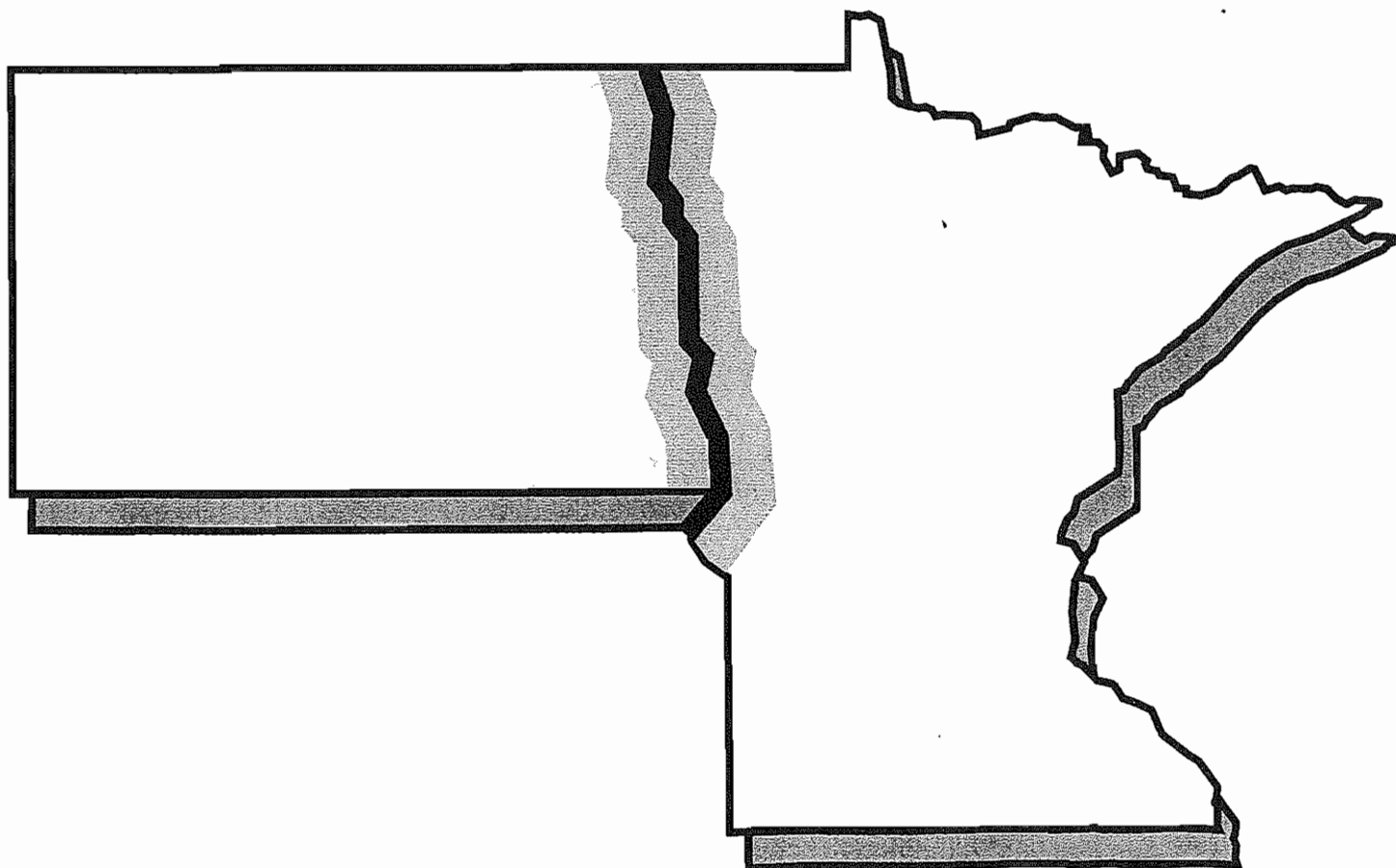


**North Dakota
Farm and Ranch
Business Management
Education**



**Minnesota
Farm Business
Management
Education**

2002 Red River Valley Report



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RED RIVER VALLEY AVERAGES
2002 ANNUAL REPORT

ACKNOWLEDGMENTS

The Red River Valley farm business analyses were submitted by the following cooperating instructors and farm management programs:

North Dakota

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A special acknowledgment is due Northland Community and Technical College, Thief River Falls, Minnesota, and the North Dakota State Board for Vocational and Technical Education for cooperation in the development of the seventh annual Red River Valley Report.

2002 Red River Valley Report
Minnesota and North Dakota Farm Business Management Education

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INTRODUCTION

This report summarizes the individual farm records of farms in the Red River Valley that are enrolled in Farm Management Education programs. The current financial status of farm operators and net returns from each crop enterprise is reported. In addition to the average of all farms, the averages for the high and low net income groups are also presented. To insure anonymity, only averages of five or more farms are reported. Regional averages reports can be used by producers for comparison purposes to identify and study the areas that may need management improvement. A review of the comparative information may reveal how certain aspects of the business or enterprises excel and help answer why they are profitable. The data contained in this report should also be useful to instructors, extension agents, bankers and agricultural consultants.

The Red River Valley averages reports are divided into three major categories. Explanatory notes precede the farm operators' reports and the crop reports. Tables 1 through 12 present whole farm information. The table 13 series provide performance information on crop enterprises.

The 2002 Red River Valley Report is based upon data generated by individual farm analysis completed by farm/ranch families enrolled in the Farm and Ranch Business Management Education programs in Minnesota and North Dakota. Instructors pooled the individual business analysis and submitted the combined school data of farms located in the Red River Valley to a FINPACK Center located at North Dakota State University, where the comparison tables were generated. The tables in this report were created using FINPACK and RankEm Central copyrighted software of the Center for Farm Financial Management, University of Minnesota.

You may contact Robert E. Bollesen, Northland Community and Technical College, Highway 1 East, Thief River Falls, MN 56701, to order a copy of this report. This report and regional reports for north central, south central and western North Dakota can be ordered for \$5 per copy from Farm Business Management, PO Box 6022, Bismarck, ND 58506-6022. A state average book which includes all North Dakota farms excluding the Red River Valley is also available.

EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS

Tables 1 through 5 and 8 include the same number of farms, which were all of the farms whose records were judged to be of sufficient quality to be included in the overall report. Table 6 and 7, the Comparative Financial Statement, on cost and market basis, respectively, includes only sole proprietors. Partnerships and corporations are excluded because some debt is held outside of the business causing potential misinterpretations of the financial statement. The number of farms included in each of the crop tables varies because all farms do not have the same enterprises. Also, some farmers' records were complete enough to be included in the whole-farm tables, but at times, these same farmers' crop records were not complete enough to include in the respective crop tables.

Rounding of individual items for the report may have caused minor discrepancies with the printed totals which are calculated before rounding.

Tables 1. Detailed Farm Income Statement

This statement is a summary of income, expenses, or resultant profit or loss from farming operations during the calendar year.

The first section of Table 1 lists cash farm income from all sources. There are three possible sources of cash income from crops. The first is income from cash sales. The second is income from crops stored under government loan programs when the loan is treated as income for the year in which the crop was stored. If the crop value has not been entered as income when it was stored, then it would be treated as cash income in the year it was sold. The third is Net Government Sales, which refers to the difference between income credited in the year a crop was stored and the actual cash income received at the time it was sold. There are two categories of cash income from livestock sales. "Raised" steer, hogs, and lambs refer to animals raised from birth to market weight on the farm. "Finished" animals refers to those purchased as feeders and fed to market weight. The "direct government payments" is the transition payment. The direct payment under the 2002 Farm Bill, less the transition payment received, is included in accounts receivable. "Other government payments" refers to all other government payments such as loan deficiency and disaster payments but not including CRP payments.

The second section of Table 1 lists cash expenses. "Labor" includes only labor hired. "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 Expenses" is the "Net Cash Farm Income." This is net farm income on a cash basis.

The last two sections of Table 1 deal with the non-cash changes in the farm business. The "Inventory Changes" and "Depreciation and Other Capital Adjustments" 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 bottom line, labeled "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 debt forgiveness or asset repossessions.

Table 2. Inventory Changes

This is the detailed statement of inventory changes which is summarized in Table 1. It includes beginning and ending inventories and the calculated changes.

Table 3. Depreciation and Other Capital Adjustments

This is the detailed statement of depreciation and other capital adjustments which is summarized in Table 1. It includes beginning and ending inventories, sales, purchases, and depreciation.

Table 4. Profitability Measures

Two sections on profitability are provided. The first section shows profitability when capital assets are valued at cost. Capital assets are valued at market in the second section. Therefore net farm income includes the change in market value of capital assets that occurred during the year.

Various measures of performance are calculated for the farms in this report. In Tables 1 through 3, no opportunity costs are used. In Table 4, opportunity costs for labor, capital, management are used. The measures and their components are described below.

"Labor and management earnings" equals "Net farm income" from Table 1 minus an opportunity interest cost of 6% an average farm net worth.

"Rate of return on assets" is the "Return on farm assets" divided by "Average farm assets."

"Rate of return on equity" is the "Return of farm equity" divided by "Average farm equity."

"Operating profit margin" is the "Return on farm assets" divided by "Value of farm production."

"Asset turnover rate" is the "Value of farm production" divided by "Average farm assets."

"Interest on farm net worth" is the "Average farm equity" multiplied by a 6% opportunity interest cost charge.

"Farm interest expense" is the accrual interest cost, usually it will be different from the cash interest expense shown on Table 1.

"Value of operator's labor and management" is an opportunity cost for unpaid operator's labor and management that is used in the calculation of several financial performance measures. A value of \$15,000 per full time operator plus 5% of value of farm production.

"Return of farm assets" is calculated by adding "Farm interest expense" to "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.

"Return on 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 cash farm income minus purchased feed and feeder livestock and adjusted for inventory changes in crops, market livestock, accounts receivable and breeding livestock.

Table 5. Liquidity Measures

Liquidity: Cash Basis

"Family living and taxes" is calculated cash family living plus income and social security taxes.

"Cash available for intermediate debt" on the cash basis is the sum of "Net cash farm income" and "Net nonfarm income" minus "Family living and taxes" and "Real estate principal payments."

"Average intermediate debt" is the average of beginning and ending intermediate farm liabilities.

"Years to turn over debt" is "Average intermediate debt" divided by "Cash available for intermediate debt." If the cash-based or accrual-based "Cash available for intermediate debt" is a negative number, debt repayment is not possible because of negative cash flow on a cash or accrual basis, respectively, and "Years to turn over intermediate debt" cannot be calculated.

Cash "Expense as a percent of income" is "Total cash expense" divided by "Gross cash farm income."

"Interest as a percent of income" is "Interest paid" divided by "Gross cash farm income"

Liquidity: Accrual Basis

"Available for intermediate debt" on the accrual basis is "Net accrual operating income" plus "Net nonfarm income" minus "Family living and taxes" and "Real estate principal payments."

Accrual "Expense as a percent of income" is "Total cash expense" adjusted by inventory changes in accounts payable, accrued expense items, prepaid expenses and growing crops divided by "Gross farm income." "Gross farm revenue" is "Gross cash farm income" adjusted by changes in inventories of crops and feed, feeder livestock and accounts receivable.

"Interest as a percent of income" is "Interest paid" adjusted by changes in accrued interest for the year, divided by "Gross farm revenue."

Tables 6 and 7. Balance Sheet

The beginning and ending net worth statements and solvency measures are presented for sole proprietors only in Tables 6 and 7. Current assets are valued at market price at the time of the inventory which is January 1, and December 31, for the beginning and ending inventories respectively. In Table 6, intermediate and long-term assets that are depreciable are valued at cost remaining (amount remaining to be depreciated, plus salvage value). Raised breeding livestock is valued at conservative market replacement costs. Land is valued at cost or conservative market value. In Table 7, the intermediate and long term assets are listed at market value, and deferred income tax liabilities are estimated.

Table 8. Statement of Cash Flows

This statement organizes cash inflows and outflows by the following three categories: Operating activities, investing activities, and financing activities.

Table 9. Financial Standards Measures

This table contains the 16 measures of financial performance recommended by the Farm Financial Standards Task Force (FFSTF). The Finpack financial management program used by the North Dakota Farm Business Education in most part, but not completely, complies with the FFSTF recommendations for calculating the financial guidelines measures. The measures are calculated on an accrual basis.

Liquidity

"Current ratio" is "Total current farm assets" divided by "Total current farm liabilities."

"Working capital" is "Total current farm assets" less "Total current farm liabilities."

Solvency

"Farm debt to asset ratio" is "Total farm liabilities" divided by "Total farm assets."

"Farm equity to asset ratio" is "Total farm assets" minus "Total farm liabilities," divided by "Total farm assets."

"Farm debt to equity ratio" is "Total farm liabilities," divided by the result of "Total farm assets" minus "Total farm liabilities."

Profitability

"Rate of return on farm assets" is "Net farm income" plus "interest expense" minus "Value of operator's labor and management," divided by the average of beginning and ending "Total farm assets."

"Rate of return on farm equity" is "Net farm income" minus "Value of operator's labor and management," divided by the average of beginning and ending farm net worth.

"Operating profit margin" is "Net farm income" plus "interest expense" minus "Value of operator's labor and management," divided by "Value of farm production."

Repayment Capacity

"Term debt coverage ratio" is "Net farm income" plus "depreciation and other capital adjustments" plus "Net nonfarm income" plus scheduled interest on term debt minus "Family living and taxes," divided by scheduled term debt principal and interest payments.

"Capital replacement margin" is "Net farm income" plus "Depreciation and other capital adjustments" plus "Net nonfarm income" minus "Family living and taxes" and scheduled term debt principal payments.

Efficiency

"Asset turnover rate" is "Value of farm production" divided by the average of beginning and ending "Total farm assets."

"Operating expense ratio" is total expense less "Farm interest expense" and "Depreciation and capital adjustment," divided by "Gross farm revenue."

"Depreciation expense ratio" is "Depreciation and capital adjustments" divided by "Gross farm revenue."

"Interest expense ratio" is "Farm interest expense" divided by "Gross farm revenue"

"Net farm income ratio" is "Net farm income" divided by "Gross farm revenue."

Table 10. Crop Production and Marketing Summary

This table contains three sections. The first section reports average acreage by land use. The next two sections show average price received and average yields for major crops. These tables are sorted on the basis of "Net farm income."

Table 11. Household and Personal Expenses

For those farms that keep records, the household and personal expenses are summarized in Table 11. The farms are grouped in the same ranking as in Table 1. Not all farms keep these records, therefore, the numbers may be different for each group. Averages are determined by the number of farms keeping these records. Table 8 presents calculated family living and includes all farms. Income tax paid is also shown on Table 8 and includes all farms.

Table 12. Operator Information, Nonfarm Summary

Table 12 reports the average for the number of operators per farm, the operator's age, and the number of years farming. This table also reports the income from nonfarm income, but the figure reported is the average over all farms not just those reporting nonfarm income.

Financial Guideline Measures

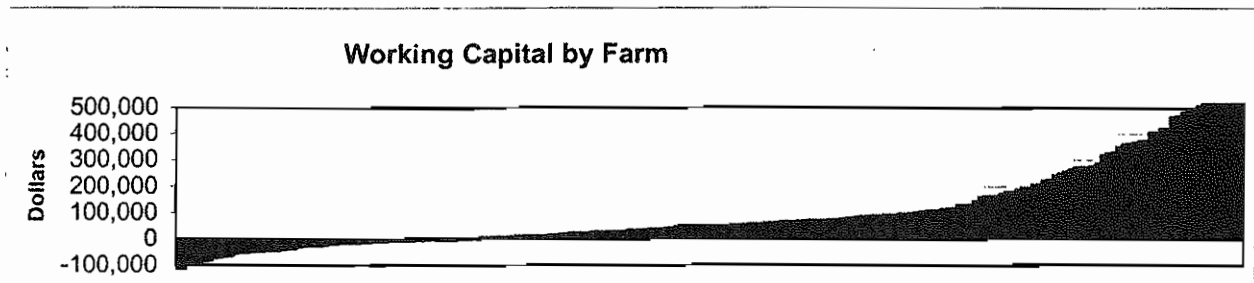
The Farm Financial Standards Task Force recommended the use of sixteen financial measures to evaluate a farm's financial position and financial performance. These measures are grouped by Liquidity, Solvency, Profitability, Repayment Capacity and Efficiency.

Liquidity

Liquidity is the ability of the farm business to meet financial obligations in a timely manner, without disrupting normal business operations.

Current Ratio: The current ratio shows the value of current assets relative to current liabilities. It measures the extent current farm assets, if liquidated, would cover liabilities that are due during the next 12 months. The higher the ratio, the safer the short term position.

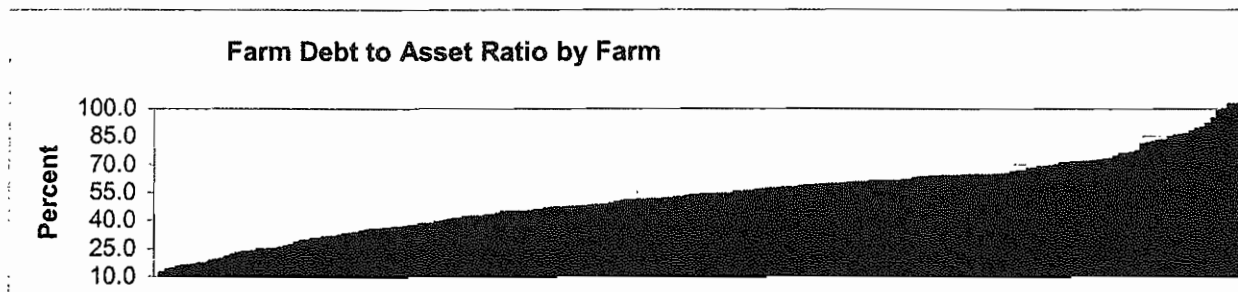
Working Capital: Working capital shows the dollar amount that current assets can or cannot cover current liabilities. It approximates the amount of capital available to purchase crop and livestock inputs and equipment necessary to produce farm products. The amount of working capital considered adequate must be related to the size of the farm business.



Solvency

Solvency is important in evaluating the risk position of the farm and family and in considering future borrowing capacity. Solvency measures the ability of the business to pay off all debts if liquidated.

Farm Debt To Asset Ratio: The farm debt to asset ratio measures the financial position or solvency of the farm or ranch by comparing the total liabilities to the total assets. It measures the portion of the farm assets that have debt against them. A higher ratio is considered an indicator of greater financial risk.



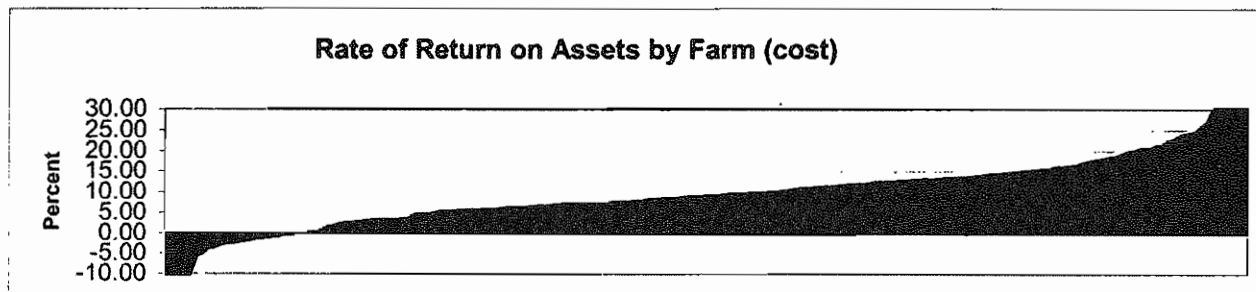
Farm Equity To Asset Ratio: The farm equity to asset ratio measures the farm equity relative to the value of the farm assets. It measures the proportion of the farm assets financed by the owner's equity whereas the debt to asset ratio measured the proportion of farm assets financed by debt.

Farm Debt To Equity Ratio: The farm debt to equity ratio measures the amount of farm debt relative to the amount of farm equity. It measures the amount of debt the farm has for every dollar of equity the farm has.

Profitability

Profitability is the measure of the value of goods produced by the business in relation to the cost of resources used in the production. Profitability calculated on a cost basis does not consider changes in market valuation of capital assets such as machinery and breeding livestock.

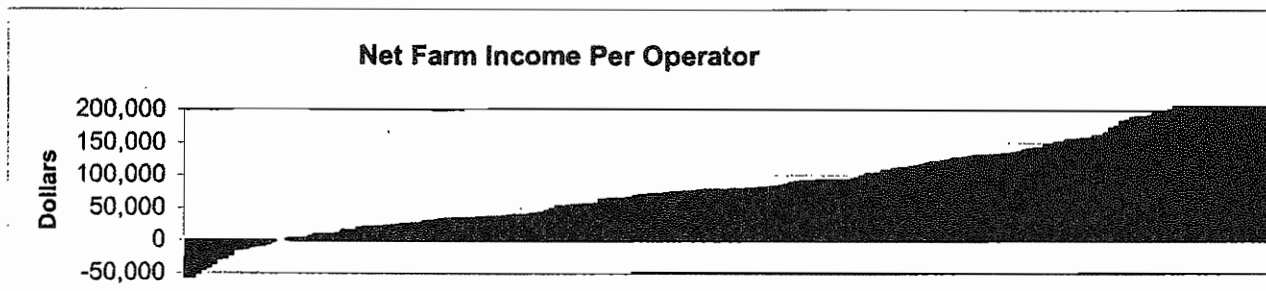
Rate of Return on Assets: Rate of return on assets is, in effect, the interest rate your farm earned in the past year on all money invested in the business. If assets are valued at market value, the rate of return on investment can be looked at as the "opportunity cost" of investing money in the farm instead of alternative investments. If assets are valued at cost (cost less depreciation), the rate of return represents the actual return on the average dollar invested in the business.



Rate of Return on Equity: Rate of return on equity is, in effect, the interest rate your investment in the business earned in the past year. If assets are valued at market value, this return can be compared with returns available if the assets were liquidated and invested in alternative investments. If assets are valued at cost, this represents the actual return to the amount of equity capital you have invested in the farm business.

If your return on assets is higher than your average interest rate, your return on equity will be still higher, reflecting the fact that there are residual returns to equity capital after paying all interest expense. This is positive use of financial leverage. If your return on assets is lower than your average interest rate, your return on equity will be still lower, reflecting the fact that borrowed capital did not earn enough to pay its interest cost. This is negative financial leverage. As your debt to asset ratio increases, these relationships become more pronounced. So profitability becomes a key concern when substantial debt capital is used in the business.

Net Farm Income: Net farm income represents the returns to labor, management, and equity capital invested in the business. Without income from other sources, or appreciation of capital asset values, net farm income must cover family living expenses and taxes, or net worth will decrease.



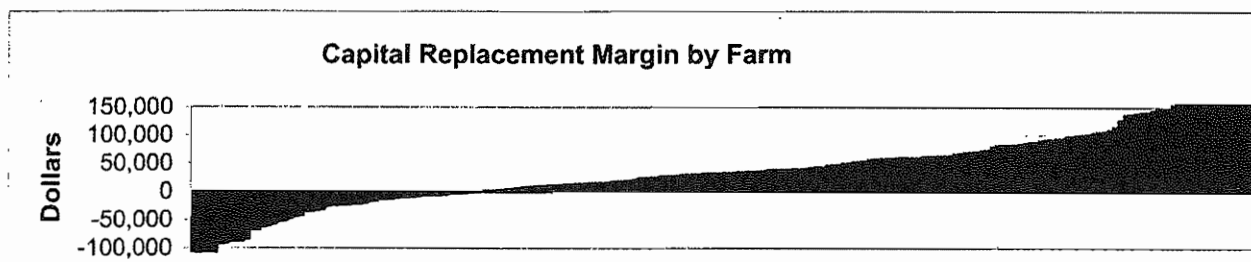
Operating Profit Margin: The operating profit margin is a measure of the profit margin from the employment of assets. It measures how effectively you are employing assets relative to the value of output produced. Low prices, high operating expenses, or production problems are all possible causes of a low operating profit margin.

Repayment Capacity

Repayment capacity measures the ability to repay term debt (longer than one year) and to replace capital assets.

Term Debt Coverage Ratio: The term debt coverage ratio measures the ability of the business to cover all term debt payments. A number less than 100 percent indicates that the business, plus non-farm income, is not generating sufficient cash to meet all of the debt payments, after family living expenses and taxes have been paid. A number greater than 100 indicates the business is generating sufficient cash to pay all term debt obligations with some surplus margin remaining.

Capital Replacement Margin: The capital replacement margin is the amount of money remaining from farm and non-farm income after all operating expenses, taxes, family living and debt payments have been paid. It is the amount available for acquiring capital assets, such as machinery and land, or servicing additional debt.

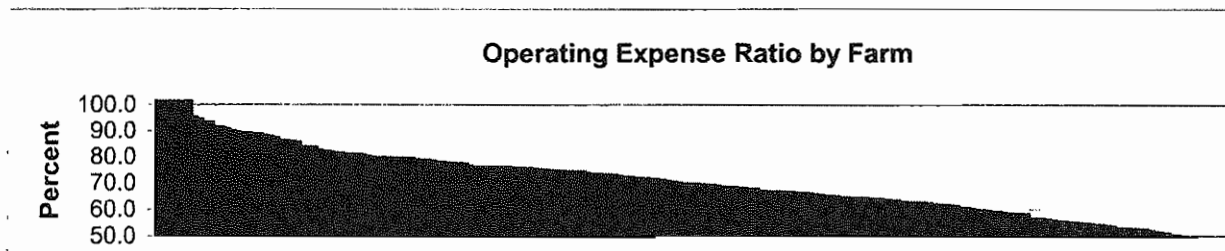


Efficiency

These measures reflect the relationships between expense and income items to revenue and the efficiency of the farm business with regard to the use of cash and capital assets.

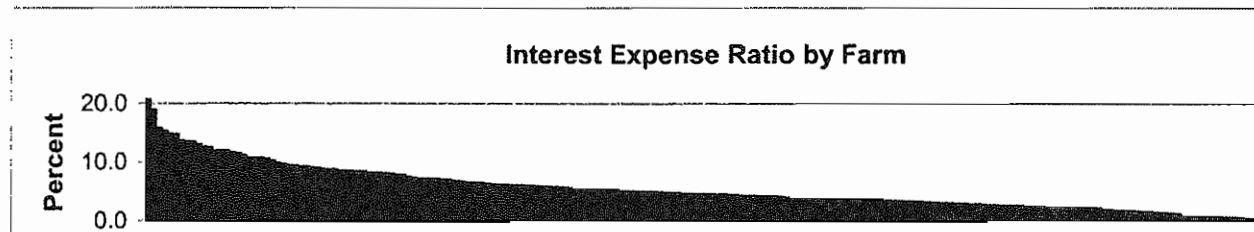
Asset Turnover: Asset turnover is a measure of how efficiently assets are used in the business. A farm with good operating profit margin and asset turnover will show a strong rate of return on farm assets. If operating profit margin is low, the asset turnover rate must be strong, or vice versa, to maintain the rate of return on assets.

Operating Expense Ratio: This ratio indicates the percent of the gross farm income which is used to pay the operating expenses. Operating expenses do not include interest or depreciation expense.



Depreciation Expense Ratio: This ratio indicates the percent of the gross farm income which is used to cover the depreciation expense.

Interest Expense Ratio: This ratio indicates the percent of the gross farm income which is used to pay farm interest expenses.



Net Farm Income Ratio: The ratio indicates the percent of the gross farm income which remains after all expenses.

Five Year Trends Red River Valley Farm Business Management Education

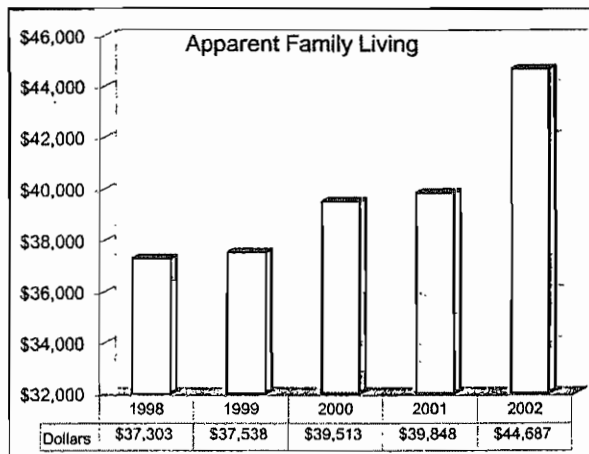
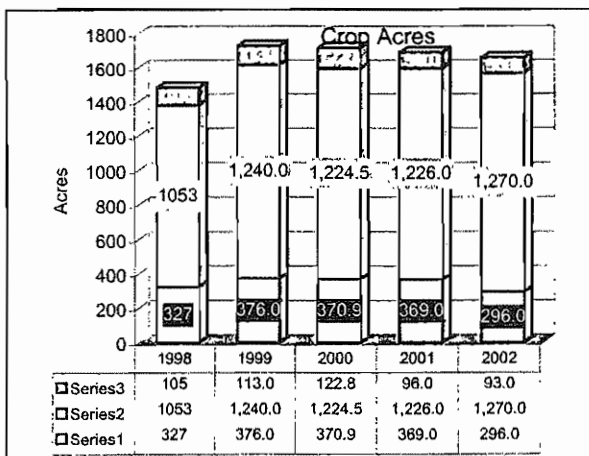
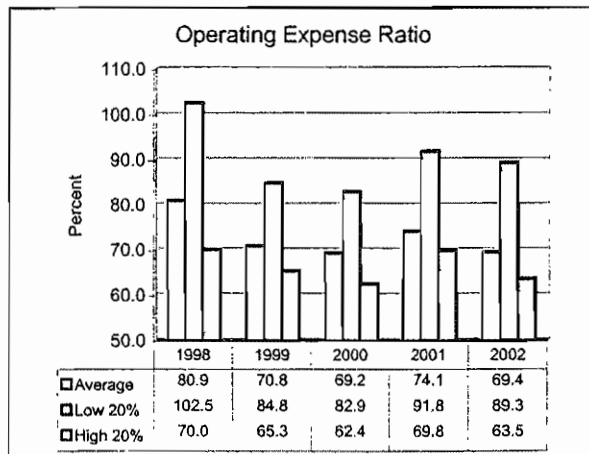
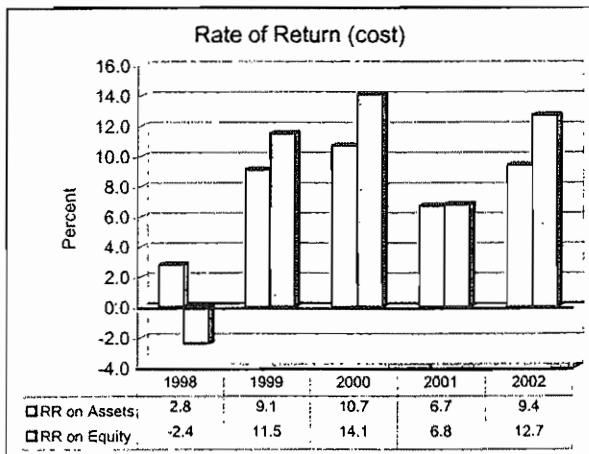
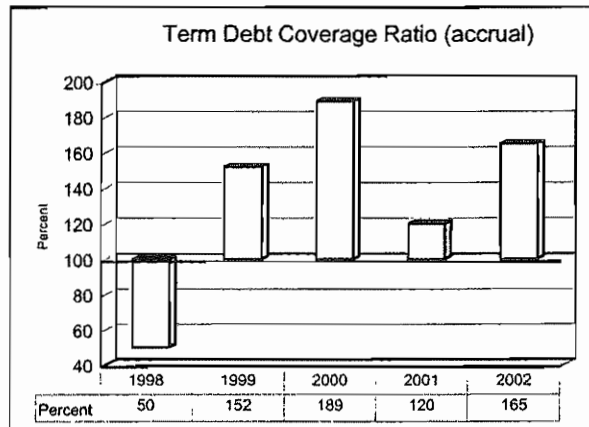
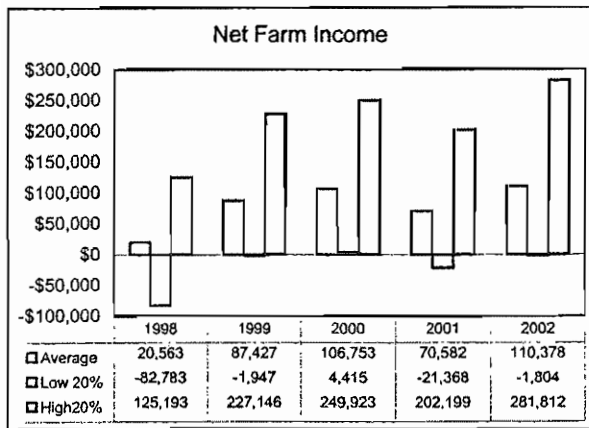


TABLE 1
FARM INCOME STATEMENT, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
CASH FARM INCOME				
Barley	2,017	1,618	1,818	3,700
Beans, Black Turtle	49	247	-	-
Beans, Great Northern	148	-	-	-
Beans, Navy	4,259	3,724	4,256	11,464
Beans, Pinto	1,636	-	1,883	4,110
Beans, Small Red	94	-	465	-
Canola	558	2,530	-	-
Corn	22,028	14,256	13,826	60,860
Hay, Alfalfa	593	294	-	1,368
Millet	113	-	557	-
Potatoes	755	-	-	-
Potatoes, Seed	685	-	-	-
Soybeans	87,109	76,832	77,249	94,708
Straw	1,248	-	5,356	258
Sugar Beets	156,334	60,765	104,594	358,571
Sunflowers	3,082	3,637	1,845	4,269
Sunflowers, Confectionary	3,038	2,216	1,975	5,900
Wheat, Durum	1,248	5,637	-	608
Wheat, Spring	100,544	73,993	73,027	165,677
Wheat, Winter	303	-	-	-
Other crops	1,048	-	4,119	1,047
Miscellaneous crop income	107	-	76	-
Beef Cow-Calf, Beef Calves	50	254	-	-
Beef, Background Beef	336	-	-	944
Beef, Finish Beef Calves	1,719	-	-	181
Beef, Finish Yrlg Steers	24	-	116	-
Hogs, Farrow-Fin, Raised Hogs	1,382	-	6,813	-
Misc. livestock income	11	22	24	-
Direct government payments	18,342	13,872	15,071	30,943
CRP payments	1,101	969	1,071	813
Other government payments	2,509	1,003	725	3,962
Custom work income	5,233	1,592	4,027	10,002
Patronage dividends, cash	1,804	316	1,292	4,873
Insurance income	28,453	26,572	23,110	40,975
Cash from hedging accts	426	240	232	863
Other farm income	14,107	8,246	7,241	27,639
Gross Cash Farm Income	462,678	298,836	350,769	833,733

TABLE 1
FARM INCOME STATEMENT, 2002 (Continued)
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
CASH FARM EXPENSE				
Seed	33,376	20,222	27,246	55,929
Fertilizer	32,255	22,063	25,061	61,587
Crop chemicals	49,957	33,553	34,633	96,193
Crop insurance	13,519	11,003	10,941	22,385
Drying fuel	734	250	647	2,177
Crop custom hire	343	434	1,002	-
Marketing	3,577	5,184	1,514	3,524
Crop miscellaneous	3,494	1,529	3,684	6,347
Feeder livestock purchase	997	-	161	-
Purchased feed	1,126	17	4,242	291
Breeding fees	36	7	165	-
Veterinary	106	16	165	56
Livestock supplies	94	43	288	59
Interest	24,219	15,443	18,556	39,896
Fuel & oil	15,723	11,790	12,747	25,891
Repairs	35,264	21,836	24,418	63,016
Custom hire	10,013	8,931	8,388	14,239
Hired labor	20,735	8,508	14,552	44,036
Land rent	84,899	58,698	67,961	154,453
Machinery & bldg leases	6,814	5,440	7,811	12,969
Real estate taxes	3,418	2,486	1,948	6,436
Farm insurance	7,187	5,794	6,371	11,398
Utilities	4,446	3,316	4,085	6,889
Dues & professional fees	3,490	2,427	3,055	4,734
Hedging account deposits	1,221	188	762	2,868
Miscellaneous	6,747	10,514	4,744	8,310
Total cash expense	366,230	252,044	286,928	643,682
Net cash farm income	96,448	46,792	63,841	190,051
INVENTORY CHANGES				
Crops and feed	25,334	-23,887	34,465	96,106
Market livestock	-42	65	410	-61
Accounts receivable	10,383	3,256	5,632	20,698
Prepaid expenses and supplies	-3,286	-4,328	-6,812	-4,152
Accounts payable	-182	-10,132	190	6,188
Total inventory change	32,207	-35,026	33,885	118,779
Net operating profit	128,655	11,766	97,725	308,830
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS				
Breeding livestock	35	-29	227	74
Machinery and equipment	-23,409	-14,908	-17,058	-43,211
Buildings and improvements	-552	-286	-387	-801
Other farm capital	5,637	1,654	4,033	16,860
Total depr. and other capital adj	-18,289	-13,570	-13,185	-27,077
Net farm income	110,366	-1,804	84,540	281,753

TABLE 2
INVENTORY CHANGES, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
Net cash farm income	96,448	46,792	63,841	190,051
CROPS AND FEED				
Ending inventory	214,653	109,478	159,817	453,202
Beginning inventory	189,319	133,365	125,352	357,096
Inventory change	25,334	-23,887	34,465	96,106
MARKET LIVESTOCK				
Ending inventory	1,582	302	2,327	1,253
Beginning inventory	1,624	237	1,917	1,314
Inventory change	-42	65	410	-61
ACCTS RECEIVABLE & OTHER CURRENT ASSETS				
Ending inventory	49,489	22,581	39,946	98,209
Beginning inventory	39,106	19,325	34,314	77,511
Inventory change	10,383	3,256	5,632	20,698
PREPAID EXPENSES AND SUPPLIES				
Ending inventory	32,725	13,136	22,271	67,566
Beginning inventory	36,010	17,465	29,083	71,718
Inventory change	-3,286	-4,328	-6,812	-4,152
ACCOUNTS PAYABLE & ACCRUED EXPENSES				
Beginning inventory	23,168	12,685	18,671	40,372
Ending inventory	23,380	22,906	18,529	34,158
Inventory change	-182	-10,132	190	6,188
Total inventory change	32,207	-35,026	33,885	118,779
Net operating profit	128,655	11,766	97,725	308,830

TABLE 3
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
Net operating profit	128,655	11,766	97,725	308,830
BREEDING LIVESTOCK				
Ending inventory	877	600	951	1,656
Capital sales	113	-	392	166
Beginning inventory	933	629	1,116	1,636
Capital purchases	23	-	-	112
Depreciation, capital adjust.	35	-29	227	74
MACHINERY AND EQUIPMENT				
Ending inventory	249,370	150,485	200,655	450,816
Capital sales	2,525	1,058	1,592	4,921
Beginning inventory	223,282	137,344	182,189	385,574
Capital purchases	52,025	29,010	36,956	113,738
Depreciation, capital adjust.	-23,409	-14,908	-17,058	-43,211
BUILDINGS AND IMPROVEMENTS				
Ending inventory	38,971	16,305	30,989	63,002
Capital sales	-	-	-	-
Beginning inventory	36,301	15,004	28,547	57,870
Capital purchases	3,222	1,587	2,829	5,933
Depreciation, capital adjust.	-552	-286	-387	-801
OTHER CAPITAL ASSETS				
Ending inventory	183,249	64,640	121,732	415,721
Capital sales	6,668	5,272	7,218	13,295
Beginning inventory	178,326	66,428	124,154	394,132
Capital purchases	5,955	1,829	762	18,024
Depreciation, capital adjust.	5,637	1,654	4,033	16,860
Total depreciation, capital adj.	-18,289	-13,570	-13,185	-27,077
Net farm income	110,366	-1,804	84,540	281,753

TABLE 4
 PROFITABILITY MEASURES, 2002
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
Profitability (assets valued at cost)				
Net farm income	110,366	-1,804	84,540	281,753
Labor and management earnings	76,669	-17,724	62,905	208,620
Rate of return on assets	9.4 %	-1.8 %	9.8 %	12.9 %
Rate of return on equity	12.7 %	-10.7 %	14.7 %	17.5 %
Operating profit margin	19.1 %	-3.7 %	18.5 %	26.4 %
Asset turnover rate	48.8 %	47.8 %	53.2 %	48.8 %
Interest on farm net worth	33,697	15,920	21,635	73,133
Farm interest expense	23,971	17,898	18,390	37,728
Value of operator lbr and mgmt.	39,348	26,410	31,425	68,936
Return on farm assets	94,989	-10,317	71,506	250,544
Average farm assets	1,015,915	581,854	726,960	1,948,945
Return on farm equity	71,018	-28,214	53,115	212,816
Average farm equity	560,373	263,743	360,578	1,218,885
Value of farm production	496,265	278,224	387,099	950,259
	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
Profitability (assets valued at market)				
Net farm income	121,121	11,633	96,182	276,686
Labor and management earnings	84,000	-5,652	72,018	196,488
Rate of return on assets	8.9 %	0.5 %	9.9 %	10.5 %
Rate of return on equity	13.2 %	-5.2 %	16.1 %	15.5 %
Operating profit margin	21.3 %	1.1 %	21.5 %	25.8 %
Asset turnover rate	41.6 %	42.8 %	46.0 %	40.7 %
Interest on farm net worth	37,122	17,286	24,164	80,198
Farm interest expense	23,971	17,898	18,390	37,728
Value of operator lbr and mgmt.	39,348	26,410	31,425	68,936
Return on farm assets	105,745	3,121	83,147	245,477
Average farm assets	1,191,569	650,543	841,447	2,335,657
Return on farm equity	81,774	-14,777	64,757	207,750
Average farm equity	617,786	286,784	402,735	1,336,639
Value of farm production	496,265	278,224	387,099	950,259

TABLE 5
LIQUIDITY MEASURES, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
Liquidity (cash)				
Net cash farm income	96,448	46,792	63,841	190,051
Net nonfarm income	15,186	24,864	14,849	8,266
Family living and taxes	60,155	40,930	51,629	102,417
Real estate principal payments	10,603	8,949	7,804	16,254
Cash available for interm. debt	40,876	21,776	19,258	79,646
Average intermediate debt	158,408	102,550	141,498	254,186
Years to turnover interm. debt	3.9	4.7	7.3	3.2
Expense as a % of income	79 %	84 %	82 %	77 %
Interest as a % of income	5 %	5 %	5 %	5 %
Liquidity (accrual)				
Total accrual farm income	498,353	278,270	391,276	950,476
Total accrual operating expense	369,698	266,504	293,551	641,646
Net accrual operating income	128,655	11,766	97,725	308,830
Net nonfarm income	15,186	24,864	14,849	8,266
Family living and taxes	60,155	40,930	51,629	102,417
Real estate principal payments	10,603	8,949	7,804	16,254
Available for intermediate debt	73,084	-13,250	53,142	198,424
Average intermediate debt	158,408	102,550	141,498	254,186
Years to turnover interm. debt	2.2	**	2.7	1.3
Expense as a % of income	74 %	96 %	75 %	68 %
Interest as a % of income	5 %	6 %	5 %	4 %

** Income insufficient to meet debt servicing requirements

TABLE 6
ENDING BALANCE SHEET AT COST VALUES, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	181	37	41	30
ASSETS				
Current Farm Assets				
Cash and checking balance	9,329	11,049	10,006	11,252
Prepaid expenses & supplies	29,264	14,010	22,295	55,905
Growing crops	44	-	-	-
Accounts receivable	43,496	17,429	40,361	87,379
Hedging accounts	1,162	461	270	3,538
Crops held for sale or feed	169,074	76,465	134,554	386,719
Crops under government loan	17,625	24,318	19,723	7,335
Market livestock held for sale	1,809	335	2,384	1,755
Other current assets	2,040	237	111	4,202
Total current farm assets	273,843	144,304	229,704	558,084
Intermediate Farm Assets				
Breeding livestock	1,003	665	975	2,318
Machinery and equipment	216,646	144,432	192,792	369,337
Other intermediate assets	125,504	38,713	117,507	261,523
Total intermediate farm assets	344,942	185,092	314,996	634,247
Long Term Farm Assets				
Farm land	258,178	189,615	176,025	457,268
Buildings and improvements	35,371	16,919	31,745	58,729
Other long-term assets	21,201	8,312	6,829	60,872
Total long-term farm assets	314,750	214,845	214,599	576,869
Total Farm Assets	933,535	544,240	759,299	1,769,200
Total Nonfarm Assets	154,632	117,189	155,543	268,589
Total Assets	1,088,166	661,429	914,843	2,037,788
LIABILITIES				
Current Farm Liabilities				
Accrued interest	8,576	5,824	6,980	10,414
Accounts payable	12,025	9,645	10,462	18,165
Current notes	114,328	76,163	97,717	194,217
Government crop loans	13,702	20,238	12,235	6,172
Principal due on term debt	37,346	24,803	34,058	59,546
Total current farm liabilities	185,978	136,674	161,451	288,514
Total intermediate farm liabs	111,767	73,625	107,274	184,796
Total long term farm liabilities	141,715	105,446	105,131	207,415
Total farm liabilities	439,460	315,744	373,856	680,725
Total nonfarm liabilities	34,137	26,791	35,212	55,447
Total liabilities	473,597	342,535	409,068	736,172
NET WORTH (farm and nonfarm)	614,570	318,894	505,775	1,301,617
Net worth change	56,960	-20,994	45,651	175,838
RATIO ANALYSIS				
Current farm liabilities / assets	68 %	95 %	70 %	52 %
Curr. & interm farm liab. / assets	48 %	64 %	49 %	40 %
Long term farm liab. / assets	45 %	49 %	49 %	36 %
Total debt to asset ratio	44 %	52 %	45 %	36 %

TABLE 7
ENDING BALANCE SHEET AT MARKET VALUES, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	181	37	41	30
ASSETS				
Current Farm Assets				
Cash and checking balance	9,329	11,049	10,006	11,252
Prepaid expenses & supplies	29,264	14,010	22,295	55,905
Growing crops	44	-	-	-
Accounts receivable	43,496	17,429	40,361	87,379
Hedging accounts	1,162	461	270	3,538
Crops held for sale or feed	169,074	76,465	134,554	386,719
Crops under government loan	17,625	24,318	19,723	7,335
Market livestock held for sale	1,809	335	2,384	1,755
Other current assets	2,040	237	111	4,202
Total current farm assets	273,843	144,304	229,704	558,084
Intermediate Farm Assets				
Breeding livestock	895	665	975	2,318
Machinery and equipment	272,186	181,739	245,043	470,714
Other intermediate assets	158,320	42,065	133,243	350,113
Total intermediate farm assets	433,223	225,760	383,118	824,214
Long Term Farm Assets				
Farm land	299,967	203,738	220,924	516,892
Buildings and improvements	43,333	22,811	43,445	68,206
Other long-term assets	22,195	8,312	6,878	62,114
Total long-term farm assets	365,494	234,861	271,247	647,212
Total Farm Assets	1,072,559	604,924	884,069	2,029,510
Total Nonfarm Assets	172,097	137,366	163,470	318,774
Total Assets	1,244,657	742,291	1,047,539	2,348,284
LIABILITIES				
Current Farm Liabilities				
Accrued interest	8,576	5,824	6,980	10,414
Accounts payable	12,025	9,645	10,462	18,165
Current notes	114,328	76,163	97,717	194,217
Government crop loans	13,702	20,238	12,235	6,172
Principal due on term debt	37,346	24,803	34,058	59,546
Total current farm liabilities	185,978	136,674	161,451	288,514
Total intermediate farm liabs	111,767	73,625	107,274	184,796
Total long term farm liabilities	141,715	105,446	105,131	207,415
Total farm liabilities	439,460	315,744	373,856	680,725
Total nonfarm liabilities	34,137	26,791	35,212	55,447
Total liabs excluding deferreds	473,597	342,535	409,068	736,172
Total deferred liabilities	100,244	42,915	81,007	224,855
Total liabilities	573,841	385,450	490,075	961,027
RETAINED EARNINGS				
Market valuation equity	614,570	318,894	505,775	1,301,617
Net worth (farm and nonfarm)	56,246	37,947	51,689	85,641
Net worth excluding deferreds	670,816	356,841	557,464	1,387,257
Net worth change	771,060	399,756	638,472	1,612,112
	70,959	-3,238	56,483	174,117
RATIO ANALYSIS				
Current farm liabilities / assets	68 %	95 %	70 %	52 %
Curr. & interm farm liab. / assets	42 %	57 %	44 %	34 %
Long term farm liab. / assets	39 %	45 %	39 %	32 %
Total debt to asset ratio	46 %	52 %	47 %	41 %
Debt to assets excl deferreds	38 %	46 %	39 %	31 %

TABLE 8
STATEMENT OF CASH FLOWS, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
Beginning cash (farm & nonfarm)	24,487	14,862	17,538	51,189
CASH FROM OPERATING ACTIVITIES				
Gross cash farm income	462,678	298,836	350,769	833,733
Net nonfarm income	15,186	24,864	14,849	8,266
Total cash farm expense	-366,230	-252,044	-286,928	-643,682
Apparent family living expense	-44,675	-33,343	-38,022	-67,654
Income and social security tax	-13,633	-7,588	-11,056	-28,214
Cash from operations	53,326	30,726	29,613	102,449
CASH FROM INVESTING ACTIVITIES				
Sale of breeding livestock	113	-	392	166
Sale of machinery & equipment	2,525	1,058	1,592	4,921
Sale of farm land	455	154	569	-
Sale of farm buildings	-	-	-	-
Sale of other farm assets	6,668	5,272	7,218	13,295
Sale of nonfarm assets	1,665	588	2,207	863
Purchase of breeding livestock	-23	-	-	-112
Purchase of machinery & equip.	-52,025	-29,010	-36,956	-113,738
Purchase of farm land	-14,540	-7,022	-17,794	-22,746
Purchase of farm buildings	-3,222	-1,587	-2,829	-5,933
Purchase of other farm assets	-5,955	-1,829	-762	-18,024
Purchase of nonfarm assets	-14,287	-10,280	-14,529	-24,283
Cash from investing activities	-79,882	-43,179	-63,692	-166,947
CASH FROM FINANCING ACTIVITIES				
Money borrowed	262,616	191,505	261,743	394,437
Cash gifts and inheritances	2,140	422	3,360	412
Principal payments	-239,142	-175,640	-230,661	-335,461
Dividends paid	-1,846	-	-2,551	-6,549
Gifts given	0	-2	-	-
Cash from financing activities	23,767	16,285	31,890	52,838
Net change in cash balance	-2,790	3,831	-2,189	-11,660
Ending cash (farm & nonfarm)	21,697	18,693	15,349	39,529

TABLE 9
FINANCIAL STANDARDS MEASURES, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
Liquidity				
Current ratio	1.56	1.07	1.41	1.98
Working capital	113,093	10,396	67,313	323,713
Solvency (market)				
Farm debt to asset ratio	48 %	58 %	52 %	43 %
Farm equity to asset ratio	52 %	42 %	48 %	57 %
Farm debt to equity ratio	92 %	138 %	108 %	74 %
Profitability (cost)				
Rate of return on farm assets	9.4 %	-1.8 %	9.8 %	12.9 %
Rate of return on farm equity	12.7 %	-10.7 %	14.7 %	17.5 %
Operating profit margin	19.1 %	-3.7 %	18.5 %	26.4 %
Net farm income	110,366	-1,804	84,540	281,753
Repayment Capacity				
Term debt coverage ratio	165 %	25 %	145 %	229 %
Capital replacement margin	40,546	-31,277	23,643	135,262
Efficiency				
Asset turnover rate (cost)	48.8 %	47.8 %	53.2 %	48.8 %
Operating expense ratio	69.4 %	89.3 %	70.3 %	63.5 %
Depreciation expense ratio	3.7 %	4.9 %	3.4 %	2.8 %
Interest expense ratio	4.8 %	6.4 %	4.7 %	4.0 %
Net farm income ratio	22.1 %	-0.6 %	21.6 %	29.6 %

TABLE 10
CROP PRODUCTION AND MARKETING SUMMARY, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
Acreage Summary				
Total acres owned	370	288	250	543
Total crop acres	1,658	1,235	1,410	2,589
Crop acres owned	296	226	211	422
Crop acres cash rented	1,270	963	1,054	2,048
Crop acres share rented	93	46	145	119
Total pasture acres	2	-	-	11
Average Price Received (Cash Sales Only)				
Wheat, Spring per bushel	3.61	3.46	3.58	3.71
Soybeans per bushel	4.78	4.78	4.68	4.82
Corn per bushel	2.14	-	1.86	2.17
Barley per bushel	2.25	2.33	2.11	-
Sunflowers, Confectionary per cwt	13.01	-	-	-
Beans, Navy per cwt	15.40	-	-	15.12
Sunflowers per cwt	12.33	-	-	-
Hay, Alfalfa per ton	56.04	-	-	-
Beans, Pinto per cwt	17.68	-	-	-
Straw per ton	35.75	-	-	-
Average Yield Per Acre				
Wheat, Spring (bushel)	36.68	30.02	36.84	41.97
Soybeans (bushel)	36.03	31.04	36.71	38.85
Sugar Beets (ton)	18.11	15.26	16.93	19.02
Corn (bushel)	142.79	103.55	139.49	151.79
Barley (bushel)	49.52	39.41	44.36	56.74
Beans, Navy (cwt)	18.24	16.21	17.14	19.62
Sunflowers (cwt)	15.42	-	-	20.26
Beans, Pinto (cwt)	17.79	-	-	20.45
Sunflowers, Confectionary (cwt)	13.76	-	-	-
Soybeans, Food (bushel)	29.85	-	-	-
Hay, Alfalfa (ton)	2.85	-	-	-
Canola (cwt)	14.16	-	-	-

TABLE 11
HOUSEHOLD AND PERSONAL EXPENSES, 2002
Minnesota and North Dakota Farm Business Mgmt Education
RedRiver Valley
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms
Number of farms	18
Average family size	3.7
Family Living Expenses	
Food and meals expense	6,240
Medical care	2,360
Health insurance	3,270
Cash donations	1,941
Household supplies	5,013
Clothing	2,228
Personal care	1,894
Child / Dependent care	364
Alimony and Child support	558
Gifts	1,823
Education	1,234
Recreation	3,190
Utilities (household share)	1,468
Nonfarm vehicle operating expense	1,176
Household real estate taxes	288
Dwelling rent	-
Household repairs	1,626
Nonfarm interest	1,276
Disability / Long term care insurance	232
Life insurance payments	1,371
Nonfarm property insurance	113
Miscellaneous	683
Total cash family living expense	38,347
Family living from the farm	-
Total family living	38,347
Other Nonfarm Expenditures	
Income taxes	16,610
Furnishing & appliance purchases	333
Nonfarm vehicle purchases	2,642
Nonfarm real estate purchases	1,852
Other nonfarm capital purchases	494
Nonfarm savings & investments	2,418
Total other nonfarm expenditures	24,349
Total cash family living investment & nonfarm capital purchase	62,696

TABLE 12
 NONFARM INCOME, OPERATOR AND LABOR INFORMATION, 2002
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	207	41	42	42
NONFARM INCOME				
Nonfarm wages & salary	12,250	18,129	12,871	6,909
Nonfarm business income	573	3,085	611	-53
Nonfarm rental income	385	1,797	-	-8
Nonfarm interest income	167	90	108	544
Nonfarm cash dividends	2	-	6	2
Tax refunds	281	456	121	288
Gifts and inheritances	2,140	422	3,360	412
Other nonfarm income	1,528	1,306	1,133	584
Total nonfarm income	17,326	25,285	18,209	8,678
OPERATOR INFORMATION				
Average number of operators	1.1	1.0	1.0	1.4
Average age of operators	43.6	41.5	42.2	45.5
Average number of years farming	20.7	17.7	18.7	24.1
RESULTS PER OPERATOR				
Working capital	101,784	9,912	65,747	234,413
Total assets (market)	1,272,206	765,535	1,033,364	1,963,664
Total liabilities	573,883	401,886	491,857	800,950
Net worth (market)	698,324	363,648	541,506	1,162,713
Net worth excl deferred liabs	814,499	410,558	620,221	1,380,727
Gross farm income	448,518	265,327	382,176	688,276
Total farm expense	349,188	267,048	299,602	484,248
Net farm income	99,329	-1,720	82,574	204,028
Net nonfarm income	13,668	23,707	14,504	5,986
Family living & tax withdrawals	54,139	39,026	50,428	74,164
Total acres owned	332.8	274.9	244.2	393.4
Total crop acres	1,492.0	1,177.5	1,376.8	1,874.8
Crop acres owned	266.1	215.2	205.8	305.7
Crop acres cash rented	1,142.6	918.6	1,029.1	1,483.0
Crop acres share rented	83.3	43.8	141.9	86.0
Total pasture acres	2.1	-	-	8.3
LABOR ANALYSIS				
Number of farms	207	41	42	42
Total unpaid labor hours	2,160	1,772	2,079	2,854
Total hired labor hours	1,186	511	785	2,424
Total labor hours per farm	3,346	2,283	2,863	5,278
Unpaid hours per operator	1,944	1,690	2,030	2,066
Value of farm production / hour	148.29	121.86	135.20	180.05
Net farm income / unpaid hour	51.09	-1.02	40.67	98.74

EXPLANATORY NOTES FOR CROPS TABLES

The "Crop Enterprise Analysis" tables show the average physical production, gross return, direct costs, overhead costs, and net returns per acre. The "Net Return per Acre" is the "Gross Return per Acre" minus the direct and overhead costs. "Net Return" represents the return to the operator's and family's unpaid labor, management, and equity. It represents the return to all of the resources which are owned by the farm family and hence, not purchased or paid a wage. Net returns are also calculated after a charge for unpaid operator labor and management and after an allocation of direct government payments. Sugar beet enterprises, where the beet stock is owned, have a sugar beet stock equity charge to determine net return over sugar beet stock. The sugar beet stock equity charge is calculated by multiplying \$1500 (the sugar beet stock sales price in spring 2002) by 5% and subtracting the interest paid on beet stock debt in 2002. The last section of each crop table contains breakeven yield measures which provide useful standards or goals for the individual managers.

There are potentially three tables for each crop depending on the farmer's tenure on the land. The crop tables may be for (1) owned land, (2) cash rented land, and (3) share rented land. Individual farms may have data in all three tables if all three land tenure categories are represented in that farm business. When there are less than five farms with a particular crop and tenure, that table is not included in the report. 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, i.e., an individual farm may be in the low 20% for one crop, the high 20% for a second, and the middle 60% for a third. When there are less than 25 total farms with any particular crop and farmer's tenure, only overall averages are presented.

Value per unit is the market price received plus any loan deficiency payment. Miscellaneous income includes crop insurance and disaster payments for the crop.

Several cost items, such as "utilities," "hired labor," and "interest paid," are listed under both "direct" and "overhead" costs because some of these costs are specific to that crop whereas others are general overhead costs of the farm. For example, "Direct Lease Payments" refers to non-land inputs or resources leased and used only in that crop enterprise and not listed elsewhere under direct costs; the most common example is the lease of equipment that is crop specific. However, cost of leasing machinery that is used for the entire farm operation is listed as an overhead cost. Interest payments are likewise divided into those incurred directly for a specific crop and those that are not. "Land Rent" is listed as a separate category and is assigned as a direct cost for each crop enterprise because it is identifiable with the specific crop. In the case of double cropping, one-half of the rent is charged to each crop.

In the last section of the crop table, "Total direct expense per unit" and "Total dir & ovhd exp per unit" are calculated by dividing "Total direct expense per acre" and "Total dir & ovhd expenses per acre," respectively, by "Yield per acre." "With labor & management" is the breakeven yield after direct, overhead and a labor and management charge are considered. "Total exp less govt & oth income" is the breakeven yield after all costs (including a labor and management charge) are reduced by government payments and miscellaneous income.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals.

Five Year Crop History of Yields and Cost of Production Red River Valley Farm Business Management Education

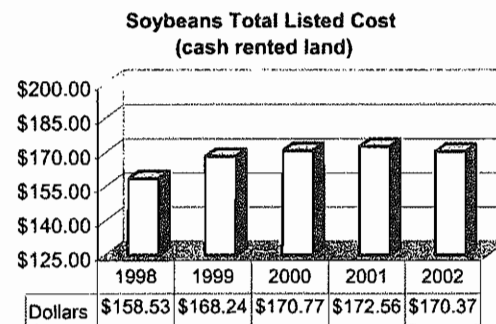
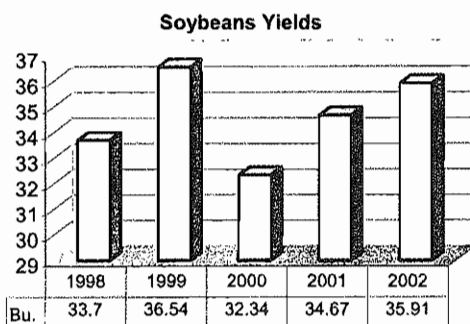
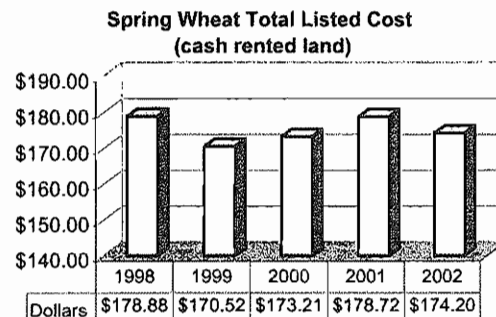
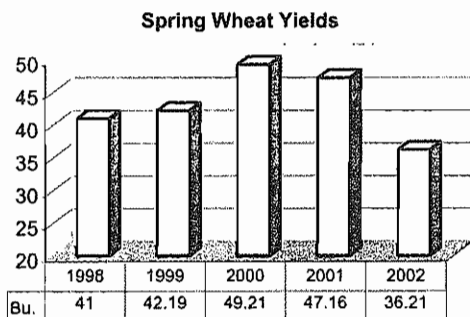
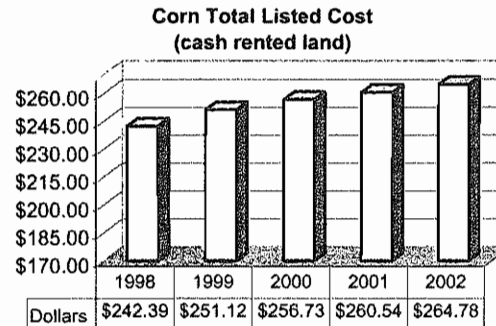
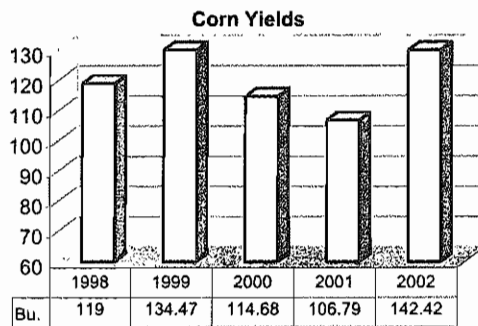
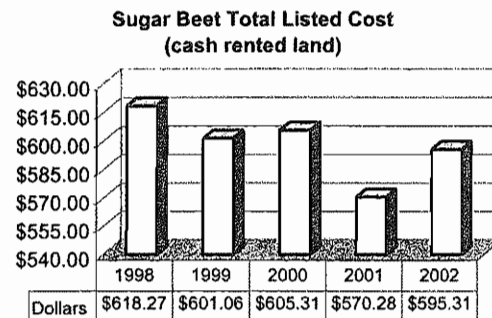
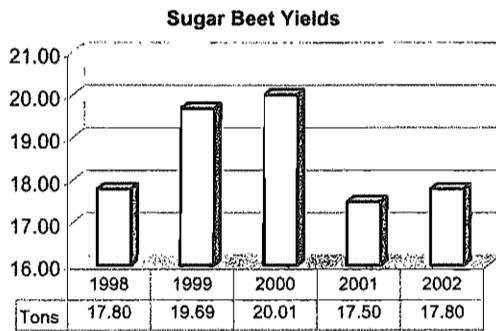


TABLE 13 - 1
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Barley on Owned Land

	Avg. Of All Farms
Number of fields	9
Number of farms	9
Acres	60.84
Yield per acre (bu.)	50.22
Operators share of yield %	100.00
Value per bu.	2.28
Total product return per acre	114.52
Miscellaneous income per acre	12.80
Gross return per acre	127.32
Direct Expenses	
Seed	11.20
Fertilizer	18.98
Crop chemicals	19.18
Crop insurance	5.57
Fuel & oil	7.46
Repairs	11.69
Custom hire	0.93
Operating interest	1.66
Total direct expenses per acre	76.67
Return over direct exp per acre	50.65
Overhead Expenses	
Custom hire	1.43
Hired labor	2.42
Machinery & bldg leases	2.71
RE & pers. property taxes	6.89
Farm insurance	4.35
Utilities	1.58
Dues & professional fees	0.83
Interest	43.82
Mach & bldg depreciation	10.47
Miscellaneous	2.74
Total overhead expenses per acre	77.23
Total dir & ovhd expenses per acre	153.91
Net return per acre	-26.58
Lbr & mgt charge per acre	12.92
Net return over lbr & mgt	-39.50
Government payments	13.30
Net return with govt payments	-26.20
Cost of Production	
Total direct expense per bu.	1.53
Total dir & ovhd exp per bu.	3.06
With labor & management	3.32
Total exp less govt & oth income	2.80

TABLE 13 - 2
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Barley on Cash Rent

	Avg. Of All Farms
Number of fields	21
Number of farms	21
Acres	226.03
Yield per acre (bu.)	49.43
Operators share of yield %	100.00
Value per bu.	2.73
Total product return per acre	135.04
Miscellaneous income per acre	20.79
Gross return per acre	155.83
Direct Expenses	
Seed	9.19
Fertilizer	20.75
Crop chemicals	17.93
Crop insurance	7.31
Fuel & oil	5.66
Repairs	10.88
Custom hire	3.02
Hired labor	0.13
Land rent	57.40
Operating interest	2.43
Miscellaneous	0.13
Total direct expenses per acre	134.84
Return over direct exp per acre	20.99
Overhead Expenses	
Custom hire	1.13
Hired labor	6.23
Machinery & bldg leases	1.69
Farm insurance	4.15
Utilities	1.88
Dues & professional fees	1.56
Interest	3.59
Mach & bldg depreciation	7.79
Miscellaneous	1.77
Total overhead expenses per acre	29.78
Total dir & ovhd expenses per acre	164.62
Net return per acre	-8.79
Lbr & mgt charge per acre	12.53
Net return over lbr & mgt	-21.31
Government payments	14.16
Net return with govt payments	-7.15
Cost of Production	
Total direct expense per bu.	2.73
Total dir & ovhd exp per bu.	3.33
With labor & management	3.58
Total exp less govt & oth income	2.88

TABLE 13 - 3
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Beans, Navy on Owned Land

	Avg. Of All Farms
Number of fields	8
Number of farms	8
Acres	95.88
Yield per acre (cwt.)	18.08
Operators share of yield %	100.00
Value per cwt.	15.27
Total product return per acre	276.12
Miscellaneous income per acre	23.62
Gross return per acre	299.75
Direct Expenses	
Seed	36.61
Fertilizer	22.76
Crop chemicals	30.33
Crop insurance	16.99
Fuel & oil	11.92
Repairs	25.86
Custom hire	4.28
Operating interest	5.22
Total direct expenses per acre	153.96
Return over direct exp per acre	145.79
Overhead Expenses	
Custom hire	1.59
Hired labor	10.43
Machinery & bldg leases	3.18
RE & pers. property taxes	10.58
Farm insurance	3.88
Utilities	3.35
Dues & professional fees	3.26
Interest	52.75
Mach & bldg depreciation	14.20
Miscellaneous	4.39
Total overhead expenses per acre	107.61
Total dir & ovhd expenses per acre	261.57
Net return per acre	38.18
Lbr & mgt charge per acre	28.42
Net return over lbr & mgt	9.76
Government payments	-
Net return with govt payments	9.76
Cost of Production	
Total direct expense per cwt.	8.51
Total dir & ovhd exp per cwt.	14.46
With labor & management	16.04
Total exp less govt & oth income	14.73

TABLE 13 - 4
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Beans, Navy on Cash Rent

	Avg. Of All Farms
Number of fields	20
Number of farms	17
Acres	153.84
Yield per acre (cwt.)	16.52
Operators share of yield %	100.00
Value per cwt.	13.05
Total product return per acre	215.53
Miscellaneous income per acre	27.50
Gross return per acre	243.04
Direct Expenses	
Seed	31.69
Fertilizer	19.83
Crop chemicals	27.33
Crop insurance	16.44
Fuel & oil	8.64
Repairs	19.95
Custom hire	2.82
Land rent	64.33
Machinery & bldg leases	0.28
Operating interest	3.75
Miscellaneous	0.40
Total direct expenses per acre	195.47
Return over direct exp per acre	47.57
Overhead Expenses	
Custom hire	2.20
Hired labor	9.68
Machinery & bldg leases	1.42
Farm insurance	4.65
Utilities	2.75
Dues & professional fees	2.35
Interest	5.67
Mach & bldg depreciation	12.81
Miscellaneous	3.10
Total overhead expenses per acre	44.61
Total dir & ovhd expenses per acre	240.08
Net return per acre	2.95
Lbr & mgt charge per acre	23.61
Net return over lbr & mgt	-20.65
Government payments	-
Net return with govt payments	-20.65
Cost of Production	
Total direct expense per cwt.	11.83
Total dir & ovhd exp per cwt.	14.53
With labor & management	15.96
Total exp less govt & oth income	14.30

TABLE 13 - 5
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Beans, Pinto on Cash Rent

	Avg. Of All Farms
Number of fields	12
Number of farms	9
Acres	160.33
Yield per acre (cwt.)	17.74
Operators share of yield %	100.00
Value per cwt.	13.75
Total product return per acre	243.81
Miscellaneous income per acre	33.55
Gross return per acre	277.36
Direct Expenses	
Seed	27.50
Fertilizer	18.25
Crop chemicals	34.21
Crop insurance	13.55
Fuel & oil	8.50
Repairs	21.04
Custom hire	8.54
Land rent	59.86
Operating interest	3.27
Miscellaneous	0.77
Total direct expenses per acre	195.50
Return over direct exp per acre	81.86
Overhead Expenses	
Custom hire	3.09
Hired labor	10.90
Machinery & bldg leases	4.04
Farm insurance	5.38
Utilities	2.53
Dues & professional fees	1.60
Interest	5.09
Mach & bldg depreciation	12.51
Miscellaneous	2.98
Total overhead expenses per acre	48.13
Total dir & ovhd expenses per acre	243.63
Net return per acre	33.73
Lbr & mgt charge per acre	31.27
Net return over lbr & mgt	2.46
Government payments	-
Net return with govt payments	2.46
Cost of Production	
Total direct expense per cwt.	11.02
Total dir & ovhd exp per cwt.	13.74
With labor & management	15.50
Total exp less govt & oth income	13.61

TABLE 13 - 6
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Corn on Owned Land

	Avg. Of All Farms
Number of fields	21
Number of farms	21
Acres	152.97
Yield per acre (bu.)	134.37
Operators share of yield %	100.00
Value per bu.	2.18
Total product return per acre	292.30
Miscellaneous income per acre	10.26
Gross return per acre	302.56
Direct Expenses	
Seed	35.32
Fertilizer	33.80
Crop chemicals	17.96
Crop insurance	9.96
Drying fuel	9.80
Fuel & oil	9.72
Repairs	18.11
Custom hire	1.27
Marketing	0.33
Operating interest	3.61
Miscellaneous	0.75
Total direct expenses per acre	140.63
Return over direct exp per acre	161.93
Overhead Expenses	
Custom hire	1.18
Hired labor	11.42
Machinery & bldg leases	7.72
RE & pers. property taxes	9.77
Farm insurance	3.85
Utilities	1.97
Dues & professional fees	2.06
Interest	24.83
Mach & bldg depreciation	15.50
Miscellaneous	1.59
Total overhead expenses per acre	79.88
Total dir & ovhd expenses per acre	220.51
Net return per acre	82.05
Lbr & mgt charge per acre	20.70
Net return over lbr & mgt	61.35
Government payments	13.37
Net return with govt payments	74.71
Cost of Production	
Total direct expense per bu.	1.05
Total dir & ovhd exp per bu.	1.64
With labor & management	1.80
Total exp less govt & oth income	1.62

TABLE 13 - 7
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Corn on Cash Rent				
	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	47	8	8	11
Number of farms	41	8	8	8
Acres	250.00	139.44	249.03	257.94
Yield per acre (bu.)	142.42	90.82	136.83	155.47
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	2.18	2.09	2.14	2.20
Total product return per acre	310.98	190.12	292.72	342.08
Miscellaneous income per acre	14.26	30.97	5.65	22.85
Gross return per acre	325.24	221.09	298.36	364.92
Direct Expenses				
Seed	37.14	38.35	35.17	33.95
Fertilizer	35.41	39.25	32.39	30.37
Crop chemicals	22.20	25.88	23.93	19.53
Crop insurance	8.93	9.63	10.54	9.80
Drying fuel	8.39	15.30	5.00	7.88
Fuel & oil	9.54	13.12	8.24	9.16
Repairs	21.96	22.93	13.00	19.52
Custom hire	0.54	0.51	0.10	0.69
Land rent	63.81	58.79	57.60	66.95
Machinery & bldg leases	2.31	0.82	0.02	0.12
Marketing	0.78	-	0.13	-
Operating interest	5.55	4.24	6.05	3.64
Miscellaneous	0.28	0.57	0.01	0.54
Total direct expenses per acre	216.83	229.37	192.19	202.14
Return over direct exp per acre	108.41	-8.28	106.18	162.79
Overhead Expenses				
Custom hire	2.31	2.76	4.45	0.91
Hired labor	8.68	8.44	2.18	9.91
Machinery & bldg leases	4.33	2.26	4.97	4.67
Farm insurance	4.44	4.12	3.11	3.55
Utilities	3.08	3.51	2.06	3.67
Dues & professional fees	2.19	3.03	1.36	2.39
Interest	4.88	8.35	5.08	3.76
Mach & bldg depreciation	16.21	19.20	15.95	17.75
Miscellaneous	1.83	4.26	0.72	3.03
Total overhead expenses per acre	47.95	55.92	39.89	49.63
Total dir & ovhd expenses per acre	264.78	285.29	232.08	251.77
Net return per acre	60.46	-64.20	66.29	113.16
Lbr & mgt charge per acre	22.98	27.77	17.44	23.12
Net return over lbr & mgt	37.48	-91.96	48.85	90.04
Government payments	12.97	10.63	10.44	14.86
Net return with govt payments	50.45	-81.33	59.29	104.90
Cost of Production				
Total direct expense per bu.	1.52	2.53	1.40	1.30
Total dir & ovhd exp per bu.	1.86	3.14	1.70	1.62
With labor & management	2.02	3.45	1.82	1.77
Total exp less govt & oth income	1.83	2.99	1.71	1.53

TABLE 13 - 8
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Corn on Share Rent

	Avg. Of All Farms
Number of fields	12
Number of farms	9
Acres	136.53
Yield per acre (bu.)	148.77
Operators share of yield %	69.02
Value per bu.	2.21
Total product return per acre	226.49
Miscellaneous income per acre	7.75
Gross return per acre	234.24
Direct Expenses	
Seed	34.24
Fertilizer	40.58
Crop chemicals	18.52
Crop insurance	8.54
Drying fuel	12.03
Fuel & oil	8.69
Repairs	19.37
Custom hire	2.65
Operating interest	2.65
Total direct expenses per acre	147.27
Return over direct exp per acre	86.97
Overhead Expenses	
Custom hire	0.03
Hired labor	10.40
Machinery & bldg leases	12.65
Farm insurance	4.21
Utilities	3.06
Dues & professional fees	0.91
Interest	3.48
Mach & bldg depreciation	19.84
Miscellaneous	1.77
Total overhead expenses per acre	56.34
Total dir & ovhd expenses per acre	203.61
Net return per acre	30.63
Lbr & mgt charge per acre	23.95
Net return over lbr & mgt	6.68
Government payments	9.67
Net return with govt payments	16.35
Cost of Production	
Total direct expense per bu.	1.43
Total dir & ovhd exp per bu.	1.98
With labor & management	2.22
Total exp less govt & oth income	2.05

TABLE 13 - 9
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Hay, Alfalfa on Cash Rent

	Avg. Of All Farms
Number of fields	5
Number of farms	5
Acres	98.64
Yield per acre (ton)	3.05
Operators share of yield %	100.00
Value per ton	62.78
Total product return per acre	191.32
Miscellaneous income per acre	64.32
Gross return per acre	255.64
Direct Expenses	
Fertilizer	3.97
Crop insurance	4.50
Fuel & oil	10.62
Repairs	18.62
Custom hire	8.87
Land rent	60.96
Operating interest	2.94
Miscellaneous	1.16
Total direct expenses per acre	111.65
Return over direct exp per acre	143.99
Overhead Expenses	
Custom hire	3.74
Hired labor	0.81
Machinery & bldg leases	6.84
Farm insurance	2.53
Utilities	2.56
Dues & professional fees	2.37
Interest	1.25
Mach & bldg depreciation	16.11
Miscellaneous	2.05
Total overhead expenses per acre	38.26
Total dir & ovhd expenses per acre	149.91
Net return per acre	105.73
Lbr & mgt charge per acre	25.43
Net return over lbr & mgt	80.30
Government payments	12.87
Net return with govt payments	93.17
Cost of Production	
Total direct expense per ton	36.64
Total dir & ovhd exp per ton	49.19
With labor & management	57.54
Total exp less govt & oth income	32.21

TABLE 13 - 10
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Soybeans on Owned Land

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	131	21	20	29
Number of farms	94	19	18	19
Acres	134.43	117.97	172.98	116.01
Yield per acre (bu.)	35.69	29.44	35.77	38.29
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.39	5.25	5.19	5.78
Total product return per acre	192.22	154.62	185.54	221.36
Miscellaneous income per acre	8.76	8.97	14.33	4.29
Gross return per acre	200.98	163.59	199.87	225.64
Direct Expenses				
Seed	26.21	29.93	26.54	23.54
Fertilizer	3.11	4.19	3.71	2.09
Crop chemicals	15.24	15.30	15.71	15.15
Crop insurance	8.85	8.43	8.93	7.91
Fuel & oil	6.55	8.07	6.30	6.04
Repairs	14.03	15.69	12.91	10.11
Custom hire	2.18	2.07	1.74	3.07
Operating interest	2.39	2.45	2.61	1.66
Miscellaneous	0.42	0.10	0.62	0.37
Total direct expenses per acre	78.98	86.22	79.07	69.94
Return over direct exp per acre	122.00	77.37	120.80	155.70
Overhead Expenses				
Custom hire	1.67	2.82	1.99	1.16
Hired labor	6.31	7.17	6.20	3.56
Machinery & bldg leases	2.17	2.21	2.57	2.15
RE & pers. property taxes	8.85	8.47	7.88	8.29
Farm insurance	3.55	4.14	3.02	3.28
Utilities	2.09	2.31	2.10	2.58
Dues & professional fees	1.96	1.90	2.69	2.04
Interest	29.34	41.44	34.09	13.63
Mach & bldg depreciation	11.32	10.66	9.68	10.34
Miscellaneous	2.54	2.01	2.83	2.72
Total overhead expenses per acre	69.80	83.13	73.05	49.73
Total dir & ovhd expenses per acre	148.78	169.35	152.13	119.68
Net return per acre	52.20	-5.76	47.75	105.97
Lbr & mgt charge per acre	17.04	16.74	17.60	18.92
Net return over lbr & mgt	35.16	-22.50	30.15	87.05
Government payments	14.00	12.54	13.76	14.94
Net return with govt payments	49.16	-9.96	43.91	101.99
Cost of Production				
Total direct expense per bu.	2.21	2.93	2.21	1.83
Total dir & ovhd exp per bu.	4.17	5.75	4.25	3.13
With labor & management	4.65	6.32	4.75	3.62
Total exp less govt & oth income	4.01	5.59	3.96	3.12

TABLE 13 - 11
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By RoundUp Ready)

Soybeans on Owned Land, Sorted by RoundUp Ready

	Avg. Of All Farms	100% RR	100% no RR	No Answer
Number of fields	131	54	15	62
Number of farms	94	46	10	45
Acres	134.43	145.36	99.15	133.44
Yield per acre (bu.)	35.69	34.70	32.80	37.15
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.39	5.25	5.30	5.52
Total product return per acre	192.22	182.11	173.93	205.10
Miscellaneous income per acre	8.76	10.80	23.96	4.10
Gross return per acre	200.98	192.91	197.88	209.20
Direct Expenses				
Seed	26.21	30.42	13.11	24.57
Fertilizer	3.11	2.65	5.59	3.10
Crop chemicals	15.24	12.22	19.65	17.31
Crop insurance	8.85	9.62	9.85	7.95
Fuel & oil	6.55	5.88	7.77	6.96
Repairs	14.03	12.02	14.42	15.88
Custom hire	2.18	1.20	1.49	3.24
Operating interest	2.39	2.56	1.53	2.37
Miscellaneous	0.42	0.35	0.21	0.52
Total direct expenses per acre	78.98	76.93	73.63	81.89
Return over direct exp per acre	122.00	115.97	124.25	127.31
Overhead Expenses				
Custom hire	1.67	1.90	2.93	1.23
Hired labor	6.31	6.83	4.50	6.15
Machinery & bldg leases	2.17	2.21	3.03	1.98
RE & pers. property taxes	8.85	8.18	9.18	9.42
Farm insurance	3.55	3.17	2.61	4.09
Utilities	2.09	2.15	1.91	2.06
Dues & professional fees	1.96	2.07	1.34	1.96
Interest	29.34	30.64	16.58	30.41
Mach & bldg depreciation	11.32	10.24	13.66	11.93
Miscellaneous	2.54	2.71	3.16	2.26
Total overhead expenses per acre	69.80	70.09	58.90	71.48
Total dir & ovhd expenses per acre	148.78	147.03	132.53	153.37
Net return per acre	52.20	45.88	65.35	55.83
Lbr & mgt charge per acre	17.04	17.08	17.92	16.85
Net return over lbr & mgt	35.16	28.80	47.43	38.98
Government payments	14.00	14.48	14.31	13.50
Net return with govt payments	49.16	43.28	61.74	52.48
Cost of Production				
Total direct expense per bu.	2.21	2.22	2.24	2.20
Total dir & ovhd exp per bu.	4.17	4.24	4.04	4.13
With labor & management	4.65	4.73	4.59	4.58
Total exp less govt & oth income	4.01	4.00	3.42	4.11

TABLE 13 - 12
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Soybeans on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	249	50	49	38
Number of farms	161	33	32	32
Acres	302.26	258.67	376.07	399.15
Yield per acre (bu.)	35.91	26.96	37.39	41.67
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.33	5.22	5.29	5.56
Total product return per acre	191.21	140.82	197.83	231.54
Miscellaneous income per acre	10.52	21.14	6.94	7.91
Gross return per acre	201.73	161.96	204.77	239.45
Direct Expenses				
Seed	25.45	26.43	26.31	23.77
Fertilizer	3.54	3.94	4.33	3.58
Crop chemicals	16.39	17.21	15.81	15.68
Crop insurance	8.53	9.30	8.03	9.32
Fuel & oil	6.22	7.40	5.54	6.53
Repairs	13.54	15.18	12.53	12.02
Custom hire	1.92	2.23	1.82	2.12
Land rent	58.79	58.29	60.92	57.18
Operating interest	3.04	2.97	4.01	1.78
Miscellaneous	0.55	0.75	0.61	0.58
Total direct expenses per acre	137.96	143.69	139.89	132.56
Return over direct exp per acre	63.77	18.27	64.88	106.89
Overhead Expenses				
Custom hire	2.04	4.09	1.52	1.95
Hired labor	5.32	6.01	6.50	3.40
Machinery & bldg leases	2.19	1.60	2.42	3.22
Farm insurance	3.70	4.52	3.35	3.55
Utilities	2.00	2.41	1.79	2.20
Dues & professional fees	1.69	1.59	1.86	1.84
Interest	3.38	3.88	3.21	2.49
Mach & bldg depreciation	9.98	9.36	10.35	10.24
Miscellaneous	2.12	2.54	1.95	1.90
Total overhead expenses per acre	32.40	36.01	32.95	30.79
Total dir & ovhd expenses per acre	170.37	179.70	172.85	163.35
Net return per acre	31.36	-17.74	31.93	76.09
Lbr & mgt charge per acre	15.73	15.72	15.50	17.08
Net return over lbr & mgt	15.63	-33.46	16.43	59.02
Government payments	13.61	13.40	12.65	13.91
Net return with govt payments	29.24	-20.05	29.08	72.93
Cost of Production				
Total direct expense per bu.	3.84	5.33	3.74	3.18
Total dir & ovhd exp per bu.	4.74	6.67	4.62	3.92
With labor & management	5.18	7.25	5.04	4.33
Total exp less govt & oth income	4.51	5.97	4.51	3.81

TABLE 13 - 13
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By RoundUp Ready)

Soybeans on Cash Rent, Sorted by RoundUp Ready

	Avg. Of All Farms	100% RR	100% no RR	No Answer
Number of fields	249	85	34	130
Number of farms	161	75	31	75
Acres	302.26	401.83	276.54	243.88
Yield per acre (bu.)	35.91	37.43	29.51	36.16
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.33	5.24	5.35	5.42
Total product return per acre	191.21	196.08	157.99	195.81
Miscellaneous income per acre	10.52	10.17	25.95	6.33
Gross return per acre	201.73	206.25	183.94	202.14
Direct Expenses				
Seed	25.45	30.90	13.87	23.02
Fertilizer	3.54	3.72	3.50	3.36
Crop chemicals	16.39	13.90	21.25	17.64
Crop insurance	8.53	8.73	7.69	8.56
Fuel & oil	6.22	5.57	6.57	6.81
Repairs	13.54	12.00	13.17	15.32
Custom hire	1.92	1.57	2.97	1.97
Land rent	58.79	58.89	58.01	58.91
Operating interest	3.04	2.91	2.25	3.40
Miscellaneous	0.55	0.44	0.88	0.57
Total direct expenses per acre	137.96	138.63	130.15	139.56
Return over direct exp per acre	63.77	67.62	53.79	62.58
Overhead Expenses				
Custom hire	2.04	2.50	2.19	1.50
Hired labor	5.32	4.88	4.21	6.11
Machinery & bldg leases	2.19	2.32	1.10	2.37
Farm insurance	3.70	3.64	3.58	3.80
Utilities	2.00	2.06	2.07	1.91
Dues & professional fees	1.69	1.66	1.34	1.83
Interest	3.38	3.15	2.71	3.82
Mach & bldg depreciation	9.98	9.54	8.25	10.95
Miscellaneous	2.12	1.91	2.28	2.29
Total overhead expenses per acre	32.40	31.67	27.73	34.58
Total dir & ovhd expenses per acre	170.37	170.30	157.89	174.15
Net return per acre	31.36	35.95	26.05	27.99
Lbr & mgt charge per acre	15.73	15.04	16.13	16.37
Net return over lbr & mgt	15.63	20.91	9.92	11.63
Government payments	13.61	13.66	13.60	13.57
Net return with govt payments	29.24	34.57	23.53	25.20
Cost of Production				
Total direct expense per bu.	3.84	3.70	4.41	3.86
Total dir & ovhd exp per bu.	4.74	4.55	5.35	4.82
With labor & management	5.18	4.95	5.90	5.27
Total exp less govt & oth income	4.51	4.31	4.56	4.72

TABLE 13 - 14
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Soybeans on Share Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	47	7	15	9
Number of farms	27	5	6	6
Acres	138.16	111.90	73.85	151.31
Yield per acre (bu.)	38.43	32.44	36.64	40.85
Operators share of yield %	65.55	66.90	64.73	68.16
Value per bu.	5.41	5.50	5.52	5.26
Total product return per acre	136.22	119.40	131.01	146.37
Miscellaneous income per acre	6.42	5.57	5.50	1.36
Gross return per acre	142.64	124.97	136.51	147.73
Direct Expenses				
Seed	27.62	32.18	26.00	21.00
Fertilizer	0.85	1.89	0.86	1.43
Crop chemicals	15.18	18.64	14.95	20.70
Crop insurance	7.70	7.00	5.21	4.88
Fuel & oil	6.84	8.35	7.18	6.48
Repairs	13.76	18.50	16.61	10.31
Custom hire	3.60	2.95	1.36	2.43
Operating interest	1.78	2.41	2.83	1.68
Miscellaneous	0.43	-	-	-
Total direct expenses per acre	77.75	91.93	75.01	68.92
Return over direct exp per acre	64.88	33.04	61.50	78.81
Overhead Expenses				
Custom hire	0.68	0.84	2.12	1.03
Hired labor	10.62	4.02	5.54	7.63
Machinery & bldg leases	5.19	6.28	5.98	0.74
Farm insurance	4.79	5.55	6.31	2.62
Utilities	2.45	3.50	1.95	1.05
Dues & professional fees	1.71	1.21	0.83	0.79
Interest	3.13	4.17	4.16	3.55
Mach & bldg depreciation	13.87	17.43	11.92	12.13
Miscellaneous	3.31	2.52	5.08	3.80
Total overhead expenses per acre	45.77	45.52	43.88	33.33
Total dir & ovhd expenses per acre	123.52	137.44	118.89	102.26
Net return per acre	19.11	-12.48	17.62	45.47
Lbr & mgt charge per acre	18.35	20.22	15.07	20.43
Net return over lbr & mgt	0.76	-32.70	2.55	25.04
Government payments	8.77	8.28	7.00	10.22
Net return with govt payments	9.54	-24.42	9.55	35.26
Cost of Production				
Total direct expense per bu.	3.09	4.24	3.16	2.48
Total dir & ovhd exp per bu.	4.90	6.33	5.01	3.67
With labor & management	5.63	7.27	5.65	4.41
Total exp less govt & oth income	5.03	6.63	5.12	3.99

TABLE 13 - 15
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Soybeans, Food on Cash Rent

	Avg. Of All Farms
Number of fields	6
Number of farms	5
Acres	144.47
Yield per acre (bu.)	28.16
Operators share of yield %	100.00
Value per bu.	6.75
Total product return per acre	190.17
Miscellaneous income per acre	-
Gross return per acre	190.17
Direct Expenses	
Seed	3.12
Fertilizer	2.05
Crop chemicals	20.77
Crop insurance	10.84
Drying fuel	0.32
Fuel & oil	4.84
Repairs	17.56
Custom hire	0.69
Land rent	62.31
Operating interest	7.54
Miscellaneous	0.74
Total direct expenses per acre	130.78
Return over direct exp per acre	59.38
Overhead Expenses	
Custom hire	3.80
Hired labor	6.01
Machinery & bldg leases	1.31
Farm insurance	4.36
Utilities	1.79
Dues & professional fees	0.66
Interest	4.95
Mach & bldg depreciation	13.14
Miscellaneous	0.33
Total overhead expenses per acre	36.35
Total dir & ovhd expenses per acre	167.14
Net return per acre	23.03
Lbr & mgt charge per acre	17.04
Net return over lbr & mgt	5.99
Government payments	11.01
Net return with govt payments	17.00
Cost of Production	
Total direct expense per bu.	4.64
Total dir & ovhd exp per bu.	5.93
With labor & management	6.54
Total exp less govt & oth income	6.15

TABLE 13 - 16
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Sugar Beets on Owned Land, Excluding Joint venture

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	54	17	8	11
Number of farms	41	8	8	8
Acres	105.64	93.94	99.96	86.35
Yield per acre (ton)	19.27	17.63	17.93	24.86
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	36.61	35.81	36.78	36.99
Total product return per acre	705.70	631.58	659.52	919.75
Miscellaneous income per acre	32.11	5.86	86.66	22.90
Gross return per acre	737.82	637.44	746.18	942.65
Direct Expenses				
Seed	48.54	46.43	57.28	46.51
Fertilizer	26.31	23.56	27.79	35.08
Crop chemicals	110.23	118.04	108.35	99.80
Crop insurance	11.62	8.76	12.97	16.51
Fuel & oil	26.16	23.36	31.08	28.17
Repairs	70.55	81.22	67.04	64.37
Custom hire	15.43	24.16	19.03	8.23
Hired labor	19.39	16.35	29.16	11.08
Machinery & bldg leases	0.91	2.29	0.42	-
Operating interest	7.06	10.47	3.20	4.94
Miscellaneous	3.55	3.37	-	5.05
Total direct expenses per acre	339.74	358.01	356.31	319.75
Return over direct exp per acre	398.07	279.43	389.87	622.90
Overhead Expenses				
Custom hire	7.35	17.11	0.99	0.10
Hired labor	33.83	32.66	23.46	29.72
Machinery & bldg leases	11.92	6.51	20.56	9.18
RE & pers. property taxes	9.61	10.26	10.12	6.51
Farm insurance	5.29	6.68	2.64	4.31
Utilities	7.05	8.87	7.70	6.66
Dues & professional fees	6.02	8.97	6.89	3.10
Interest	42.36	66.12	29.36	43.45
Mach & bldg depreciation	47.14	42.09	60.45	49.22
Miscellaneous	6.74	4.12	4.54	6.23
Total overhead expenses per acre	177.31	203.40	166.69	158.47
Total dir & ovhd expenses per acre	517.06	561.41	523.00	478.22
Net return per acre	220.76	76.03	223.18	464.43
Lbr & mgt charge per acre	73.77	59.94	64.85	56.30
Net return over lbr & mgt	146.99	16.09	158.33	408.12
Government payments	14.80	18.46	10.96	11.99
Net return with govt payments	161.80	34.55	169.29	420.11
Sugar beet stock equity charge	71.55	71.49	67.24	75.00
Net return over sugar beet stock	90.25	-36.94	102.05	345.11
Cost of Production				
Total direct expense per ton	17.63	20.30	19.87	12.86
Total dir & ovhd exp per ton	26.83	31.84	29.17	19.23
With labor & management	30.65	35.23	32.78	21.50
Total exp less govt & oth income	28.22	33.85	27.34	20.09
With sugar beet stock equity charge	31.94	37.92	31.09	23.11

TABLE 13 - 17
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Sugar Beets on Owned Land - Joint venture

	Avg. Of All Farms
Number of fields	31
Number of farms	24
Acres	59.36
Yield per acre (ton)	18.19
Operators share of yield %	100.00
Value per ton	35.75
Total product return per acre	650.41
Miscellaneous income per acre	72.49
Gross return per acre	722.90
Direct Expenses	
Seed	44.46
Fertilizer	28.55
Crop chemicals	106.93
Crop insurance	12.68
Fuel & oil	23.11
Repairs	54.65
Custom hire	11.79
Hired labor	20.59
Machinery & bldg leases	2.25
Stock rent (joint venture)	156.54
Operating interest	12.76
Miscellaneous	1.23
Total direct expenses per acre	475.54
Return over direct exp per acre	247.36
Overhead Expenses	
Custom hire	6.29
Hired labor	17.65
Machinery & bldg leases	9.09
RE & pers. property taxes	9.04
Farm insurance	3.26
Utilities	4.82
Dues & professional fees	5.81
Interest	44.20
Mach & bldg depreciation	44.33
Miscellaneous	6.34
Total overhead expenses per acre	150.82
Total dir & ovhd expenses per acre	626.36
Net return per acre	96.54
Lbr & mgt charge per acre	53.96
Net return over lbr & mgt	42.58
Government payments	12.79
Net return with govt payments	55.37
Cost of Production	
Total direct expense per ton	26.14
Total dir & ovhd exp per ton	34.43
With labor & management	37.39
Total exp less govt & oth income	32.71

TABLE 13 - 18
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Sugar Beets on Cash Rent, Excluding Joint venture

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	103	20	17	17
Number of farms	84	17	16	17
Acres	173.99	189.14	207.47	148.84
Yield per acre (ton)	18.17	14.00	18.76	21.24
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	37.23	35.26	36.99	38.91
Total product return per acre	676.56	493.64	693.82	826.45
Miscellaneous income per acre	35.13	56.90	27.33	17.88
Gross return per acre	711.70	550.54	721.15	844.33
Direct Expenses				
Seed	48.44	45.13	49.63	45.39
Fertilizer	26.09	24.63	24.24	26.43
Crop chemicals	113.28	118.61	105.60	104.13
Crop insurance	11.90	10.84	12.22	12.77
Fuel & oil	26.16	27.01	28.69	22.99
Repairs	61.52	57.59	60.92	57.54
Custom hire	11.39	12.59	16.13	11.30
Hired labor	16.55	14.15	20.58	17.99
Land rent	70.08	66.22	65.48	66.74
Machinery & bldg leases	0.84	0.81	1.24	0.70
Operating interest	11.48	11.57	8.66	15.09
Miscellaneous	2.17	1.52	2.10	0.05
Total direct expenses per acre	399.91	390.67	395.48	381.11
Return over direct exp per acre	311.79	159.86	325.66	463.21
Overhead Expenses				
Custom hire	10.07	10.59	4.55	8.74
Hired labor	31.62	34.38	26.21	17.55
Machinery & bldg leases	8.51	10.76	7.38	10.66
Farm insurance	5.08	5.63	4.14	3.30
Utilities	6.45	7.28	7.38	4.69
Dues & professional fees	5.92	7.57	4.80	5.85
Interest	18.42	28.15	26.53	8.22
Mach & bldg depreciation	43.63	42.75	44.01	42.18
Miscellaneous	10.08	10.52	9.60	6.71
Total overhead expenses per acre	139.80	157.62	134.60	107.91
Total dir & ovhd expenses per acre	539.70	548.29	530.08	489.02
Net return per acre	171.99	2.24	191.06	355.31
Lbr & mgt charge per acre	72.98	61.32	69.96	73.43
Net return over lbr & mgt	99.01	-59.08	121.11	281.88
Government payments	13.17	14.62	12.18	12.74
Net return with govt payments	112.19	-44.46	133.28	294.62
Sugar beet stock equity charge	70.86	64.59	70.72	73.18
Net return over sugar beet stock	41.33	-109.05	62.56	221.44
Cost of Production				
Total direct expense per ton	22.01	27.90	21.09	17.95
Total dir & ovhd exp per ton	29.70	39.16	28.26	23.03
With labor & management	33.72	43.54	31.99	26.48
Total exp less govt & oth income	31.06	38.43	29.89	25.04
With sugar beet stock equity charge	34.96	39.16	33.65	28.48

TABLE 13 - 19
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Sugar Beets on Cash Rent - Joint venture

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	99	17	19	22
Number of farms	66	13	13	13
Acres	160.46	131.83	179.23	126.87
Yield per acre (ton)	17.38	12.65	17.82	23.68
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	36.70	34.14	37.11	36.83
Total product return per acre	637.87	431.76	661.40	872.10
Miscellaneous income per acre	56.13	81.44	28.15	9.61
Gross return per acre	694.00	513.20	689.56	881.70
Direct Expenses				
Seed	47.30	49.40	46.85	47.22
Fertilizer	26.86	29.30	27.63	31.66
Crop chemicals	107.63	121.34	110.13	100.20
Crop insurance	13.79	11.27	12.77	16.46
Fuel & oil	24.98	24.53	27.71	26.62
Repairs	56.11	59.67	66.73	54.08
Custom hire	7.02	4.93	6.54	9.20
Hired labor	13.98	8.34	18.18	9.08
Land rent	64.35	64.16	58.12	67.65
Machinery & bldg leases	1.55	1.49	2.86	-
Stock rent (joint venture)	162.14	163.71	179.73	125.34
Operating interest	12.29	10.20	15.04	9.31
Miscellaneous	1.72	0.48	1.08	5.22
Total direct expenses per acre	539.73	548.82	573.36	502.04
Return over direct exp per acre	154.27	-35.63	116.20	379.66
Overhead Expenses				
Custom hire	6.82	15.71	2.53	3.31
Hired labor	25.10	27.23	34.25	17.49
Machinery & bldg leases	10.96	15.96	7.00	10.83
Farm insurance	4.58	7.51	4.67	3.76
Utilities	4.97	3.06	4.60	6.70
Dues & professional fees	4.48	8.02	3.29	3.30
Interest	15.41	14.61	12.83	14.42
Mach & bldg depreciation	35.38	42.14	28.28	40.24
Miscellaneous	10.61	15.72	7.75	8.95
Total overhead expenses per acre	118.31	149.96	105.21	108.99
Total dir & ovhd expenses per acre	658.04	698.78	678.57	611.03
Net return per acre	35.96	-185.58	10.99	270.67
Lbr & mgt charge per acre	56.47	63.83	56.03	59.02
Net return over lbr & mgt	-20.51	-249.41	-45.04	211.66
Government payments	12.35	12.23	12.07	13.45
Net return with govt payments	-8.16	-237.19	-32.97	225.10
Cost of Production				
Total direct expense per ton	31.06	43.40	32.17	21.20
Total dir & ovhd exp per ton	37.86	55.26	38.07	25.81
With labor & management	41.11	60.31	41.21	28.30
Total exp less govt & oth income	37.17	52.90	38.96	27.32

TABLE 13 - 20
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Sunflowers on Cash Rent

	Avg. Of All Farms
Number of fields	13
Number of farms	13
Acres	212.21
Yield per acre (cwt.)	15.03
Operators share of yield %	100.00
Value per cwt.	13.03
Total product return per acre	195.88
Miscellaneous income per acre	28.30
Gross return per acre	224.17
Direct Expenses	
Seed	16.21
Fertilizer	19.38
Crop chemicals	14.21
Crop insurance	9.23
Fuel & oil	8.20
Repairs	17.91
Custom hire	2.19
Land rent	58.98
Operating interest	2.62
Miscellaneous	0.16
Total direct expenses per acre	149.10
Return over direct exp per acre	75.07
Overhead Expenses	
Custom hire	2.91
Hired labor	7.71
Machinery & bldg leases	2.57
Farm insurance	3.52
Utilities	2.05
Dues & professional fees	2.04
Interest	2.96
Mach & bldg depreciation	12.75
Miscellaneous	2.66
Total overhead expenses per acre	39.17
Total dir & ovhd expenses per acre	188.27
Net return per acre	35.90
Lbr & mgt charge per acre	18.28
Net return over lbr & mgt	17.63
Government payments	15.46
Net return with govt payments	33.08
Cost of Production	
Total direct expense per cwt.	9.92
Total dir & ovhd exp per cwt.	12.52
With labor & management	13.74
Total exp less govt & oth income	10.83

TABLE 13 - 21
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Sunflowers, Confectionary on Cash Rent

	Avg. Of All Farms
Number of fields	10
Number of farms	10
Acres	248.28
Yield per acre (cwt.)	13.47
Operators share of yield %	100.00
Value per cwt.	14.02
Total product return per acre	188.93
Miscellaneous income per acre	5.58
Gross return per acre	194.51
Direct Expenses	
Seed	20.79
Fertilizer	18.66
Crop chemicals	22.02
Crop insurance	8.04
Drying fuel	0.49
Fuel & oil	7.90
Repairs	14.99
Custom hire	6.62
Land rent	62.56
Operating interest	2.36
Miscellaneous	0.29
Total direct expenses per acre	164.74
Return over direct exp per acre	29.77
Overhead Expenses	
Custom hire	2.38
Hired labor	9.01
Machinery & bldg leases	1.94
Farm insurance	3.09
Utilities	1.55
Dues & professional fees	2.21
Interest	3.49
Mach & bldg depreciation	10.36
Miscellaneous	1.95
Total overhead expenses per acre	35.99
Total dir & ovhd expenses per acre	200.73
Net return per acre	-6.22
Lbr & mgt charge per acre	17.44
Net return over lbr & mgt	-23.66
Government payments	13.28
Net return with govt payments	-10.37
Cost of Production	
Total direct expense per cwt.	12.23
Total dir & ovhd exp per cwt.	14.90
With labor & management	16.19
Total exp less govt & oth income	14.79

TABLE 13 - 22
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Wheat, Spring on Owned Land

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	137	27	28	27
Number of farms	103	21	21	21
Acres	139.07	118.32	143.30	122.89
Yield per acre (bu.)	37.55	29.82	33.25	46.06
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.07	3.88	3.97	4.29
Total product return per acre	152.81	115.65	132.11	197.81
Miscellaneous income per acre	12.08	17.55	19.13	3.40
Gross return per acre	164.90	133.19	151.25	201.22
Direct Expenses				
Seed	10.36	11.27	10.90	9.83
Fertilizer	26.10	28.44	24.57	26.18
Crop chemicals	19.36	20.88	17.36	17.12
Crop insurance	7.14	9.00	6.88	7.19
Fuel & oil	5.82	6.95	5.46	5.39
Repairs	12.64	13.21	12.36	10.89
Custom hire	2.22	0.81	4.22	1.22
Operating interest	2.26	3.50	1.61	2.34
Miscellaneous	0.87	0.99	0.81	0.63
Total direct expenses per acre	86.79	95.05	84.17	80.77
Return over direct exp per acre	78.11	38.15	67.08	120.44
Overhead Expenses				
Custom hire	1.84	3.03	0.87	0.13
Hired labor	5.32	5.40	4.41	4.24
Machinery & bldg leases	1.89	1.72	2.53	2.47
RE & pers. property taxes	9.73	11.08	8.65	9.95
Farm insurance	4.09	4.12	3.11	3.32
Utilities	1.69	1.98	1.46	1.67
Dues & professional fees	1.55	2.67	1.50	1.25
Interest	29.63	47.77	23.87	14.25
Mach & bldg depreciation	9.51	10.50	10.97	9.24
Miscellaneous	1.92	3.45	1.71	2.37
Total overhead expenses per acre	67.17	91.72	59.08	48.88
Total dir & ovhd expenses per acre	153.96	186.77	143.26	129.66
Net return per acre	10.94	-53.57	7.99	71.56
Lbr & mgt charge per acre	14.26	17.36	14.30	14.33
Net return over lbr & mgt	-3.32	-70.93	-6.31	57.23
Government payments	14.20	14.19	13.45	13.55
Net return with govt payments	10.88	-56.74	7.14	70.78
Cost of Production				
Total direct expense per bu.	2.31	3.19	2.53	1.75
Total dir & ovhd exp per bu.	4.10	6.26	4.31	2.81
With labor & management	4.48	6.85	4.74	3.13
Total exp less govt & oth income	3.78	5.78	3.76	2.76

TABLE 13 - 23
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Wheat, Spring on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	256	50	58	54
Number of farms	162	33	33	32
Acres	342.66	297.62	360.66	282.74
Yield per acre (bu.)	36.21	29.97	36.82	45.66
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.01	3.76	3.99	4.21
Total product return per acre	145.01	112.58	146.78	192.15
Miscellaneous income per acre	18.28	17.65	12.88	12.09
Gross return per acre	163.29	130.22	159.66	204.24
Direct Expenses				
Seed	9.89	11.69	9.99	9.04
Fertilizer	25.55	25.97	23.95	26.19
Crop chemicals	19.18	19.91	18.79	16.45
Crop insurance	7.62	7.82	7.40	7.04
Fuel & oil	5.60	6.12	6.12	5.42
Repairs	11.61	13.95	10.52	12.24
Custom hire	2.43	1.52	3.31	3.22
Land rent	58.85	62.25	58.72	59.03
Machinery & bldg leases	0.31	0.78	0.44	0.02
Marketing	0.19	0.86	-	-
Operating interest	2.38	3.82	2.10	1.99
Miscellaneous	0.62	0.83	0.51	0.65
Total direct expenses per acre	144.24	155.52	141.83	141.28
Return over direct exp per acre	19.05	-25.30	17.83	62.96
Overhead Expenses				
Custom hire	1.96	2.70	1.10	1.72
Hired labor	5.11	5.79	5.04	4.04
Machinery & bldg leases	2.00	1.25	2.73	1.92
Farm insurance	3.98	5.67	3.24	3.09
Utilities	1.74	2.30	1.65	1.67
Dues & professional fees	1.48	1.58	1.23	1.16
Interest	3.05	3.78	3.17	1.15
Mach & bldg depreciation	8.53	9.27	8.24	9.52
Miscellaneous	2.10	2.38	2.37	1.93
Total overhead expenses per acre	29.96	34.73	28.77	26.21
Total dir & ovhd expenses per acre	174.20	190.24	170.60	167.49
Net return per acre	-10.91	-60.02	-10.94	36.75
Lbr & mgt charge per acre	13.98	15.97	13.10	15.49
Net return over lbr & mgt	-24.89	-76.00	-24.04	21.26
Government payments	13.57	14.45	12.31	13.29
Net return with govt payments	-11.32	-61.55	-11.72	34.54
Cost of Production				
Total direct expense per bu.	3.98	5.19	3.85	3.09
Total dir & ovhd exp per bu.	4.81	6.35	4.63	3.67
With labor & management	5.20	6.88	4.99	4.01
Total exp less govt & oth income	4.32	5.81	4.30	3.45

TABLE 13 - 24
Crop Enterprise Analysis, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Net Return)

Wheat, Spring on Share Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	49	10	11	7
Number of farms	25	5	5	5
Acres	131.16	118.81	197.73	134.90
Yield per acre (bu.)	40.24	32.72	39.79	49.81
Operators share of yield %	63.41	62.02	61.36	63.28
Value per bu.	4.16	3.71	4.37	4.28
Total product return per acre	106.13	75.31	106.78	134.92
Miscellaneous income per acre	3.99	11.57	2.21	7.53
Gross return per acre	110.12	86.88	108.99	142.45
Direct Expenses				
Seed	8.87	7.37	9.72	8.54
Fertilizer	26.16	20.10	29.84	25.20
Crop chemicals	12.63	23.04	10.21	10.24
Crop insurance	4.85	3.56	6.17	3.27
Fuel & oil	4.87	5.40	4.46	4.99
Repairs	11.13	14.47	8.73	10.68
Custom hire	2.41	2.48	1.76	2.21
Operating interest	1.49	2.37	1.15	1.33
Miscellaneous	0.38	-	0.81	0.26
Total direct expenses per acre	72.79	78.79	72.85	66.71
Return over direct exp per acre	37.33	8.09	36.14	75.74
Overhead Expenses				
Custom hire	1.07	2.88	0.19	2.76
Hired labor	6.13	6.60	7.53	3.10
Machinery & bldg leases	2.59	2.74	3.43	4.73
Farm insurance	4.52	5.33	3.83	7.84
Utilities	1.63	1.90	2.15	1.39
Dues & professional fees	1.14	2.11	0.94	1.69
Interest	2.54	2.58	2.94	2.76
Mach & bldg depreciation	9.90	10.83	8.89	8.08
Miscellaneous	2.32	0.88	2.63	4.49
Total overhead expenses per acre	31.85	35.86	32.53	36.84
Total dir & ovhd expenses per acre	104.63	114.65	105.38	103.55
Net return per acre	5.49	-27.77	3.61	38.90
Lbr & mgt charge per acre	12.83	14.16	10.18	16.76
Net return over lbr & mgt	-7.35	-41.93	-6.58	22.14
Government payments	9.21	12.61	8.38	7.88
Net return with govt payments	1.87	-29.32	1.80	30.01
Cost of Production				
Total direct expense per bu.	2.85	3.88	2.98	2.12
Total dir & ovhd exp per bu.	4.10	5.65	4.32	3.29
With labor & management	4.60	6.35	4.73	3.82
Total exp less govt & oth income	4.09	5.16	4.30	3.33

TABLE 14 - 1
Size of Farm Report, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Gross Farm Income)

	Avg. Of All Farms	40,001 - 100,000	100,001 - 200,000	200,001 - 500,000	500,001 - 1,000,000	Over 1,000,000
Number of farms	207	11	26	99	54	15
Income Statement						
Gross cash farm income	462,678	75,542	151,136	345,672	678,570	1,340,446
Total cash farm expense	366,230	69,966	118,592	274,306	525,856	1,088,591
Net cash farm income	96,448	5,576	32,545	71,366	152,714	251,855
Inventory change	32,207	27,521	22,882	22,551	37,813	94,966
Depreciation and capital adjust	-18,289	-4,564	-8,735	-15,549	-29,287	-26,449
Net farm income	110,366	28,533	46,692	78,368	161,240	320,371
Profitability (cost)						
Labor and management earnings	76,669	21,800	35,141	54,682	105,821	236,786
Rate of return on assets	9.4 %	7.6 %	9.8 %	9.0 %	8.9 %	10.9 %
Rate of return on equity	12.7 %	12.4 %	14.9 %	12.1 %	11.6 %	15.8 %
Operating profit margin	19.1 %	19.1 %	22.3 %	18.2 %	19.0 %	20.3 %
Asset turnover rate	48.8 %	40.0 %	43.7 %	49.6 %	46.7 %	54.1 %
Liquidity						
Term debt coverage ratio	165.0 %	128.1 %	195.9 %	157.7 %	176.2 %	155.3 %
Expense as a percent of income	74.2 %	70.7 %	68.1 %	74.7 %	73.7 %	75.7 %
Interest as a percent of income	4.8 %	6.7 %	6.4 %	5.2 %	4.2 %	4.9 %
Solvency (market)						
Number of sole proprietors	181	11	26	93	41	8
Ending farm assets	1,072,559	315,725	483,145	901,984	1,719,991	2,914,660
Ending farm liabilities	535,200	200,062	254,647	441,556	796,507	1,764,199
Ending total assets	1,244,657	390,316	582,344	1,061,137	1,962,536	3,288,475
Ending total liabilities	573,841	238,511	280,723	474,270	851,445	1,838,600
Ending net worth	670,816	151,804	301,621	586,867	1,111,092	1,449,874
Net worth change	70,959	14,616	37,690	51,232	133,715	179,302
Ending farm debt to asset ratio	50 %	63 %	53 %	49 %	46 %	61 %
Beg total debt to asset ratio	47 %	60 %	49 %	45 %	45 %	58 %
End total debt to asset ratio	46 %	61 %	48 %	45 %	43 %	56 %
Nonfarm Information						
Net nonfarm income	15,186	28,531	20,356	15,345	11,656	7,045
Crop Acres						
Total acres owned	370	149	182	331	558	475
Total crop acres	1,658	409	731	1,422	2,250	3,784
Total crop acres owned	296	106	143	271	402	515
Total crop acres cash rented	1,270	303	480	1,074	1,701	3,220
Total crop acres share rented	93	-	108	77	148	49

TABLE 14 - 2
Age of Operator Report, 2002
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Age Of Operator)

	Avg. Of All Farms	Less than 31	31 - 40	41 - 50	51 - 60	Over 60
Number of farms	207	22	44	94	37	10
Income Statement						
Gross cash farm income	462,678	312,746	395,995	519,410	502,782	404,255
Total cash farm expense	366,230	240,149	317,225	414,826	397,205	287,822
Net cash farm income	96,448	72,597	78,770	104,585	105,577	116,433
Inventory change	32,207	-2,141	16,155	43,729	49,372	6,597
Depreciation and capital adjust	-18,289	-7,767	-14,957	-20,658	-21,562	-21,722
Net farm income	110,366	62,689	79,969	127,655	133,387	101,308
Profitability (cost)						
Labor and management earnings	76,669	50,784	58,338	92,997	79,221	51,353
Rate of return on assets	9.4 %	10.8 %	9.5 %	10.1 %	8.1 %	6.5 %
Rate of return on equity	12.7 %	18.4 %	13.4 %	14.8 %	9.5 %	6.8 %
Operating profit margin	19.1 %	14.5 %	16.5 %	20.2 %	20.3 %	19.8 %
Asset turnover rate	48.8 %	74.5 %	58.0 %	50.0 %	40.0 %	32.8 %
Liquidity						
Term debt coverage ratio	165.0 %	177.7 %	147.0 %	165.4 %	174.8 %	186.0 %
Expense as a percent of income	74.2 %	77.9 %	77.2 %	73.8 %	72.1 %	69.4 %
Interest as a percent of income	4.8 %	3.1 %	4.8 %	5.0 %	4.7 %	5.6 %
Solvency (market)						
Number of sole proprietors	181	21	41	84	28	7
Ending farm assets	1,072,559	476,165	838,161	1,292,592	1,259,908	844,865
Ending farm liabilities	535,200	287,653	434,645	677,437	495,910	317,114
Ending total assets	1,244,657	553,929	979,811	1,470,949	1,535,348	989,807
Ending total liabilities	573,841	340,765	489,492	710,763	523,111	326,970
Ending net worth	670,816	213,164	490,319	760,186	1,012,238	662,837
Net worth change	70,959	52,498	71,779	83,948	57,847	18,103
Ending farm debt to asset ratio	50 %	60 %	52 %	52 %	39 %	38 %
Beg total debt to asset ratio	47 %	64 %	51 %	49 %	35 %	35 %
End total debt to asset ratio	46 %	62 %	50 %	48 %	34 %	33 %
Nonfarm Information						
Net nonfarm income	15,186	15,399	16,838	17,329	10,461	4,796
Crop Acres						
Total acres owned	370	99	200	405	559	683
Total crop acres	1,658	1,088	1,422	1,815	1,925	1,484
Total crop acres owned	296	88	193	331	409	455
Total crop acres cash rented	1,270	997	1,124	1,395	1,368	966
Total crop acres share rented	93	2	106	89	148	62