.5		26.8
Turnover rate		36.7		37.5		33.2
Cow death loss percent		6.2		7.3		5.9
Percent of barn capacity		113.9		107.8		113.1
Feed cost per day		6.25		6.39		5.89
Feed cost per cwt. of milk		9.15		10.10		8.54
Feed cost per cow		2,279.99		2,332.61		2,151.17
Hired labor per cow		526.73		569.75		444.62
Avg. milk price per cwt.		17.88		17.25		18.89
Milk price / feed margin		8.73		7.15		10.35

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Dairy Finishing -- Average Per Head

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	116		23		24	
	Quantity	Value	Quantity	Value	Quantity	Value
Dairy Finish sold (lb)	1,302.9	1,263.01	1,156.3	1,033.89	1,365.4	1,376.02
Transferred out (lb)	4.9	4.51	3.7	3.35	9.0	9.63
Other income		5.11		33.24		8.47
Purchased (lb)	-312.0	-348.69	-151.7	-204.40	-154.9	-214.34
Transferred in (lb)	-22.7	-34.71	-39.4	-78.16	-43.1	-55.93
Inventory change (lb)	40.7	47.30	-39.9	-91.15	-2.8	64.21
Gross margin		936.53		696.78		1,188.06
Direct Expenses						
Protein Vit Minerals (lb.)	674.3	133.21	835.7	166.58	778.5	144.09
Complete Ration (lb.)	179.7	29.27	256.2	25.42	16.2	3.41
Corn (bu.)	99.2	304.58	105.2	312.51	102.8	316.91
Corn Silage (lb.)	1,610.8	24.72	1,408.7	19.31	1,524.0	20.10
DDGS, dry (lb.)	203.7	14.90	346.7	21.05	387.3	29.52
Corn snaplage (lb.)	106.9	3.89	551.7	22.07	-	-
Other feed stuffs (lb)	1,504.4	53.64	966.2	72.91	766.3	31.49
Veterinary		25.80		29.15		31.06
Supplies		32.92		18.05		17.81
Contract production exp.		4.05		33.66		-
Fuel & oil		13.22		17.08		8.90
Repairs		25.61		28.54		22.80
Hired labor		9.42		1.06		20.35
Marketing		10.78		16.93		11.92
Bedding		14.31		32.00		17.14
Operating interest		20.35		6.86		13.11
Total direct expenses		720.65		823.17		688.61
Return over direct expense		215.88		-126.39		499.45
Overhead Expenses						
Hired labor		9.71		16.11		14.24
Farm insurance		11.49		18.14		9.86
Utilities		8.37		16.47		7.71
Interest		17.77		25.39		11.86
Mach & bldg depreciation		36.52		51.36		35.13
Miscellaneous		22.30		21.77		13.52
Total overhead expenses		106.16		149.25		92.32
Total dir & ovhd expenses		826.81		972.42		780.93
Net return		109.72		-275.65		407.12
Labor & management charge		42.59		49.67		40.14
Net return over lbr & mgt		67.13		-325.32		366.98
Cost of Production Per Cwt. Produced						
Total direct expense per unit		79.90		100.32		64.48
Total dir & ovhd expense per unit		88.02		113.19		71.20
With other revenue adjustments		88.53		113.19		71.20
With labor and management		91.79		117.47		74.12
Est. labor hours per unit		4.48		5.20		4.04
Other Information						
No. purchased or trans in		173		87		179
Number sold or trans out		158		79		163
Percentage death loss		2.7		3.9		2.8
Avg. daily gain (lb.)		2.45		2.11		2.53
Lb. of conc / lb. of gain		6.99		8.43		6.14
Lb. of feed / lb. of gain		8.35		9.43		6.95
Feed cost per cwt. of gain		55.10		66.81		46.20
Feed cost per head		564.20		639.84		545.52
Hired labor per head		19.13		17.18		34.59
Average purchase weight		382		239		246
Avg wgt / Dairy Finish sold		1,398		1,400		1,429
Avg purch price / head		426.67		321.70		340.24
Avg sales price / cwt.		96.94		89.42		100.78

Livestock Enterprise Analysis
Southwest Minnesota Farm Business Management Association
(Includes Statewide Minnesota State FBM Farms)
(Farms Sorted By Net Return)

Dairy Finishing -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>High 20%</u>	
Number of farms	116		23		24	
	Quantity	Value	Quantity	Value	Quantity	Value
Dairy Finish sold (lb)	127.23	123.34	120.73	107.96	115.64	116.54
Transferred out (lb)	0.48	0.44	0.38	0.35	0.76	0.82
Other income		0.50		3.47		0.72
Purchased (lb)	-30.47	-34.05	-15.84	-21.34	-13.12	-18.15
Transferred in (lb)	-2.21	-3.39	-4.11	-8.16	-3.65	-4.74
Inventory change (lb)	3.98	4.62	-4.17	-9.52	-0.24	5.44
Gross margin		91.46		72.76		100.62
Direct Expenses						
Protein Vit Minerals (lb.)	65.85	13.01	87.26	17.39	65.94	12.20
Complete Ration (lb.)	17.55	2.86	26.75	2.65	1.37	0.29
Corn (bu.)	9.69	29.74	10.99	32.63	8.71	26.84
Corn Silage (lb.)	157.30	2.41	147.09	2.02	129.07	1.70
DDGS, dry (lb.)	19.90	1.45	36.20	2.20	32.80	2.50
Corn snaplage (lb.)	10.44	0.38	57.61	2.30	-	-
Other feed stuffs (lb)	146.91	5.24	100.89	7.61	64.90	2.67
Veterinary		2.52		3.04		2.63
Supplies		3.21		1.88		1.51
Contract production exp.		0.40		3.51		-
Fuel & oil		1.29		1.78		0.75
Repairs		2.50		2.98		1.93
Hired labor		0.92		0.11		1.72
Marketing		1.05		1.77		1.01
Bedding		1.40		3.34		1.45
Operating interest		1.99		0.72		1.11
Total direct expenses		70.38		85.95		58.32
Return over direct expense		21.08		-13.20		42.30
Overhead Expenses						
Hired labor		0.95		1.68		1.21
Farm insurance		1.12		1.89		0.83
Utilities		0.82		1.72		0.65
Interest		1.74		2.65		1.00
Mach & bldg depreciation		3.57		5.36		2.98
Miscellaneous		2.18		2.27		1.15
Total overhead expenses		10.37		15.58		7.82
Total dir & ovhd expenses		80.74		101.54		66.14
Net return		10.71		-28.78		34.48
Labor & management charge		4.16		5.19		3.40
Net return over lbr & mgt		6.56		-33.97		31.08
Cost of Production Per Cwt. Produced						
Total direct expense per unit		79.90		100.32		64.48
Total dir & ovhd expense per unit		88.02		113.19		71.20
With other revenue adjustments		88.53		113.19		71.20
With labor and management		91.79		117.47		74.12
Est. labor hours per unit		0.44		0.54		0.34
Other Information						
No. purchased or trans in		173		87		179
Number sold or trans out		158		79		163
Percentage death loss		2.7		3.9		2.8
Avg. daily gain (lb.)		2.45		2.11		2.53
Lb. of conc / lb. of gain		6.99		8.43		6.14
Lb. of feed / lb. of gain		8.35		9.43		6.95
Feed cost per cwt. of gain		55.10		66.81		46.20
Feed cost per head		564.20		639.84		545.52
Hired labor per head		19.13		17.18		34.59
Average purchase weight		382		239		246
Avg wgt / Dairy Finish sold		1,398		1,400		1,429
Avg purch price / head		426.67		321.70		340.24
Avg sales price / cwt.		96.94		89.42		100.78

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>
1998	163.0	2008	215.3
1999	166.6	2009	214.5
2000	172.2	2010	218.1
2001	177.1	2011	224.9
2002	179.9	2012	229.6
2003	184.0	2013	233.0
2004	188.9	2014	236.7
2005	195.3	2015	237.0
2006	201.6	2016	240.0
2007	207.3	2017	244.7

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	1998	1999	2000	2001	2002	2003	2004	2005	2006
		----	----	----	----	----	----	----	----	----
1	Number of Farms	210	216	212	207	188	175	125	107	110
	Farm Income Statement									
2	Gross Cash Farm Income	369,573	388,731	422,897	433,698	428,084	504,022	496,771	579,201	609,886
3	Total Cash Farm Expense	305,344	324,802	348,711	358,506	352,995	400,605	404,743	477,476	494,409
4	Inventory Change	-21,057	15,633	25,296	-17,297	19,571	18,977	31,076	74,307	66,397
5	Depr. & Cap. Adj.	-34,557	-35,800	-17,731	-21,280	-24,654	-25,990	-24,741	-28,170	-27,176
6	Net Farm Income from Operations	8,616	43,762	81,750	36,614	70,007	96,404	98,362	147,862	154,698
7	Gain of Loss on Capital Sales	0	0	0	0	0	0	0	0	0
8	Net Farm Income	8,616	43,762	81,750	36,614	70,007	96,404	98,362	147,862	154,698
9	Net Farm Income (Constant \$)	13,136	65,697	120,073	52,029	96,729	131,129	130,811	191,540	193,828
	Profitability*									
10	Rate of Return on Assets (%)	2	7	12	6	9	11	11	14	13
11	Rate of Return on Equity (%)	-6	7	19	4	11	16	16	21	19
12	Operating Profit Margin (%)	4	16	27	14	20	24	23	28	28
13	Asset Turnover Rate (%)	39	43	45	39	44	44	46	51	48
14	Value of Farm Production	250,717	274,411	313,232	282,583	345,743	379,505	378,450	478,073	512,081
15	Farm Interest Paid	25,358	27,488	27,002	27,203	26,739	25,262	21,824	22,210	27,677
	Liquidity, Repayment and Efficiency									
16	Current Ratio	1.5	1.6	1.7	1.5	1.6	1.7	1.9	2.1	2.2
17	Working Capital	76,325	95,737	112,896	83,500	117,135	143,632	155,804	218,745	268,567
18	Working Capital to Gross Revenue (%)	21	24	25	20	25	28	30	34	40
19	Term Debt Coverage Ratio	1.6	1.9	2.3	1.0	1.6	2.2	2.1	3.0	3.1
20	Operating Expense Ratio (%)	80.5	73.1	71.4	79.5	73.6	71.5	72.1	69.2	68.7
21	Interest Expense Ratio (%)	7.5	6.7	6.2	6.6	5.8	4.8	4.2	3.5	4.3
	Solvency (Year-end, Sole Proprietors Only)*									
22	No. of Sole Proprietors	183	185	181	178	161	149	109	91	93
23	Total Assets	1,066,565	1,061,579	1,150,838	1,158,071	1,277,823	1,407,919	1,286,775	1,487,232	1,694,428
24	Total Liabilities	522,994	517,040	545,689	539,918	578,253	619,279	554,962	618,105	698,239
25	Net Worth	543,571	544,539	605,149	618,197	699,570	788,640	731,813	869,127	996,189
26	Debt to Asset Ratio (%)	49	49	47	47	45	44	43	42	41
	Acreage Information									
27	Total Acres Owned	250	241	250	252	265	263	236	241	243
28	Total Crop Acres Farmed	697	709	730	759	784	794	766	792	797
29	Crop Acres Owned	219	204	214	214	226	239	193	199	197
30	Crop Acres Cash Rented	402	430	445	468	490	489	494	532	526
31	Crop Acres Share Rented	76	75	70	77	68	67	79	61	74
	Crop Yields									
32	Corn per acre (bu.)	161	156	150	128	151	157	171	192	169
33	Soybeans per acre (bu.)	49	45	46	42	49	39	41	55	51
	Crop Prices Received (cash sales)									
34	Corn per Bushel	1.97	1.66	1.68	1.72	1.95	2.07	2.28	1.89	2.04
35	Soybeans per Bushel	5.72	4.59	4.57	4.32	4.57	5.73	7.17	5.88	5.57
	Household Information									
36	No. Farms Reporting HseHld Info	122	125	120	124	108	102	73	67	66
37	Average Family Size	3.6	3.6	3.5	3.5	3.6	3.4	3.4	3.4	3.3
38	Family living expense	34,097	35,186	38,932	39,793	41,882	43,383	48,371	50,608	51,569
39	Total Family Use of Cash	48,197	50,326	62,349	63,980	51,826	68,470	68,029	74,513	82,670
40	Net Nonfarm Income	15,580	18,430	21,436	20,082	20,846	22,480	23,733	24,774	31,059

* 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)

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Row
----	----	----	----	----	----	----	----	----	----	----	----
107	99	95	97	107	110	117	109	103	103	104	1
731,897	876,375	878,404	970,471	1,150,686	1,332,519	1,285,081	1,086,085	997,581	918,546	941,931	2
592,841	720,364	743,487	781,053	898,752	1,057,018	1,029,631	856,705	798,226	748,909	783,231	3
135,843	70,051	-21,159	178,977	136,582	157,209	-53,364	-49,479	-68,430	-8,515	-7,784	4
-32,631	-39,437	-43,972	-48,085	-55,244	-66,085	-69,322	-70,801	-73,028	-71,987	-74,624	5
242,267	186,625	69,787	320,310	333,272	366,624	132,764	109,100	57,897	89,135	76,292	6
0	4,276	0	1,855	3,015	10,447	4,404	9,296	1,944	-418	8,475	7
242,267	190,901	69,787	322,165	336,287	377,071	137,168	118,396	59,841	88,717	84,767	8
294,061	225,342	79,317	367,523	377,301	410,268	146,189	124,341	61,864	91,599	84,767	9
17	11	3	17	16	14	4	3	1	3	2	10
25	15	2	24	21	19	4	3	0	2	1	11
35	26	9	36	35	30	11	10	4	8	7	12
50	43	37	47	46	46	34	34	31	31	30	13
648,768	658,576	608,181	819,691	871,265	1,052,663	819,449	790,270	729,443	738,186	735,601	14
30,714	30,232	29,727	34,124	28,447	27,141	27,405	26,239	27,225	30,723	35,049	15
2.5	2.6	2.3	2.9	3.3	3.1	2.7	2.6	2.2	1.9	1.8	16
393,911	446,350	404,104	568,438	659,446	771,719	646,719	562,147	455,840	395,033	367,795	17
46	49	45	50	52	52	52	54	49	42	39	18
4.1	2.9	1.1	5.2	5.6	4.6	1.8	1.4	0.9	1.4	1.3	19
64.1	71.6	83.6	64.8	66.9	69.1	81.4	80.0	83.0	79.0	80.1	20
3.7	3.3	3.3	3.0	2.3	1.8	2.2	2.6	3.0	3.0	3.8	21
91	85	80	80	87	85	89	84	81	81	83	22
2,034,365	2,208,883	2,376,886	2,719,826	2,922,324	3,515,081	3,667,344	3,670,892	3,953,187	3,994,222	4,126,516	23
810,184	837,830	892,734	987,753	1,068,183	1,057,882	1,271,925	1,241,969	1,283,940	1,297,771	1,329,095	24
1,224,181	1,371,053	1,484,151	1,732,074	1,854,181	2,288,721	2,395,419	2,428,924	2,669,246	2,696,451	2,797,420	25
40	38	38	36	37	35	35	34	32	32	32	26
241	249	250	240	232	216	211	208	210	210	226	27
825	822	831	831	791	886	845	902	940	939	940	28
208	222	224	221	202	205	203	208	226	236	233	29
546	536	555	550	532	617	592	626	661	651	661	30
71	64	52	61	57	63	50	67	53	53	46	31
162	172	185	184	173	162	175	167	204	207	204	32
49	44	49	51	46	47	52	48	58	62	55	33
3.00	4.51	3.83	3.67	5.29	6.27	6.48	4.35	3.63	3.38	3.17	34
7.14	10.83	10.15	9.72	11.58	13.07	13.97	12.73	10.12	8.92	9.23	35
60	62	52	46	43	42	32	41	32	44	45	36
3.1	3.0	3.3	3.0	3.0	2.9	3.0	2.8	3.1	3.0	2.6	37
56,229	59,939	62,182	63,848	73,704	73,904	72,592	73,073	64,621	73,384	69,964	38
98,388	100,933	123,590	108,468	119,913	135,406	159,539	140,853	158,913	125,223	116,348	39
25,164	28,456	29,369	29,543	35,042	30,841	35,723	42,073	36,083	39,590	38,552	40

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

	<u>Avg. Of All Farms</u>	<u>Less than 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>1,000,001- 2,000,000</u>	<u>Over 2,000,000</u>
Number of farms	104	5	11	32	32	17	7
Income Statement							
Gross cash farm income	941,931	63,491	181,288	397,225	688,914	1,233,560	5,703,180
Total cash farm expense	783,231	49,939	252,198	291,926	546,079	963,191	5,034,535
Net cash farm income	158,700	13,553	-70,910	105,300	142,835	270,369	668,645
Inventory change	-7,784	8,475	151,695	-15,470	-21,362	33,755	-273,679
Depreciation	-74,624	-10,649	-46,676	-42,927	-69,446	-114,196	-236,709
Net farm income from operations	76,292	11,378	34,109	46,903	52,027	189,929	158,257
Gain or loss on capital sales	8,475	1,134	-4,340	27,654	409	1,973	-1,159
Average net farm income	84,767	12,512	29,769	74,557	52,436	191,901	157,098
Median net farm income	40,096	5,212	14,100	49,962	50,548	134,434	-55,724
Profitability (cost)							
Rate of return on assets	1.9 %	1.9 %	1.2 %	1.4 %	1.1 %	3.4 %	1.8 %
Rate of return on equity	0.8 %	0.0 %	0.2 %	0.4 %	-0.3 %	3.6 %	-0.9 %
Operating profit margin	6.5 %	10.3 %	4.0 %	5.6 %	4.0 %	12.4 %	4.7 %
Asset turnover rate	29.7 %	18.8 %	30.8 %	25.9 %	26.7 %	27.6 %	39.3 %
Liquidity & Repayment (end of year)							
Current assets	803,844	73,614	338,039	409,581	792,558	1,229,247	2,878,234
Current liabilities	436,049	67,909	213,452	188,427	304,922	699,544	2,140,308
Current ratio	1.84	1.08	1.58	2.17	2.60	1.76	1.34
Working capital	367,795	5,705	124,587	221,154	487,636	529,703	737,926
Change in working capital	-11,429	20,404	37,466	-42,173	-26,072	37,506	-22,367
Working capital to gross inc	39.4 %	7.6 %	37.6 %	56.9 %	73.0 %	41.8 %	13.7 %
Term debt coverage ratio	1.27	1.72	1.85	0.73	1.08	1.59	1.44
Replacement coverage ratio	0.84	1.34	1.02	0.43	0.65	1.16	1.09
Term debt to EBITDA	2.44	3.17	1.24	2.30	2.82	1.92	3.15
Solvency (end of year at market)							
Number of farms	104	5	11	32	32	17	7
Total assets	4,196,248	845,015	2,035,657	3,076,754	4,273,482	5,853,833	10,724,250
Total liabilities	1,505,682	338,153	549,084	888,720	1,399,452	2,118,033	5,661,734
Net worth	2,690,566	506,862	1,486,573	2,188,034	2,874,029	3,735,801	5,062,517
Total net worth change	111,911	43,587	115,210	38,425	95,396	265,525	193,895
Farm debt to asset ratio	39 %	41 %	31 %	32 %	36 %	39 %	53 %
Total debt to asset ratio	36 %	40 %	27 %	29 %	33 %	36 %	53 %
Change in total net worth %	4 %	9 %	8 %	2 %	3 %	8 %	4 %
Nonfarm Information							
Net nonfarm income	38,552	86,114	31,270	39,599	41,392	36,564	3,085
Farms reporting living expenses	45	4	4	17	14	5	1
Total family living expense	69,964	-	-	76,429	66,501	78,811	-
Total living, invest, cap. purch	116,348	-	-	138,457	98,745	113,851	-
Crop Acres							
Total crop acres	940	74	461	563	937	1,385	2,964
Total crop acres owned	233	23	81	172	279	335	447
Total crop acres cash rented	661	51	371	340	603	977	2,517
Total crop acres share rented	46	-	9	51	55	73	-
Machinery value per crop acre	511	438	702	546	561	542	326

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

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Other</u>
Number of farms	104	69	16
Income Statement			
Gross cash farm income	941,931	721,481	441,063
Total cash farm expense	783,231	582,616	383,475
Net cash farm income	158,700	138,864	57,588
Inventory change	-7,784	-21,122	107,528
Depreciation	-74,624	-64,065	-64,010
Net farm income from operations	76,292	53,678	101,106
Gain or loss on capital sales	8,475	12,967	-2,804
Average net farm income	84,767	66,645	98,302
Median net farm income	40,096	28,122	60,597
Profitability (cost)			
Rate of return on assets	1.9 %	0.9 %	4.4 %
Rate of return on equity	0.8 %	-0.5 %	4.8 %
Operating profit margin	6.5 %	3.1 %	14.8 %
Asset turnover rate	29.7 %	29.6 %	29.6 %
Liquidity & Repayment (end of year)			
Current assets	803,844	760,602	477,100
Current liabilities	436,049	376,754	342,264
Current ratio	1.84	2.02	1.39
Working capital	367,795	383,848	134,836
Change in working capital	-11,429	-35,234	28,138
Working capital to gross inc	39.4 %	55.0 %	24.7 %
Term debt coverage ratio	1.27	0.99	1.39
Replacement coverage ratio	0.84	0.63	1.01
Term debt to EBITDA	2.44	2.82	1.74
Solvency (end of year at market)			
Number of farms	104	69	16
Total assets	4,196,248	3,858,621	3,282,200
Total liabilities	1,505,682	1,339,479	1,070,593
Net worth	2,690,566	2,519,142	2,211,607
Total net worth change	111,911	72,178	140,037
Farm debt to asset ratio	39 %	38 %	37 %
Total debt to asset ratio	36 %	35 %	33 %
Change in total net worth %	4 %	3 %	7 %
Nonfarm Information			
Net nonfarm income	38,552	42,248	29,160
Farms reporting living expenses	45	30	8
Total family living expense	69,964	71,420	65,664
Total living, invest, cap. purch	116,348	113,217	138,227
Crop Acres			
Total crop acres	940	1,044	524
Total crop acres owned	233	244	117
Total crop acres cash rented	661	754	382
Total crop acres share rented	46	47	24
Machinery value per crop acre	511	444	827

Financial Summary
Southwest 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	104	17	50	26	8
Income Statement					
Gross cash farm income	941,931	404,569	900,235	1,255,056	1,398,090
Total cash farm expense	783,231	289,867	713,374	1,097,186	1,273,774
Net cash farm income	158,700	114,702	186,861	157,870	124,315
Inventory change	-7,784	-2,647	4,870	-36,261	-46,229
Depreciation	-74,624	-38,622	-82,217	-94,375	-44,717
Net farm income from operations	76,292	73,433	109,514	27,234	33,369
Gain or loss on capital sales	8,475	51,722	515	-1,205	958
Average net farm income	84,767	125,156	110,029	26,029	34,326
Median net farm income	40,096	91,224	49,962	10,778	-5,100
Profitability (cost)					
Rate of return on assets	1.9 %	2.4 %	2.6 %	0.7 %	0.8 %
Rate of return on equity	0.8 %	2.4 %	2.3 %	-3.9 %	-5.3 %
Operating profit margin	6.5 %	10.0 %	10.0 %	2.2 %	1.9 %
Asset turnover rate	29.7 %	24.3 %	26.4 %	32.0 %	42.1 %
Liquidity & Repayment (end of year)					
Current assets	803,844	560,447	817,137	803,230	1,293,196
Current liabilities	436,049	29,910	333,159	665,627	986,541
Current ratio	1.84	18.74	2.45	1.21	1.31
Working capital	367,795	530,537	483,978	137,603	306,654
Change in working capital	-11,429	-14,591	-26,627	34,376	-41,592
Working capital to gross inc	39.4 %	133.2 %	52.8 %	11.3 %	23.7 %
Term debt coverage ratio	1.27	5.12	1.67	0.80	0.73
Replacement coverage ratio	0.84	1.19	1.03	0.59	0.64
Term debt to EBITDA	2.44	0.25	1.62	4.31	6.06
Solvency (end of year at market)					
Number of farms	104	17	50	26	8
Total assets	4,196,248	3,830,911	4,611,185	4,142,349	3,478,554
Total liabilities	1,505,682	595,135	1,339,879	2,159,860	2,290,661
Net worth	2,690,566	3,235,777	3,271,306	1,982,489	1,187,893
Total net worth change	111,911	114,303	147,921	65,309	69,182
Farm debt to asset ratio	39 %	18 %	31 %	54 %	68 %
Total debt to asset ratio	36 %	16 %	29 %	52 %	66 %
Change in total net worth %	4 %	4 %	5 %	3 %	6 %
Nonfarm Information					
Net nonfarm income	38,552	44,647	36,376	41,105	45,363
Farms reporting living expenses	45	11	25	5	4
Total family living expense	69,964	58,697	73,375	75,787	-
Total living, invest, cap. purch	116,348	124,706	119,892	99,140	-
Crop Acres					
Total crop acres	940	511	854	1,069	1,953
Total crop acres owned	233	194	264	257	135
Total crop acres cash rented	661	294	528	772	1,818
Total crop acres share rented	46	23	62	39	-
Machinery value per crop acre	511	639	593	567	133

Financial Summary
Southwest 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	104	7	15	14	21	47
Income Statement						
Gross cash farm income	941,931	1,345,388	650,517	742,080	1,045,008	988,322
Total cash farm expense	783,231	1,267,326	492,978	613,261	900,081	802,186
Net cash farm income	158,700	78,061	157,539	128,819	144,927	186,136
Inventory change	-7,784	-34,472	16,171	-51,319	40,501	-20,061
Depreciation	-74,624	-36,106	-61,220	-74,821	-80,739	-81,848
Net farm income from operations	76,292	7,482	112,491	2,679	104,689	84,228
Gain or loss on capital sales	8,475	112	-1,852	422	-689	19,509
Average net farm income	84,767	7,594	110,639	3,101	104,000	103,737
Median net farm income	40,096	5,212	40,163	2,180	110,032	38,906
Profitability (cost)						
Rate of return on assets	1.9 %	-0.9 %	4.5 %	-1.5 %	3.3 %	1.8 %
Rate of return on equity	0.8 %	-8.4 %	5.3 %	-4.5 %	2.5 %	1.1 %
Operating profit margin	6.5 %	-1.8 %	14.0 %	-4.6 %	11.4 %	6.9 %
Asset turnover rate	29.7 %	47.2 %	31.9 %	32.6 %	29.0 %	26.4 %
Liquidity & Repayment (end of year)						
Current assets	803,844	1,284,316	527,991	694,292	983,494	772,687
Current liabilities	436,049	940,518	307,195	349,117	489,039	404,258
Current ratio	1.84	1.37	1.72	1.99	2.01	1.91
Working capital	367,795	343,798	220,795	345,175	494,455	368,430
Change in working capital	-11,429	-69,129	-34,637	-62,413	119,778	-38,867
Working capital to gross inc	39.4 %	28.0 %	32.7 %	48.2 %	46.3 %	37.8 %
Term debt coverage ratio	1.27	0.68	1.50	0.38	1.48	1.36
Replacement coverage ratio	0.84	0.64	1.19	0.23	0.91	0.87
Term debt to EBITDA	2.44	6.42	2.88	3.56	2.62	1.72
Solvency (end of year at market)						
Number of farms	104	7	15	14	21	47
Total assets	4,196,248	3,013,360	3,012,069	2,964,168	4,946,634	4,782,075
Total liabilities	1,505,682	1,944,195	1,350,638	1,159,178	1,882,437	1,424,729
Net worth	2,690,566	1,069,166	1,661,431	1,804,990	3,064,197	3,357,346
Total net worth change	111,911	113,623	151,893	23,701	109,746	126,138
Farm debt to asset ratio	39 %	66 %	50 %	42 %	41 %	32 %
Total debt to asset ratio	36 %	65 %	45 %	39 %	38 %	30 %
Change in total net worth %	4 %	12 %	10 %	1 %	4 %	4 %
Nonfarm Information						
Net nonfarm income	38,552	40,684	55,247	31,005	23,103	42,057
Farms reporting living expenses	45	3	6	4	7	25
Total family living expense	69,964	-	65,658	-	69,792	76,073
Total living, invest, cap. purch	116,348	-	108,037	-	97,655	137,090
Crop Acres						
Total crop acres	940	2,133	756	831	1,014	819
Total crop acres owned	233	115	112	160	293	285
Total crop acres cash rented	661	1,970	622	627	672	483
Total crop acres share rented	46	49	22	44	49	52
Machinery value per crop acre	511	81	546	634	615	573

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 $(\text{Total Farm Operating Expense} - \text{Farm Interest Expense}) \div \text{Gross Farm Income}$. 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.	3.00	3.07	3.05
Oats/bu.	2.26	2.42	2.06
All Wheat/bu.	4.90	5.49	5.71
Soybeans/bu.	9.33	9.00	8.80
Alfalfa hay/t. (avg quality)	100.00	93.00	110.00
Alfalfa haylage/t	43.00	40.00	47.00
Grass/Mixed hay/r	85.00	82.00	100.00
Corn silage/t.	24.00	25.00	24.00
Oats straw/bale/ton	3.75/125	3.75/125	3.75/125
Cornstalks/t.	30.00	30.00	30.00
Oatlage/t.	19.00	20.00	20.00

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.

Other Prices Used:

Pasture: \$50.00/acre (adjusted for quality and carrying capacity)
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 unpaid operator's labor is calculated by using this formula: For sole proprietors and partnerships, labor and management is valued at \$25,000 per operator plus 5% of the value of farm production, with a minimum of \$30,000 for a full-time farm operator. This value is used in calculating ROA, ROE and other whole farm ratios and is also allocated as an opportunity cost to crop and livestock enterprises.



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