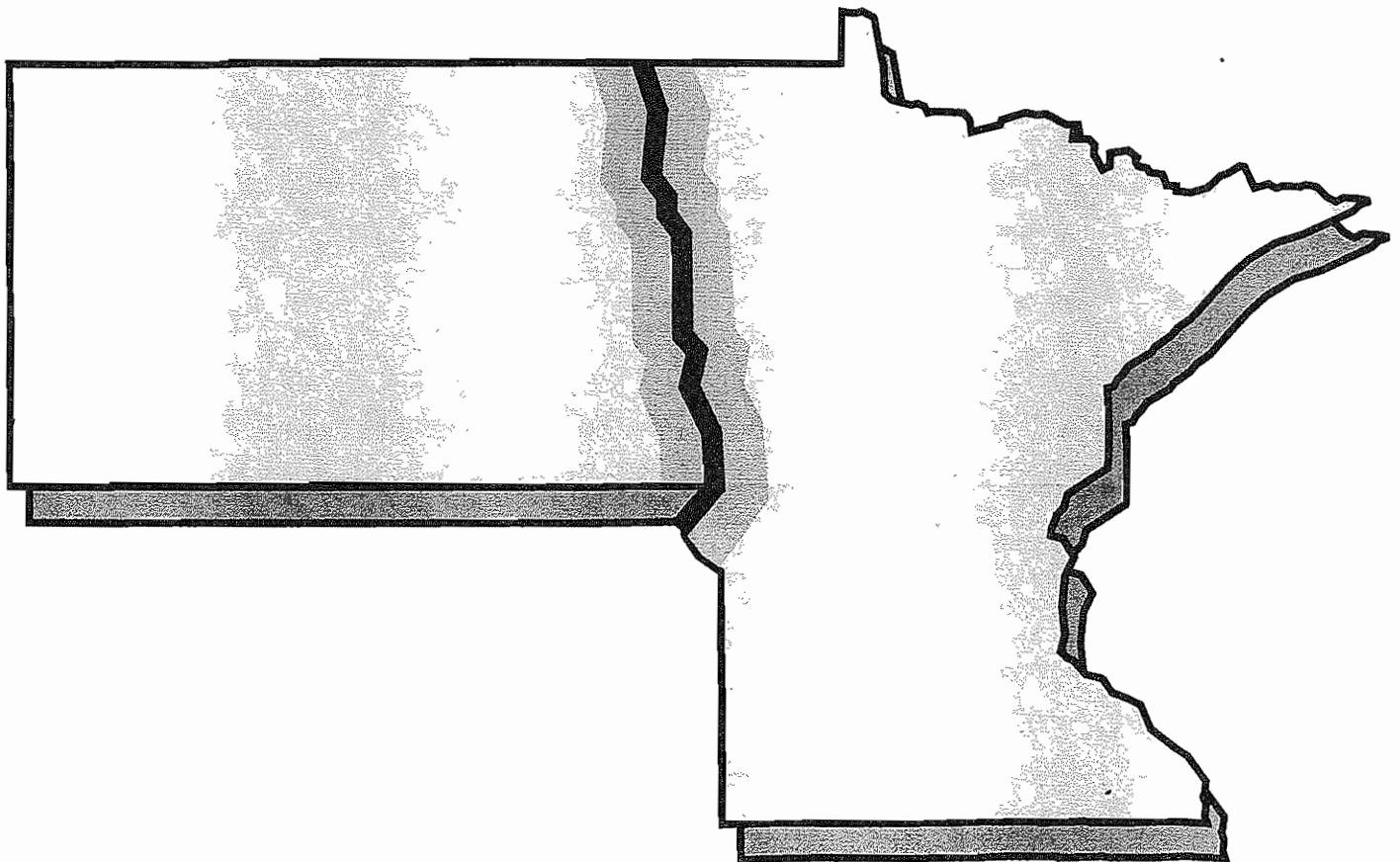


**North Dakota
Farm and Ranch
Business Management
Education**



**Minnesota
Farm Business
Management
Education**

2003 Red River Valley Report





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RED RIVER VALLEY AVERAGES
2003 ANNUAL REPORT

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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 tenth annual Red River Valley Report.

2003 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 2003 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 & CC govt payments" are decoupled from crop production but the counter-cyclical payment is coupled to national average prices. "LDP payments" are loan deficiency payments that may be received on production when local prices are below the county loan rate for the crop. "Other government payments" refers to all other government payments such as 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 that 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 that 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 that 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, and 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

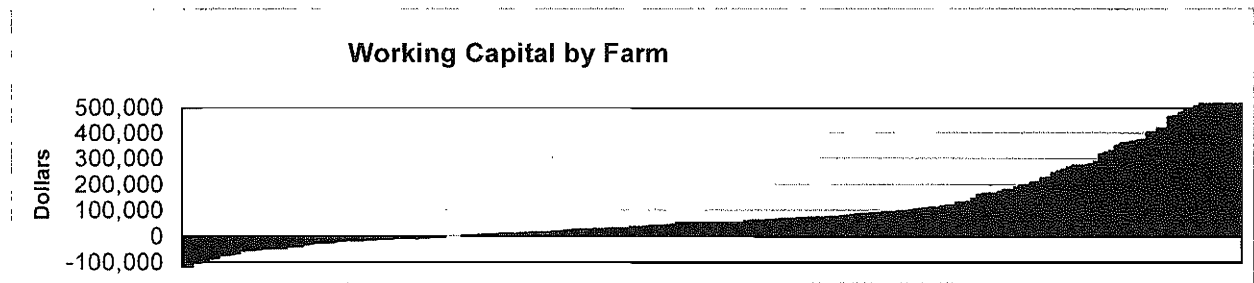
The Farm Financial Standards Task Force recommended the use of sixteen financial measures to evaluate a farm's financial position and financial performance. These measures are grouped by Liquidity, Solvency, Profitability, Repayment Capacity and Efficiency.

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.

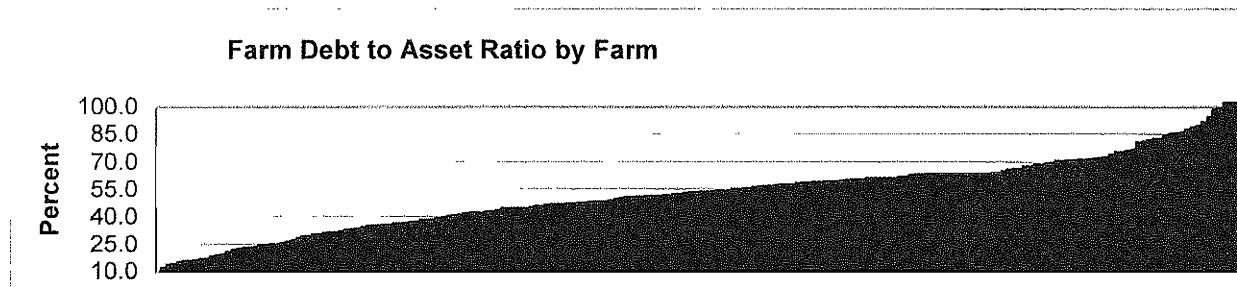
Working Capital: Working capital shows the dollar amount that current assets can or cannot cover current liabilities. It approximates the amount of capital available to purchase crop and livestock inputs and equipment necessary to produce farm products. The amount of working capital considered adequate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



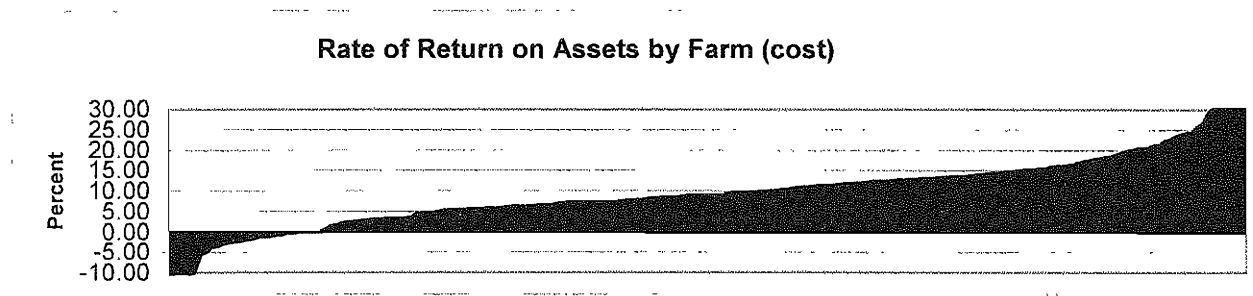
Farm Equity To Asset Ratio: The farm equity to asset ratio measures the farm equity relative to the value of the farm assets. It measures the proportion of the farm assets financed by the owner's equity whereas the debt to asset ratio measured the proportion of farm assets financed by debt.

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.

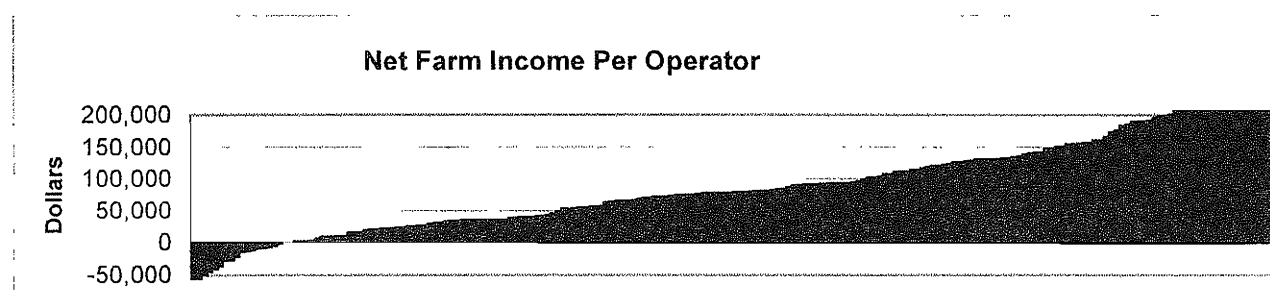
Rate of Return on Assets: Rate of return on assets is, in effect, the interest rate your farm earned in the past year on all money invested in the business. If assets are valued at market value, the rate of return on investment can be looked at as the "opportunity cost" of investing money in the farm 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.



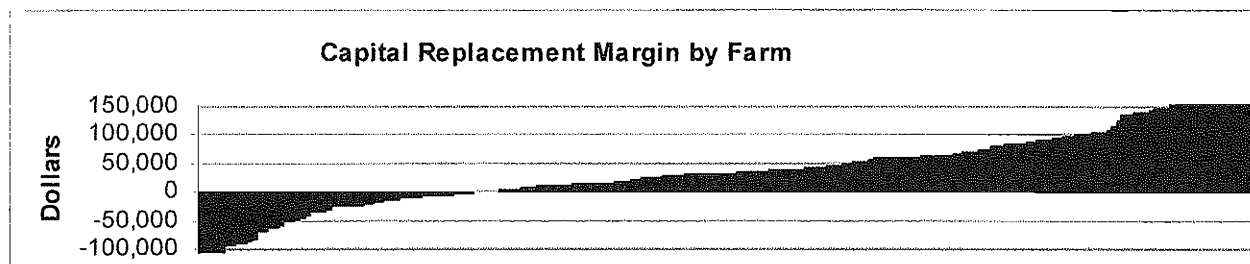
Operating Profit Margin: The operating profit margin is a measure of the profit margin from the employment of assets. It measures how effectively you are employing assets relative to the value of output produced. Low prices, high operating expenses, or production problems are all possible causes of a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

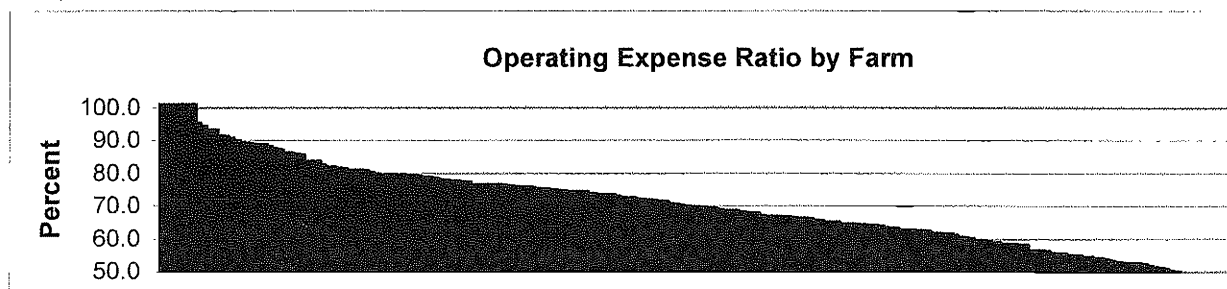


Efficiency

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.

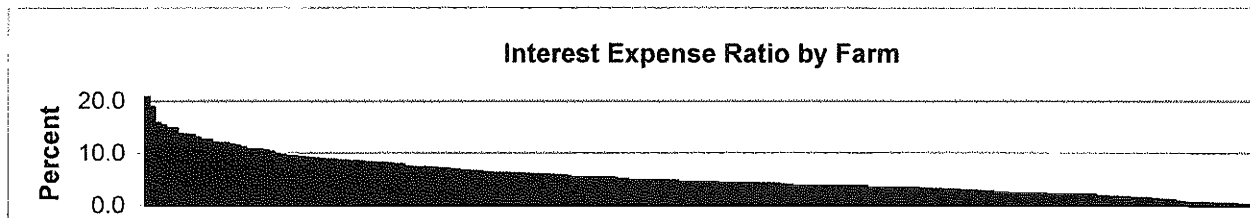
Asset Turnover: Asset turnover is a measure of how efficiently assets are used in the business. A farm with good operating profit margin and asset turnover will show a strong rate of return on farm assets. If operating profit margin is low, the asset turnover rate must be strong, or vice versa, to maintain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

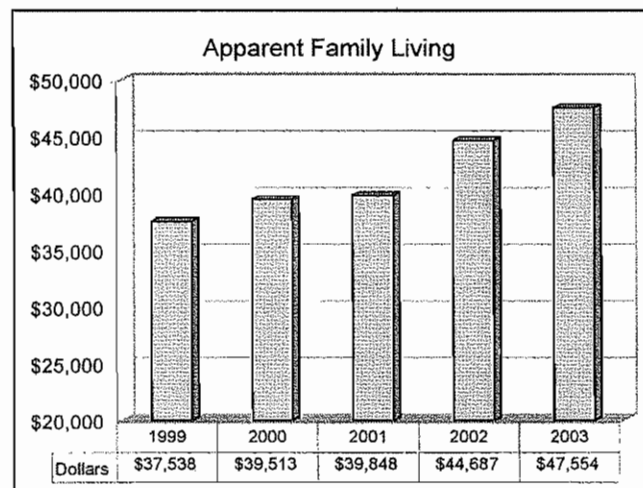
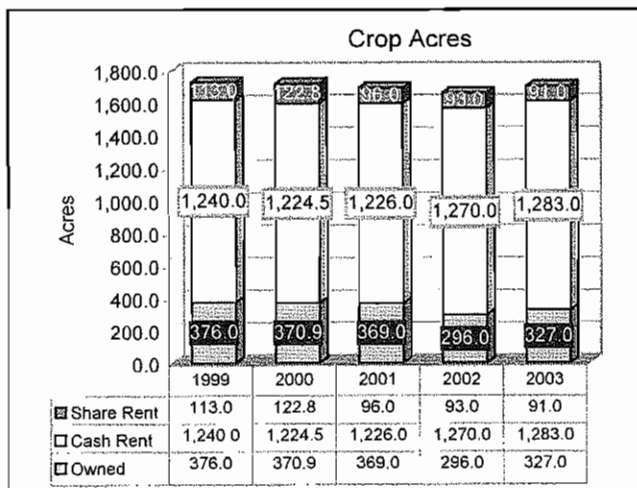
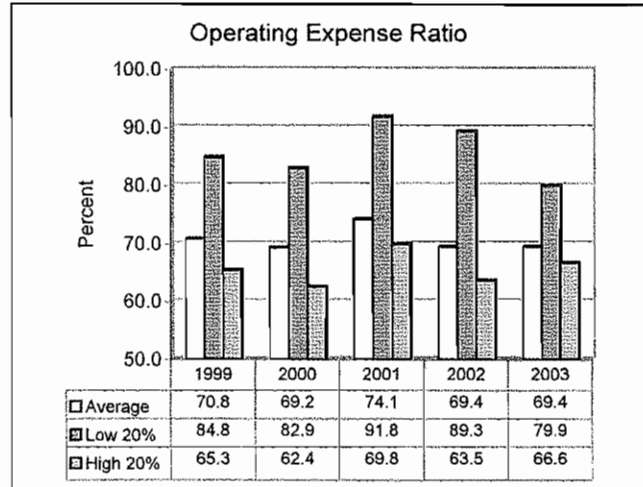
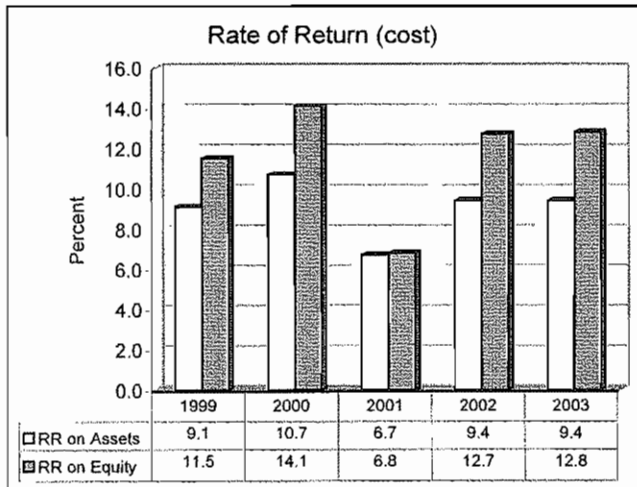
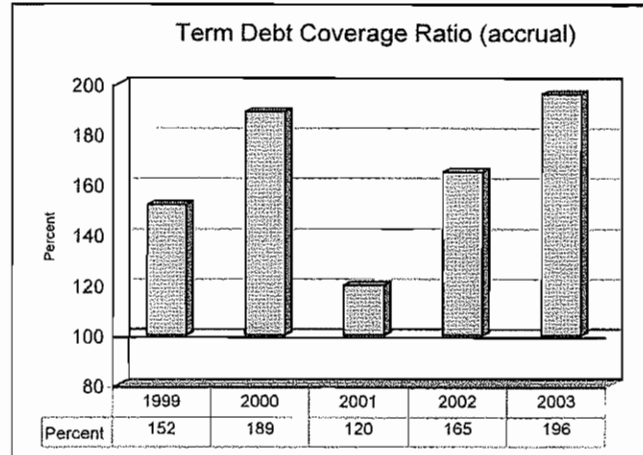
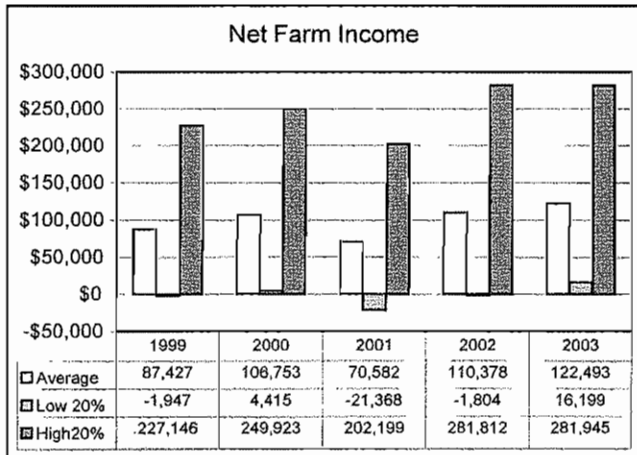


TABLE 1
Farm Income Statement
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
CASH FARM INCOME				
Alfalfa Seed	73	-	-	358
Barley	7,126	4,526	2,546	15,082
Beans, Baby Lima	38	-	-	187
Beans, Black Turtle	601	-	114	2,212
Beans, Dark Red Kidney	229	-	-	909
Beans, Great Northern	228	-	-	1,121
Beans, Navy	4,998	2,119	1,875	11,898
Beans, Pinto	2,394	569	3,030	4,866
Beans, Small Red	103	-	-	505
Canola	288	-	1,362	84
Corn	33,550	30,227	32,459	52,593
Corn Silage	114	570	-	-
Flax	42	-	209	-
Hay, Alfalfa	1,137	182	1,317	1,062
Potatoes	11,248	9,389	26,733	12,287
Soybeans	122,793	79,991	113,701	174,242
Straw	913	-	16	4,345
Sugar Beets	157,652	17,990	96,017	393,483
Sunflowers	5,653	2,809	2,136	9,961
Sunflowers, Confectionary	2,306	-	1,546	4,476
Wheat, Durum	752	2,921	-	837
Wheat, Spring	89,250	28,396	97,187	155,356
Wheat, Winter	695	-	-	-
Soybeans, Food	39	195	-	-
Other crops	2,071	-	3,139	992
Miscellaneous crop income	19	-	49	-
Beef Cow-Calf, Beef Calves	1,415	-	113	-
Beef, Background Beef	194	-	-	810
Beef, Finish Beef Calves	2,968	1,367	-	-
Dairy Steers	458	-	-	-
Hogs, Farrow-Fin, Raised Hogs	1,378	-	6,918	-
Honey Production, Honey	1,395	-	-	6,861
Hogs, Weaning to Finish	4,847	-	-	-
CCC market loan gain	50	224	25	-
Cull breeding livestock	49	-	14	229
Misc. livestock income	310	-	-	1,167
LDP payments	172	21	589	65
Direct & CC govt payments	29,613	15,715	28,756	49,049
CRP payments	1,266	557	1,091	2,950
Other government payments	17,484	8,242	14,048	30,866
Custom work income	7,549	4,857	3,151	16,488
Patronage dividends, cash	4,458	939	2,411	11,242
Insurance income	10,699	7,299	6,636	21,041
Cash from hedging accts	610	487	157	1,470
Other farm income	15,589	6,628	10,046	32,069
Gross Cash Farm Income	544,816	226,221	457,390	1,021,159

TABLE 1
Farm Income Statement (Continued)
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
CASH FARM EXPENSE				
Seed	40,284	22,479	33,453	70,063
Fertilizer	42,250	18,610	41,768	77,478
Crop chemicals	59,846	19,499	50,225	118,805
Crop insurance	17,362	7,906	17,324	30,149
Drying fuel	503	597	206	470
CCC buyback	6,037	10,722	4,832	4,317
Crop custom hire	173	89	640	-
Crop hired labor	318	665	-	-
Marketing	4,597	3,304	2,445	9,031
Crop miscellaneous	6,604	2,094	6,045	17,730
Feeder livestock purchase	4,790	726	115	-
Purchased feed	2,807	75	4,168	413
Breeding fees	32	-	159	-
Veterinary	183	36	85	84
Livestock leases	512	-	-	-
Interest	26,443	14,290	23,816	43,732
Fuel & oil	19,511	8,071	17,511	34,664
Repairs	37,882	18,074	31,790	66,940
Custom hire	11,970	4,518	10,656	22,776
Hired labor	24,135	4,933	16,535	55,853
Land rent	89,947	36,632	77,345	171,747
Machinery & bldg leases	7,434	4,101	6,931	15,725
Real estate taxes	3,672	1,644	3,088	6,926
Farm insurance	8,029	3,479	7,012	14,177
Utilities	5,035	3,026	4,766	7,513
Dues & professional fees	3,942	1,949	3,322	7,864
Hedging account deposits	932	1,045	380	1,890
Miscellaneous	7,921	2,626	5,746	12,490
Total cash expense	433,152	191,188	370,361	790,837
Net cash farm income	111,664	35,033	87,030	230,322
INVENTORY CHANGES				
Crops and feed	45,341	5,497	26,014	107,212
Market livestock	1,377	134	303	139
Accounts receivable	-19,339	-8,404	-13,915	-29,883
Prepaid expenses and supplies	8,634	259	8,262	18,316
Accounts payable	1,041	-1,264	3,670	873
Total inventory change	37,055	-3,778	24,333	96,658
Net operating profit	148,719	31,254	111,363	326,980
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS				
Breeding livestock	213	-8	497	848
Machinery and equipment	-28,007	-13,144	-21,185	-51,505
Buildings and improvements	-764	-726	-289	-1,385
Other farm capital	2,332	-1,178	406	7,007
Total depr. and other capital adj	-26,226	-15,056	-20,571	-45,034
Net farm income	122,493	16,199	90,792	281,945

TABLE 2
INVENTORY CHANGES
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
Net cash farm income	111,664	35,033	87,030	230,322
CROPS AND FEED				
Ending inventory	255,091	82,218	199,163	542,051
Beginning inventory	209,750	76,721	173,149	434,838
Inventory change	45,341	5,497	26,014	107,212
MARKET LIVESTOCK				
Ending inventory	6,137	488	2,568	1,214
Beginning inventory	4,760	354	2,265	1,074
Inventory change	1,377	134	303	139
ACCTS RECEIVABLE & OTHER CURRENT ASSETS				
Ending inventory	42,521	13,208	30,413	91,752
Beginning inventory	61,860	21,612	44,328	121,634
Inventory change	-19,339	-8,404	-13,915	-29,883
PREPAID EXPENSES AND SUPPLIES				
Ending inventory	40,079	12,382	33,248	89,338
Beginning inventory	31,445	12,122	24,986	71,022
Inventory change	8,634	259	8,262	18,316
ACCOUNTS PAYABLE & ACCRUED EXPENSES				
Beginning inventory	26,113	12,572	23,741	38,912
Ending inventory	25,071	13,836	20,071	38,038
Inventory change	1,041	-1,264	3,670	873
Total inventory change	37,055	-3,778	24,333	96,658
Net operating profit	148,719	31,254	111,363	326,980

TABLE 3
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
Net operating profit	148,719	31,254	111,363	326,980
BREEDING LIVESTOCK				
Ending inventory	1,046	-	1,273	3,636
Capital sales	215	153	275	390
Beginning inventory	949	-	1,051	3,005
Capital purchases	100	161	-	173
Depreciation, capital adjust.	213	-8	497	848
MACHINERY AND EQUIPMENT				
Ending inventory	293,043	123,904	258,351	526,661
Capital sales	3,538	3,504	3,017	6,852
Beginning inventory	257,774	109,804	232,496	460,976
Capital purchases	66,815	30,748	50,057	124,042
Depreciation, capital adjust.	-28,007	-13,144	-21,185	-51,505
BUILDINGS AND IMPROVEMENTS				
Ending inventory	51,046	28,211	33,633	100,103
Capital sales	7	-	-	-
Beginning inventory	41,713	27,092	26,557	73,015
Capital purchases	10,104	1,845	7,365	28,473
Depreciation, capital adjust.	-764	-726	-289	-1,385
OTHER CAPITAL ASSETS				
Ending inventory	178,703	41,399	128,306	429,073
Capital sales	2,251	-	-	3,223
Beginning inventory	174,260	41,744	127,036	419,148
Capital purchases	4,362	833	864	6,141
Depreciation, capital adjust.	2,332	-1,178	406	7,007
Total depreciation, capital adj.	-26,226	-15,056	-20,571	-45,034
Net farm income	122,493	16,199	90,792	281,945

TABLE 4
PROFITABILITY MEASURES
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
Profitability (assets valued at cost)				
Net farm income	122,493	16,199	90,792	281,945
Labor and management earnings	85,327	5,276	62,767	198,956
Rate of return on assets	9.4 %	2.1 %	8.2 %	11.1 %
Rate of return on equity	12.8 %	-2.5 %	11.4 %	14.7 %
Operating profit margin	18.5 %	4.1 %	16.4 %	22.1 %
Asset turnover rate	50.7 %	50.9 %	50.1 %	50.2 %
Interest on farm net worth	37,166	10,923	28,026	82,990
Farm interest expense	25,265	13,599	22,850	40,280
Value of operator lbr and mgmt.	43,139	20,629	37,326	78,954
Return on farm assets	104,619	9,169	76,316	243,271
Average farm assets	1,114,952	437,521	929,929	2,190,454
Return on farm equity	79,354	-4,430	53,466	202,991
Average farm equity	617,727	178,673	467,094	1,383,163
Value of farm production	564,811	222,639	466,006	1,099,063
	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
Profitability (assets valued at market)				
Net farm income	127,778	25,587	94,875	282,454
Labor and management earnings	87,559	13,615	65,536	195,887
Rate of return on assets	8.5 %	3.8 %	7.8 %	9.6 %
Rate of return on equity	12.7 %	2.5 %	11.8 %	14.1 %
Operating profit margin	19.5 %	8.3 %	17.3 %	22.2 %
Asset turnover rate	43.7 %	45.7 %	45.3 %	43.2 %
Interest on farm net worth	40,219	11,972	29,339	86,568
Farm interest expense	25,265	13,599	22,850	40,280
Value of operator lbr and mgmt.	43,139	20,629	37,326	78,954
Return on farm assets	109,905	18,558	80,399	243,780
Average farm assets	1,293,644	487,471	1,029,717	2,547,039
Return on farm equity	84,640	4,958	57,549	203,500
Average farm equity	668,845	196,607	488,979	1,442,795
Value of farm production	564,811	222,639	466,006	1,099,063

TABLE 5
LIQUIDITY MEASURES
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
Liquidity (cash)				
Net cash farm income	111,664	35,033	87,030	230,322
Net nonfarm income	16,177	25,438	15,275	13,729
Family living and taxes	60,355	38,162	53,166	107,302
Real estate principal payments	10,364	5,238	11,493	16,148
Cash available for interm. debt	57,121	17,071	37,647	120,600
Average intermediate debt	165,945	90,003	151,863	269,081
Years to turnover interm. debt	2.9	5.3	4.0	2.2
Expense as a % of income	80 %	85 %	81 %	77 %
Interest as a % of income	5 %	6 %	5 %	4 %
Liquidity (accrual)				
Total accrual farm income	572,195	223,447	469,792	1,098,628
Total accrual operating expense	423,476	192,193	358,429	771,648
Net accrual operating income	148,719	31,254	111,363	326,980
Net nonfarm income	16,177	25,438	15,275	13,729
Family living and taxes	60,355	38,162	53,166	107,302
Real estate principal payments	10,364	5,238	11,493	16,148
Available for intermediate debt	94,176	13,292	61,980	217,258
Average intermediate debt	165,945	90,003	151,863	269,081
Years to turnover interm. debt	1.8	6.8	2.5	1.2
Expense as a % of income	74 %	86 %	76 %	70 %
Interest as a % of income	4 %	6 %	5 %	4 %

TABLE 6
BALANCE SHEET AT COST VALUES
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	211	47	43	33
ASSETS				
Current Farm Assets				
Cash and checking balance	13,781	7,543	6,195	40,795
Prepaid expenses & supplies	35,791	11,993	33,630	82,661
Growing crops	1,298	64	155	7,921
Accounts receivable	35,079	12,590	32,255	70,760
Hedging accounts	1,963	303	832	8,434
Crops held for sale or feed	207,832	68,433	166,003	481,419
Crops under government loan	19,358	18,738	27,451	19,263
Market livestock held for sale	5,227	499	2,867	1,802
Other current assets	615	437	474	961
Total current farm assets	320,943	120,599	269,862	714,018
Intermediate Farm Assets				
Breeding livestock	1,195	-	1,421	5,399
Machinery and equipment	250,660	115,301	225,245	433,903
Other intermediate assets	130,969	27,267	130,909	325,762
Total intermediate farm assets	382,823	142,569	357,575	765,064
Long Term Farm Assets				
Farm land	271,667	136,586	257,230	513,877
Buildings and improvements	44,432	22,127	26,684	91,617
Other long-term assets	20,420	13,162	6,644	54,020
Total long-term farm assets	336,519	171,875	290,558	659,515
Total Farm Assets	1,040,285	435,043	917,996	2,138,596
Total Nonfarm Assets	161,438	114,551	139,757	282,788
Total Assets	1,201,724	549,594	1,057,753	2,421,384
LIABILITIES				
Current Farm Liabilities				
Accrued interest	8,714	5,401	6,631	11,815
Accounts payable	13,804	7,770	11,229	25,881
Current notes	127,475	58,900	122,227	248,410
Government crop loans	14,315	13,819	20,655	14,648
Principal due on term debt	40,769	19,941	39,382	68,329
Total current farm liabilities	205,076	105,831	200,123	369,083
Total intermediate farm liabs	121,548	74,114	102,158	219,635
Total long term farm liabilities	153,091	90,237	137,658	244,564
Total farm liabilities	479,715	270,182	439,939	833,282
Total nonfarm liabilities	43,177	35,203	48,681	69,818
Total liabilities	522,892	305,385	488,620	903,100
NET WORTH (farm and nonfarm)	678,832	244,208	569,133	1,518,284
Net worth change	80,856	11,408	63,076	189,376
RATIO ANALYSIS				
Current farm liabilities / assets	64 %	88 %	74 %	52 %
Curr. & interm farm liab. / assets	46 %	68 %	48 %	40 %
Long term farm liab. / assets	45 %	53 %	47 %	37 %
Total debt to asset ratio	44 %	56 %	46 %	37 %

TABLE 7
BALANCE SHEET AT MARKET VALUES
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	211	47	43	33
ASSETS				
Current Farm Assets				
Cash and checking balance	13,781	7,543	6,195	40,795
Prepaid expenses & supplies	35,791	11,993	33,630	82,661
Growing crops	1,298	64	155	7,921
Accounts receivable	35,079	12,590	32,255	70,760
Hedging accounts	1,963	303	832	8,434
Crops held for sale or feed	207,832	68,433	166,003	481,419
Crops under government loan	19,358	18,738	27,451	19,263
Market livestock held for sale	5,227	499	2,867	1,802
Other current assets	615	437	474	961
Total current farm assets	320,943	120,599	269,862	714,018
Intermediate Farm Assets				
Breeding livestock	1,228	-	1,537	5,407
Machinery and equipment	307,670	147,832	265,456	533,403
Other intermediate assets	165,961	29,808	155,166	460,919
Total intermediate farm assets	474,858	177,640	422,158	999,729
Long Term Farm Assets				
Farm land	318,171	155,729	292,013	555,581
Buildings and improvements	51,809	26,262	32,480	97,506
Other long-term assets	21,864	13,161	6,574	59,550
Total long-term farm assets	391,844	195,152	331,068	712,637
Total Farm Assets	1,187,646	493,391	1,023,088	2,426,384
Total Nonfarm Assets	181,268	131,486	147,777	336,818
Total Assets	1,368,913	624,877	1,170,865	2,763,203
LIABILITIES				
Current Farm Liabilities				
Accrued interest	8,714	5,401	6,631	11,815
Accounts payable	13,804	7,770	11,229	25,881
Current notes	127,475	58,900	122,227	248,410
Government crop loans	14,315	13,819	20,655	14,648
Principal due on term debt	40,769	19,941	39,382	68,329
Total current farm liabilities	205,076	105,831	200,123	369,083
Total intermediate farm liabs	121,548	74,114	102,158	219,635
Total long term farm liabilities	153,091	90,237	137,658	244,564
Total farm liabilities	479,715	270,182	439,939	833,282
Total nonfarm liabilities	43,177	35,203	48,681	69,818
Total liabs excluding deferreds	522,892	305,385	488,620	903,100
Total deferred liabilities	111,864	37,312	80,765	273,714
Total liabilities	634,756	342,697	569,385	1,176,814
RETAINED EARNINGS				
Market valuation equity	678,832	244,208	569,133	1,518,284
Net worth (farm and nonfarm)	55,325	37,971	32,347	68,104
Net worth excluding deferreds	734,157	282,180	601,480	1,586,388
Net worth change	846,021	319,492	682,245	1,860,102
	88,447	19,393	67,405	200,045
RATIO ANALYSIS				
Current farm liabilities / assets	64 %	88 %	74 %	52 %
Curr. & interm farm liab. / assets	41 %	60 %	44 %	34 %
Long term farm liab. / assets	39 %	46 %	42 %	34 %
Total debt to asset ratio	46 %	55 %	49 %	43 %
Debt to assets excl deferreds	38 %	49 %	42 %	33 %

TABLE 8
STATEMENT OF CASH FLOWS
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
Beginning cash (farm & nonfarm)	18,428	12,281	10,401	25,487
CASH FROM OPERATING ACTIVITIES				
Gross cash farm income	544,816	226,221	457,390	1,021,159
Net nonfarm income	16,177	25,438	15,275	13,729
Total cash farm expense	-433,152	-191,188	-370,361	-790,837
Apparent family living expense	-47,554	-31,962	-44,456	-75,825
Income and social security tax	-11,911	-6,201	-8,709	-28,076
Cash from operations	68,376	22,308	49,139	140,150
CASH FROM INVESTING ACTIVITIES				
Sale of breeding livestock	215	153	275	390
Sale of machinery & equipment	3,507	3,504	3,017	6,709
Sale of titled vehicles	31	-	-	143
Sale of farm land	1,349	-	6,765	-
Sale of farm buildings	7	-	-	-
Sale of other farm assets	2,251	-	-	3,223
Sale of nonfarm assets	3,310	3,138	8,646	2,152
Purchase of breeding livestock	-100	-161	-	-173
Purchase of machinery & equip.	-63,644	-28,242	-47,361	-118,659
Purchase of titled vehicles	-3,170	-2,507	-2,696	-5,383
Purchase of farm land	-15,474	-6,724	-21,100	-21,427
Purchase of farm buildings	-10,104	-1,845	-7,365	-28,473
Purchase of other farm assets	-4,362	-833	-864	-6,141
Purchase of nonfarm assets	-16,458	-11,443	-16,283	-32,959
Cash from investing activities	-102,642	-44,959	-76,966	-200,598
CASH FROM FINANCING ACTIVITIES				
Money borrowed	320,394	162,709	326,125	503,576
Cash gifts and inheritances	4,261	1,189	2,927	943
Principal payments	-285,127	-139,256	-302,003	-417,176
Dividends paid	-891	-	-	-3,401
Gifts given	-22	-8	-21	-
Cash from financing activities	38,615	24,633	27,028	83,942
Net change in cash balance	4,350	1,982	-798	23,494
Ending cash (farm & nonfarm)	22,778	14,263	9,603	48,981

TABLE 9
FINANCIAL STANDARDS MEASURES
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
Liquidity				
Current ratio	1.63	1.13	1.33	1.95
Working capital	142,950	13,873	71,842	378,589
Solvency (market)				
Farm debt to asset ratio	48 %	60 %	52 %	43 %
Farm equity to asset ratio	52 %	40 %	48 %	57 %
Farm debt to equity ratio	92 %	152 %	109 %	76 %
Profitability (cost)				
Rate of return on farm assets	9.4 %	2.1 %	8.2 %	11.1 %
Rate of return on farm equity	12.8 %	-2.5 %	11.4 %	14.7 %
Operating profit margin	18.5 %	4.1 %	16.4 %	22.1 %
Net farm income	122,493	16,199	90,792	281,945
Repayment Capacity				
Term debt coverage ratio	196 %	95 %	149 %	266 %
Capital replacement margin	60,842	-1,525	29,588	164,639
Efficiency				
Asset turnover rate (cost)	50.7 %	50.9 %	50.1 %	50.2 %
Operating expense ratio	69.6 %	79.9 %	71.4 %	66.6 %
Depreciation expense ratio	4.6 %	6.7 %	4.4 %	4.1 %
Interest expense ratio	4.4 %	6.1 %	4.9 %	3.7 %
Net farm income ratio	21.4 %	7.2 %	19.3 %	25.7 %

TABLE 10
Crop Production and Marketing Summary
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
Acreage Summary				
Total acres owned	359	207	359	512
Total crop acres	1,701	884	1,523	2,813
Crop acres owned	327	156	304	497
Crop acres cash rented	1,283	632	1,195	2,222
Crop acres share rented	91	95	24	94
Total pasture acres	2	-	-	10
Average Price Received (Cash Sales Only)				
Soybeans per bushel	5.91	5.52	5.80	6.01
Wheat, Spring per bushel	3.59	3.47	3.59	3.61
Corn per bushel	2.11	2.12	2.09	2.14
Sugar Beets per ton	39.99	-	-	40.43
Barley per bushel	2.61	-	2.63	2.48
Beans, Navy per cwt	15.75	-	15.56	15.48
Sunflowers per cwt	12.31	-	-	12.70
Beans, Pinto per cwt	15.16	-	-	15.13
Hay, Alfalfa per ton	67.99	-	-	-
Sunflowers, Confectionary per cwt	15.09	-	-	-
Average Yield Per Acre				
Soybeans (bushel)	30.35	26.59	31.18	31.60
Wheat, Spring (bushel)	60.82	56.80	60.19	62.58
Sugar Beets (ton)	20.23	16.84	19.59	20.89
Corn (bushel)	128.05	115.39	131.49	130.88
Barley (bushel)	76.35	72.86	74.49	77.62
Sunflowers (cwt)	17.04	-	-	15.17
Beans, Navy (cwt)	17.64	-	-	17.03
Hay, Alfalfa (ton)	3.03	-	-	-
Sunflowers, Confectionary (cwt)	13.76	-	-	13.81
Soybeans, Food (bushel)	27.37	-	-	-
Beans, Pinto (cwt)	19.15	-	-	20.87

TABLE 11
HOUSEHOLD AND PERSONAL EXPENSES
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms
Number of farms	20
Average family size	3.3
Family Living Expenses	
Food and meals expense	6,829
Medical care	3,369
Health insurance	3,769
Cash donations	1,651
Household supplies	3,200
Clothing	2,598
Personal care	1,715
Child / Dependent care	224
Alimony and Child support	-
Gifts	2,672
Education	2,430
Recreation	3,525
Utilities (household share)	1,513
Nonfarm vehicle operating expense	1,547
Household real estate taxes	338
Dwelling rent	650
Household repairs	1,398
Nonfarm interest	876
Disability / Long term care insurance	49
Life insurance payments	1,989
Nonfarm property insurance	316
Miscellaneous	1,061
Total cash family living expense	41,719
Family living from the farm	33
Total family living	41,752
Other Nonfarm Expenditures	
Income taxes	11,979
Furnishing & appliance purchases	100
Nonfarm vehicle purchases	3,748
Nonfarm real estate purchases	5,937
Other nonfarm capital purchases	848
Nonfarm savings & investments	5,475
Total other nonfarm expenditures	28,087
Total cash family living investment & nonfarm capital purch	69,806

TABLE 12
NONFARM INCOME, OPERATOR AND LABOR INFORMATION
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of farms	241	48	48	49
NONFARM INCOME				
Nonfarm wages & salary	11,724	16,485	12,530	8,769
Nonfarm business income	1,683	5,664	698	3,299
Nonfarm rental income	482	2,245	16	32
Nonfarm interest income	345	61	42	76
Nonfarm cash dividends	218	14	1,066	-
Tax refunds	382	287	571	337
Gifts and inheritances	4,261	1,189	2,927	943
Other nonfarm income	1,342	682	351	1,217
Total nonfarm income	20,438	26,626	18,202	14,672
OPERATOR INFORMATION				
Average number of operators	1.1	1.0	1.1	1.4
Average age of operators	43.5	41.2	43.8	45.8
Average number of years farming	20.5	17.7	20.3	24.0
RESULTS PER OPERATOR				
Working capital	126,658	13,873	63,860	272,807
Total assets (market)	1,353,690	646,477	1,092,027	2,106,578
Total liabilities	616,826	350,713	545,485	878,102
Net worth (market)	736,864	295,764	546,542	1,228,476
Net worth excl deferred liabs	857,518	333,045	620,485	1,455,348
Gross farm income	506,982	223,447	417,593	791,658
Total farm expense	398,449	207,249	336,889	588,492
Net farm income	108,533	16,199	80,704	203,167
Net nonfarm income	14,333	25,438	13,578	9,893
Family living & tax withdrawals	53,477	38,162	47,258	77,321
Total acres owned	318.1	206.5	319.3	368.8
Total crop acres	1,507.2	883.7	1,353.8	2,026.9
Crop acres owned	289.9	156.5	270.6	358.1
Crop acres cash rented	1,136.5	632.0	1,062.0	1,601.0
Crop acres share rented	80.8	95.2	21.3	67.8
Total pasture acres	1.8	-	-	7.1
LABOR ANALYSIS				
Number of farms	241	48	48	49
Total unpaid labor hours	2,004	1,547	2,051	2,580
Total hired labor hours	1,320	200	971	2,968
Total labor hours per farm	3,324	1,747	3,023	5,548
Unpaid hours per operator	1,775	1,547	1,823	1,859
Value of farm production / hour	169.92	127.44	154.18	198.09
Net farm income / unpaid hour	61.13	10.47	44.27	109.28

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 \$1800 (the sugar beet stock sales price in 2003) by 5% and subtracting the interest paid on beet stock debt in 2003. 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.

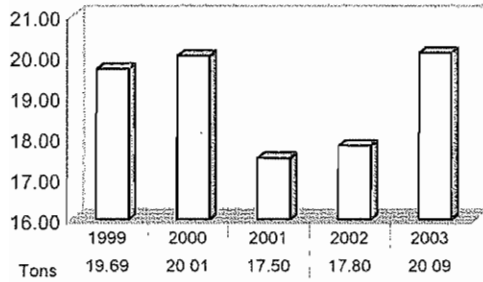
Several cost items, such as "utilities," "hired labor," and "interest paid," are listed under both "direct" and "overhead" costs because some of these costs are specific to that crop whereas others are general overhead costs of the farm. For example, "Direct Lease Payments" refers to non-land inputs 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.

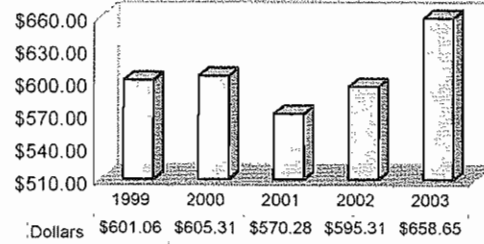
Rounding of individual items for the report may have caused minor discrepancies with the calculated totals.

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

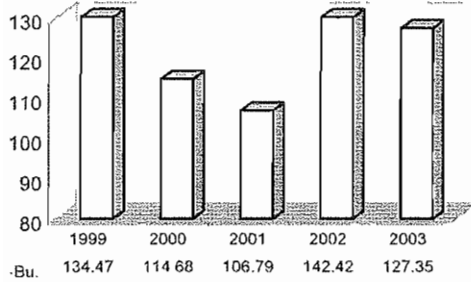
Sugar Beet Yields



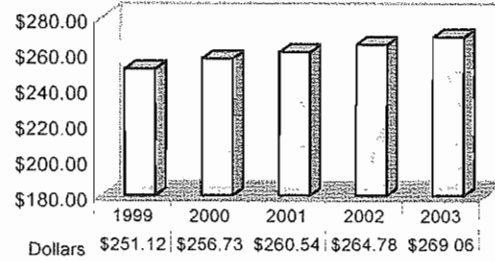
**Sugar Beet Total Listed Cost
(cash rented land)**



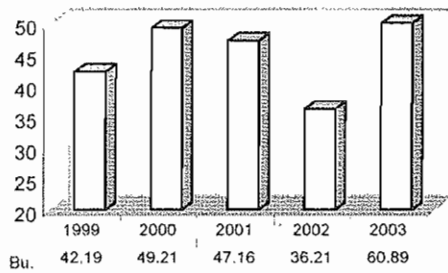
Corn Yields



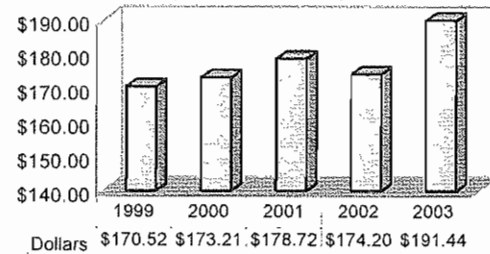
**Corn Total Listed Cost
(cash rented land)**



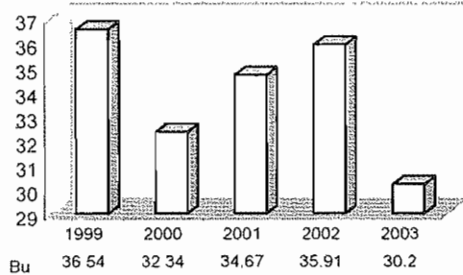
Spring Wheat Yields



**Spring Wheat Total Listed Cost
(cash rented land)**



Soybeans Yields



**Soybeans Total Listed Cost
(cash rented land)**

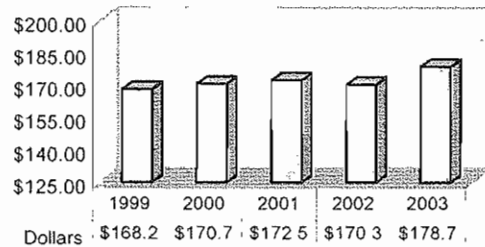


TABLE 13 - 1
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Barley on Owned Land

	Avg. Of All Farms
Number of fields	11
Number of farms	11
Acres	115.47
Yield per acre (bu.)	75.46
Operators share of yield %	100.00
Value per bu.	2.55
Total product return per acre	192.69
Miscellaneous income per acre	4.22
Gross return per acre	196.91
Direct Expenses	
Seed	10.14
Fertilizer	26.10
Crop chemicals	20.22
Crop insurance	10.51
Fuel & oil	7.53
Repairs	16.42
Custom hire	3.20
Operating interest	3.37
Miscellaneous	0.74
Total direct expenses per acre	98.22
Return over direct exp per acre	98.69
Overhead Expenses	
Custom hire	2.49
Hired labor	4.67
Machinery & bldg leases	2.01
RE & pers. property taxes	8.22
Farm insurance	4.84
Utilities	2.30
Dues & professional fees	1.37
Interest	22.08
Mach & bldg depreciation	8.39
Miscellaneous	4.21
Total overhead expenses per acre	60.59
Total dir & ovhd expenses per acre	158.81
Net return per acre	38.10
Lbr & mgt charge per acre	17.44
Net return over lbr & mgt	20.66
Government payments	15.96
Net return with govt payments	36.62
Cost of Production	
Total direct expense per bu.	1.30
Total dir & ovhd exp per bu.	2.10
With labor & management	2.34
Total exp less govt & oth income	2.07

TABLE 13 - 2
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Barley on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	31	5	8	6
Number of farms	29	5	6	6
Acres	269.43	305.00	317.50	222.40
Yield per acre (bu.)	76.45	69.99	86.29	76.82
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	2.57	2.13	2.35	3.19
Total product return per acre	196.63	149.14	202.46	245.16
Miscellaneous income per acre	2.84	-	0.44	0.23
Gross return per acre	199.47	149.14	202.90	245.39
Direct Expenses				
Seed	11.09	10.05	11.47	10.74
Fertilizer	23.57	22.27	22.50	18.90
Crop chemicals	21.78	23.58	21.72	23.12
Crop insurance	9.08	7.94	7.90	10.88
Drying fuel	0.17	-	0.13	0.81
Fuel & oil	6.63	6.57	7.32	7.08
Repairs	13.94	13.48	17.42	12.36
Custom hire	2.22	3.92	0.43	4.13
Land rent	58.43	50.84	57.31	55.55
Machinery & bldg leases	0.19	-	0.61	-
Operating interest	2.72	3.86	2.83	2.32
Miscellaneous	1.68	1.47	3.87	0.65
Total direct expenses per acre	151.49	143.97	153.50	146.55
Return over direct exp per acre	47.98	5.17	49.40	98.84
Overhead Expenses				
Custom hire	2.80	7.49	2.49	1.82
Hired labor	5.44	7.87	5.46	3.99
Machinery & bldg leases	2.06	2.47	1.90	2.57
Farm insurance	4.38	4.89	4.57	2.99
Utilities	1.79	2.34	1.95	1.80
Dues & professional fees	1.42	1.25	1.75	0.98
Interest	3.77	5.49	3.85	3.26
Mach & bldg depreciation	9.79	11.55	10.14	10.14
Miscellaneous	2.51	1.92	4.74	1.37
Total overhead expenses per acre	33.97	45.25	36.85	28.92
Total dir & ovhd expenses per acre	185.46	189.22	190.35	175.47
Net return per acre	14.01	-40.08	12.55	69.93
Lbr & mgt charge per acre	14.75	13.21	18.28	15.05
Net return over lbr & mgt	-0.74	-53.29	-5.73	54.87
Government payments	15.57	14.50	15.42	18.08
Net return with govt payments	14.83	-38.79	9.69	72.95
Cost of Production				
Total direct expense per bu.	1.98	2.06	1.78	1.91
Total dir & ovhd exp per bu.	2.43	2.70	2.21	2.28
With labor & management	2.62	2.89	2.42	2.48
Total exp less govt & oth income	2.38	2.69	2.23	2.24

TABLE 13 - 3
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Beans, Black Turtle on Cash Rent

	Avg. Of All Farms
Number of fields	5
Number of farms	5
Acres	62.00
Yield per acre (cwt.)	19.04
Operators share of yield %	100.00
Value per cwt.	16.18
Total product return per acre	308.15
Miscellaneous income per acre	-
Gross return per acre	308.15
Direct Expenses	
Seed	28.76
Fertilizer	32.53
Crop chemicals	34.21
Crop insurance	15.47
Fuel & oil	12.22
Repairs	18.50
Land rent	58.77
Operating interest	4.59
Total direct expenses per acre	205.05
Return over direct exp per acre	103.11
Overhead Expenses	
Custom hire	3.98
Hired labor	15.87
Machinery & bldg leases	2.35
Farm insurance	5.38
Utilities	2.49
Dues & professional fees	3.25
Interest	5.77
Mach & bldg depreciation	10.05
Miscellaneous	2.10
Total overhead expenses per acre	51.25
Total dir & ovhd expenses per acre	256.30
Net return per acre	51.86
Lbr & mgt charge per acre	16.50
Net return over lbr & mgt	35.36
Government payments	-
Net return with govt payments	35.36
Cost of Production	
Total direct expense per cwt.	10.77
Total dir & ovhd exp per cwt.	13.46
With labor & management	14.33
Total exp less govt & oth income	14.33
Est. labor hours per acre	1.49

TABLE 13 - 4
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Beans, Navy on Cash Rent

	Avg. Of All Farms
Number of fields	14
Number of farms	12
Acres	176.41
Yield per acre (cwt.)	16.75
Operators share of yield %	100.00
Value per cwt.	16.72
Total product return per acre	280.02
Miscellaneous income per acre	26.96
Gross return per acre	306.98
Direct Expenses	
Seed	29.25
Fertilizer	22.64
Crop chemicals	30.21
Crop insurance	15.73
Fuel & oil	9.63
Repairs	23.24
Custom hire	1.16
Hired labor	0.44
Land rent	58.89
Machinery & bldg leases	0.34
Operating interest	3.55
Miscellaneous	2.69
Total direct expenses per acre	197.76
Return over direct exp per acre	109.22
Overhead Expenses	
Custom hire	4.38
Hired labor	11.80
Machinery & bldg leases	0.80
Farm insurance	4.78
Utilities	2.17
Dues & professional fees	2.23
Interest	5.33
Mach & bldg depreciation	15.18
Miscellaneous	4.47
Total overhead expenses per acre	51.14
Total dir & ovhd expenses per acre	248.91
Net return per acre	58.07
Lbr & mgt charge per acre	25.27
Net return over lbr & mgt	32.81
Government payments	-
Net return with govt payments	32.81
Cost of Production	
Total direct expense per cwt.	11.81
Total dir & ovhd exp per cwt.	14.86
With labor & management	16.37
Total exp less govt & oth income	14.76

TABLE 13 - 5
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Beans, Pinto on Cash Rent

	Avg. Of All Farms
Number of fields	9
Number of farms	8
Acres	143.59
Yield per acre (cwt.)	19.19
Operators share of yield %	100.00
Value per cwt.	15.35
Total product return per acre	294.64
Miscellaneous income per acre	-
Gross return per acre	294.64
Direct Expenses	
Seed	28.07
Fertilizer	15.40
Crop chemicals	33.96
Crop insurance	19.59
Fuel & oil	11.59
Repairs	20.00
Custom hire	0.46
Hired labor	4.78
Land rent	53.48
Machinery & bldg leases	0.62
Operating interest	3.70
Miscellaneous	0.14
Total direct expenses per acre	191.80
Return over direct exp per acre	102.84
Overhead Expenses	
Custom hire	6.41
Hired labor	16.22
Machinery & bldg leases	0.28
Farm insurance	4.82
Utilities	1.44
Dues & professional fees	2.80
Interest	5.81
Mach & bldg depreciation	14.88
Miscellaneous	1.31
Total overhead expenses per acre	53.96
Total dir & ovhd expenses per acre	245.76
Net return per acre	48.88
Lbr & mgt charge per acre	21.27
Net return over lbr & mgt	27.61
Government payments	-
Net return with govt payments	27.61
Cost of Production	
Total direct expense per cwt.	10.00
Total dir & ovhd exp per cwt.	12.81
With labor & management	13.92
Total exp less govt & oth income	13.92

TABLE 13 - 6
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Corn on Owned Land

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	39	7	7	11
Number of farms	36	7	7	8
Acres	122.41	134.40	113.37	160.25
Yield per acre (bu.)	127.93	109.96	113.16	141.88
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	2.25	2.09	2.39	2.30
Total product return per acre	288.34	229.48	270.54	326.48
Miscellaneous income per acre	1.12	0.83	-	0.84
Gross return per acre	289.46	230.31	270.54	327.32
Direct Expenses				
Seed	36.77	32.92	36.23	35.19
Fertilizer	39.74	43.60	39.70	37.84
Crop chemicals	20.21	18.65	20.35	21.08
Crop insurance	10.04	13.81	10.17	10.05
Drying fuel	2.76	4.59	3.51	1.78
Fuel & oil	11.45	11.05	8.92	12.84
Repairs	20.42	29.09	19.96	18.58
Custom hire	1.98	1.10	-	1.50
Machinery & bldg leases	0.25	0.79	-	-
Operating interest	4.23	7.28	2.73	1.63
Miscellaneous	0.08	-	-	0.17
Total direct expenses per acre	147.92	162.88	141.57	140.67
Return over direct exp per acre	141.54	67.43	128.97	186.66
Overhead Expenses				
Custom hire	2.10	2.93	2.65	2.60
Hired labor	10.86	9.06	10.49	12.96
Machinery & bldg leases	3.02	1.04	6.36	1.96
RE & pers. property taxes	9.33	6.40	8.82	10.98
Farm insurance	4.76	4.98	4.87	4.63
Utilities	2.77	2.92	2.94	1.90
Dues & professional fees	2.37	3.20	1.25	1.55
Interest	25.92	41.00	30.70	13.70
Mach & bldg depreciation	18.76	20.58	15.64	20.44
Miscellaneous	2.72	4.20	2.17	1.53
Total overhead expenses per acre	82.61	96.33	85.89	72.26
Total dir & ovhd expenses per acre	230.53	259.21	227.46	212.92
Net return per acre	58.93	-28.90	43.08	114.40
Lbr & mgt charge per acre	23.59	25.28	23.91	25.85
Net return over lbr & mgt	35.34	-54.18	19.17	88.55
Government payments	15.22	16.59	15.50	15.44
Net return with govt payments	50.56	-37.59	34.67	103.99
Cost of Production				
Total direct expense per bu.	1.16	1.48	1.25	0.99
Total dir & ovhd exp per bu.	1.80	2.36	2.01	1.50
With labor & management	1.99	2.59	2.22	1.68
Total exp less govt & oth income	1.86	2.43	2.08	1.57

TABLE 13 - 7
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Corn on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	77	14	20	15
Number of farms	66	13	13	14
Acres	251.24	231.26	223.77	200.74
Yield per acre (bu.)	127.35	102.44	125.78	145.60
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	2.25	2.18	2.28	2.30
Total product return per acre	286.69	223.08	286.42	334.70
Miscellaneous income per acre	4.20	18.53	2.70	-
Gross return per acre	290.89	241.62	289.12	334.70
Direct Expenses				
Seed	37.37	37.81	36.89	35.61
Fertilizer	40.47	41.13	37.13	40.75
Crop chemicals	21.71	20.78	24.46	20.58
Crop insurance	10.21	13.37	7.64	10.80
Drying fuel	3.24	2.14	4.50	3.08
Fuel & oil	11.79	10.93	11.93	12.45
Repairs	22.73	26.00	21.75	21.02
Custom hire	1.47	1.88	0.20	0.81
Land rent	62.83	60.32	64.75	58.00
Machinery & bldg leases	0.41	1.87	-	-
Operating interest	5.50	4.67	6.94	3.97
Miscellaneous	0.25	1.14	-	-
Total direct expenses per acre	217.98	222.03	216.21	207.07
Return over direct exp per acre	72.92	19.59	72.91	127.63
Overhead Expenses				
Custom hire	2.62	4.33	1.45	2.13
Hired labor	9.02	7.41	8.36	10.64
Machinery & bldg leases	4.49	2.81	5.21	3.91
Farm insurance	3.90	3.78	4.42	4.07
Utilities	2.89	2.71	3.88	3.03
Dues & professional fees	2.13	2.79	1.61	1.86
Interest	5.43	7.13	5.48	4.29
Mach & bldg depreciation	17.20	19.83	14.36	16.71
Miscellaneous	3.39	5.58	5.51	1.35
Total overhead expenses per acre	51.08	56.38	50.28	47.99
Total dir & ovhd expenses per acre	269.06	278.41	266.49	255.06
Net return per acre	21.84	-36.79	22.63	79.63
Lbr & mgt charge per acre	24.51	25.33	19.94	24.29
Net return over lbr & mgt	-2.68	-62.12	2.69	55.35
Government payments	15.30	14.78	16.32	14.70
Net return with govt payments	12.63	-47.34	19.01	70.05
Cost of Production				
Total direct expense per bu.	1.71	2.17	1.72	1.42
Total dir & ovhd exp per bu.	2.11	2.72	2.12	1.75
With labor & management	2.31	2.97	2.28	1.92
Total exp less govt & oth income	2.15	2.64	2.13	1.82

TABLE 13 - 8
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Corn on Share Rent

	Avg. Of All Farms
Number of fields	.19
Number of farms	14
Acres	126.38
Yield per acre (bu.)	133.92
Operators share of yield %	70.25
Value per bu.	2.26
Total product return per acre	212.73
Miscellaneous income per acre	2.11
Gross return per acre	214.84
Direct Expenses	
Seed	35.75
Fertilizer	40.48
Crop chemicals	19.60
Crop insurance	9.52
Drying fuel	2.34
Fuel & oil	10.58
Repairs	18.78
Custom hire	3.78
Machinery & bldg leases	0.88
Operating interest	3.20
Miscellaneous	0.43
Total direct expenses per acre	145.34
Return over direct exp per acre	69.51
Overhead Expenses	
Custom hire	0.40
Hired labor	9.51
Machinery & bldg leases	4.00
Farm insurance	3.52
Utilities	3.03
Dues & professional fees	2.31
Interest	2.77
Mach & bldg depreciation	22.13
Miscellaneous	3.05
Total overhead expenses per acre	50.71
Total dir & ovhd expenses per acre	196.05
Net return per acre	18.79
Lbr & mgt charge per acre	25.00
Net return over lbr & mgt	-6.21
Government payments	11.97
Net return with govt payments	5.76
Cost of Production	
Total direct expense per bu.	1.54
Total dir & ovhd exp per bu.	2.08
With labor & management	2.35
Total exp less govt & oth income	2.20

TABLE 13 - 9
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Hay, Alfalfa on Cash Rent

	Avg. Of All Farms
Number of fields	10
Number of farms	10
Acres	115.80
Yield per acre (ton)	3.09
Operators share of yield %	100.00
Value per ton	71.40
Total product return per acre	220.29
Miscellaneous income per acre	-
Gross return per acre	220.29
Direct Expenses	
Fertilizer	8.51
Crop chemicals	1.15
Fuel & oil	11.64
Repairs	24.62
Land rent	57.50
Operating interest	6.19
Miscellaneous	3.10
Total direct expenses per acre	112.72
Return over direct exp per acre	107.57
Overhead Expenses	
Custom hire	1.59
Hired labor	8.11
Machinery & bldg leases	1.98
Farm insurance	3.34
Utilities	4.34
Dues & professional fees	1.38
Interest	9.27
Mach & bldg depreciation	16.47
Miscellaneous	2.42
Total overhead expenses per acre	48.91
Total dir & ovhd expenses per acre	161.63
Net return per acre	58.66
Lbr & mgt charge per acre	26.26
Net return over lbr & mgt	32.40
Government payments	16.21
Net return with govt payments	48.61
Cost of Production	
Total direct expense per ton	36.53
Total dir & ovhd exp per ton	52.38
With labor & management	60.89
Total exp less govt & oth income	55.64

TABLE 13 - 10
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Potatoes on Owned Land

	Avg. Of All Farms
Number of fields	5
Number of farms	5
Acres	127.88
Yield per acre (cwt.)	185.79
Operators share of yield %	100.00
Value per cwt.	4.41
Total product return per acre	819.58
Miscellaneous income per acre	15.99
Gross return per acre	835.57
Direct Expenses	
Seed	145.85
Fertilizer	38.43
Crop chemicals	122.01
Crop insurance	38.30
Fuel & oil	60.72
Repairs	68.09
Custom hire	75.42
Machinery & bldg leases	6.72
Operating interest	37.79
Total direct expenses per acre	593.34
Return over direct exp per acre	242.23
Overhead Expenses	
Custom hire	25.10
Hired labor	93.05
Machinery & bldg leases	4.60
RE & pers. property taxes	9.17
Farm insurance	7.41
Utilities	20.14
Dues & professional fees	8.85
Interest	55.01
Mach & bldg depreciation	83.97
Miscellaneous	47.52
Total overhead expenses per acre	354.84
Total dir & ovhd expenses per acre	948.17
Net return per acre	-112.61
Lbr & mgt charge per acre	96.16
Net return over lbr & mgt	-208.77
Government payments	-
Net return with govt payments	-208.77
Cost of Production	
Total direct expense per cwt.	3.19
Total dir & ovhd exp per cwt.	5.10
With labor & management	5.62
Total exp less govt & oth income	5.53

TABLE 13 - 11
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Soybeans on Owned Land

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	151	30	28	28
Number of farms	118	23	23	24
Acres	153.72	148.44	122.59	188.76
Yield per acre (bu.)	30.42	23.62	29.16	35.44
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.67	6.13	6.48	7.42
Total product return per acre	202.91	144.87	188.88	262.84
Miscellaneous income per acre	7.69	11.41	16.10	4.03
Gross return per acre	210.60	156.28	204.99	266.87
Direct Expenses				
Seed	28.52	25.26	26.30	32.65
Fertilizer	5.44	8.03	4.55	6.43
Crop chemicals	15.55	16.26	14.07	13.85
Crop insurance	10.26	9.15	8.90	11.30
Fuel & oil	7.55	7.73	8.11	7.31
Repairs	14.59	17.73	13.06	13.34
Custom hire	3.87	4.89	2.41	1.95
Marketing	0.18	0.84	0.10	-
Operating interest	3.02	3.40	3.27	3.20
Miscellaneous	0.41	0.15	0.58	0.48
Total direct expenses per acre	89.38	93.45	81.36	90.52
Return over direct exp per acre	121.23	62.83	123.63	176.34
Overhead Expenses				
Custom hire	1.72	1.43	2.67	1.57
Hired labor	6.00	3.95	4.75	6.17
Machinery & bldg leases	2.39	2.25	1.76	3.77
RE & pers. property taxes	9.78	8.84	9.29	11.11
Farm insurance	4.26	4.24	4.20	4.93
Utilities	2.17	3.09	1.58	2.04
Dues & professional fees	1.71	2.03	1.45	1.61
Interest	31.28	36.67	35.32	29.18
Mach & bldg depreciation	12.24	14.14	11.14	11.88
Miscellaneous	2.31	2.26	3.02	2.61
Total overhead expenses per acre	73.85	78.91	75.17	74.87
Total dir & ovhd expenses per acre	163.23	172.35	156.53	165.40
Net return per acre	47.37	-16.07	48.45	101.47
Lbr & mgt charge per acre	18.38	19.05	17.76	19.65
Net return over lbr & mgt	29.00	-35.13	30.69	81.82
Government payments	15.07	14.77	14.84	14.71
Net return with govt payments	44.07	-20.36	45.53	96.53
Cost of Production				
Total direct expense per bu.	2.94	3.96	2.79	2.55
Total dir & ovhd exp per bu.	5.37	7.30	5.37	4.67
With labor & management	5.97	8.10	5.98	5.22
Total exp less govt & oth income	5.22	7.00	4.92	4.69

TABLE 13 - 12
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By RoundUp Ready)

Soybeans on Owned Land, Sorted by RoundUp Ready

	Avg. Of All Farms	100% RR	No RR	No Answer
Number of fields	151	90	16	45
Number of farms	118	76	15	31
Acres	153.72	162.04	131.40	145.01
Yield per acre (bu.)	30.42	30.75	29.92	29.85
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.67	6.75	6.47	6.55
Total product return per acre	202.91	207.50	193.70	195.62
Miscellaneous income per acre	7.69	8.78	4.45	6.30
Gross return per acre	210.60	216.29	198.15	201.92
Direct Expenses				
Seed	28.52	33.24	15.80	22.07
Fertilizer	5.44	4.16	2.72	9.17
Crop chemicals	15.55	13.30	23.26	18.08
Crop insurance	10.26	11.03	8.77	9.02
Fuel & oil	7.55	7.06	8.32	8.40
Repairs	14.59	13.48	11.76	17.96
Custom hire	3.87	3.03	4.24	5.63
Operating interest	3.02	3.01	3.15	2.99
Miscellaneous	0.58	0.45	0.23	0.99
Total direct expenses per acre	89.38	88.77	78.26	94.32
Return over direct exp per acre	121.23	127.52	119.89	107.60
Overhead Expenses				
Custom hire	1.72	1.52	2.35	1.96
Hired labor	6.00	6.11	5.26	5.99
Machinery & bldg leases	2.39	2.41	2.45	2.35
RE & pers. property taxes	9.78	10.21	10.17	8.68
Farm insurance	4.26	4.24	4.81	4.12
Utilities	2.17	2.24	2.27	1.99
Dues & professional fees	1.71	1.87	1.59	1.39
Interest	31.28	35.65	27.44	22.74
Mach & bldg depreciation	12.24	12.93	12.31	10.67
Miscellaneous	2.31	2.51	1.77	2.03
Total overhead expenses per acre	73.85	79.69	70.43	61.91
Total dir & ovhd expenses per acre	163.23	168.46	148.69	156.24
Net return per acre	47.37	47.83	49.46	45.68
Lbr & mgt charge per acre	18.38	18.39	19.98	17.83
Net return over lbr & mgt	29.00	29.44	29.49	27.86
Government payments	15.07	14.75	14.88	15.85
Net return with govt payments	44.07	44.19	44.37	43.71
Cost of Production				
Total direct expense per bu.	2.94	2.89	2.62	3.16
Total dir & ovhd exp per bu.	5.37	5.48	4.97	5.23
With labor & management	5.97	6.08	5.64	5.83
Total exp less govt & oth income	5.22	5.31	4.99	5.09

TABLE 13 - 13
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Soybeans on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	318	64	58	51
Number of farms	190	38	37	38
Acres	303.23	300.09	345.95	326.75
Yield per acre (bu.)	30.20	26.14	30.35	32.49
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.47	6.12	6.37	7.02
Total product return per acre	195.32	160.03	193.21	228.21
Miscellaneous income per acre	8.88	3.24	6.51	23.97
Gross return per acre	204.20	163.27	199.72	252.18
Direct Expenses				
Seed	27.55	29.60	27.26	24.36
Fertilizer	4.11	5.47	3.14	3.42
Crop chemicals	15.01	16.01	15.11	14.94
Crop insurance	10.12	9.96	8.91	10.63
Fuel & oil	7.21	7.19	6.59	6.82
Repairs	13.52	15.14	11.85	12.02
Custom hire	2.60	3.43	1.18	1.48
Land rent	59.80	59.01	60.42	62.26
Marketing	0.18	0.92	-	-
Operating interest	2.70	2.79	2.75	2.83
Miscellaneous	0.86	0.31	1.24	0.41
Total direct expenses per acre	143.67	149.83	138.46	139.17
Return over direct exp per acre	60.53	13.44	61.26	113.01
Overhead Expenses				
Custom hire	2.05	2.01	2.46	2.30
Hired labor	6.29	6.84	5.89	4.98
Machinery & bldg leases	2.41	2.17	2.26	3.10
Farm insurance	3.99	4.39	3.77	3.78
Utilities	2.03	2.22	2.10	1.68
Dues & professional fees	1.77	2.12	1.25	1.74
Interest	3.23	3.98	3.29	3.36
Mach & bldg depreciation	11.00	12.19	10.44	10.97
Miscellaneous	2.32	2.05	1.85	1.75
Total overhead expenses per acre	35.10	37.96	33.31	33.66
Total dir & ovhd expenses per acre	178.78	187.80	171.78	172.83
Net return per acre	25.42	-24.53	27.94	79.35
Lbr & mgt charge per acre	16.62	16.83	17.59	16.02
Net return over lbr & mgt	8.80	-41.36	10.36	63.33
Government payments	14.95	14.27	14.78	15.31
Net return with govt payments	23.75	-27.09	25.14	78.64
Cost of Production				
Total direct expense per bu.	4.76	5.73	4.56	4.28
Total dir & ovhd exp per bu.	5.92	7.18	5.66	5.32
With labor & management	6.47	7.83	6.24	5.81
Total exp less govt & oth income	5.68	7.16	5.54	4.60

TABLE 13 - 14
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By RoundUp Ready)

Soybeans on Cash Rent, Sorted by RoundUp Ready

	Avg. Of All Farms	100% RR	No RR	No Answer
Number of fields	318	191	40	87
Number of farms	190	131	35	44
Acres	303.23	338.53	279.69	236.56
Yield per acre (bu.)	30.20	29.87	29.74	31.46
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.47	6.46	6.42	6.52
Total product return per acre	195.32	192.95	190.95	205.14
Miscellaneous income per acre	8.88	11.08	6.51	3.26
Gross return per acre	204.20	204.03	197.46	208.40
Direct Expenses				
Seed	27.55	31.37	14.98	22.41
Fertilizer	4.11	2.91	2.67	8.65
Crop chemicals	15.01	12.68	23.34	17.79
Crop insurance	10.12	10.18	9.55	10.26
Fuel & oil	7.21	6.80	8.06	8.08
Repairs	13.52	13.15	12.46	15.27
Custom hire	2.60	2.08	3.04	3.96
Land rent	59.80	61.50	59.52	54.63
Operating interest	2.70	2.67	3.30	2.49
Miscellaneous	1.05	1.07	0.66	1.20
Total direct expenses per acre	143.67	144.39	137.57	144.74
Return over direct exp per acre	60.53	59.64	59.89	63.67
Overhead Expenses				
Custom hire	2.05	1.81	2.12	2.80
Hired labor	6.29	6.70	5.13	5.65
Machinery & bldg leases	2.41	2.48	1.56	2.66
Farm insurance	3.99	4.00	4.48	3.67
Utilities	2.03	2.02	2.30	1.90
Dues & professional fees	1.77	1.96	1.44	1.37
Interest	3.23	3.35	2.86	3.08
Mach & bldg depreciation	11.00	11.23	11.73	9.89
Miscellaneous	2.32	2.13	2.05	3.07
Total overhead expenses per acre	35.10	35.68	33.68	34.08
Total dir & ovhd expenses per acre	178.78	180.07	171.25	178.81
Net return per acre	25.42	23.96	26.21	29.59
Lbr & mgt charge per acre	16.62	16.20	18.54	16.90
Net return over lbr & mgt	8.80	7.76	7.67	12.69
Government payments	14.95	14.46	14.93	16.51
Net return with govt payments	23.75	22.22	22.60	29.19
Cost of Production				
Total direct expense per bu.	4.76	4.83	4.63	4.60
Total dir & ovhd exp per bu.	5.92	6.03	5.76	5.68
With labor & management	6.47	6.57	6.38	6.22
Total exp less govt & oth income	5.68	5.71	5.66	5.59

TABLE 13 - 15
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Soybeans on Share Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	51	12	10	10
Number of farms	34	6	7	7
Acres	140.69	132.72	100.18	200.21
Yield per acre (bu.)	32.15	29.44	30.21	37.65
Operators share of yield %	67.20	65.86	64.16	69.70
Value per bu.	6.58	6.08	6.49	6.80
Total product return per acre	142.17	117.87	125.81	178.53
Miscellaneous income per acre	1.99	-	6.01	4.12
Gross return per acre	144.16	117.87	131.83	182.65
Direct Expenses				
Seed	28.49	25.72	29.78	30.59
Fertilizer	1.97	5.78	0.57	1.67
Crop chemicals	13.32	15.00	13.73	11.66
Crop insurance	6.94	5.71	4.93	10.47
Fuel & oil	7.94	10.20	8.00	6.16
Repairs	15.71	21.53	14.14	10.16
Custom hire	1.89	0.94	2.03	4.53
Operating interest	2.31	3.11	3.30	1.26
Miscellaneous	0.44	-	0.54	0.93
Total direct expenses per acre	79.01	88.00	77.01	77.41
Return over direct exp per acre	65.15	29.87	54.82	105.24
Overhead Expenses				
Custom hire	0.78	0.47	0.21	0.52
Hired labor	6.24	9.42	4.55	7.33
Machinery & bldg leases	2.35	0.18	1.32	3.11
Farm insurance	3.48	2.95	4.31	2.72
Utilities	2.44	2.58	2.40	1.95
Dues & professional fees	1.58	1.63	1.33	1.57
Interest	3.01	3.83	3.13	2.00
Mach & bldg depreciation	15.05	19.82	11.52	12.04
Miscellaneous	2.88	5.26	2.99	1.43
Total overhead expenses per acre	37.81	46.14	31.77	32.67
Total dir & ovhd expenses per acre	116.82	134.14	108.78	110.08
Net return per acre	27.34	-16.27	23.05	72.57
Lbr & mgt charge per acre	19.09	20.88	12.80	18.38
Net return over lbr & mgt	8.25	-37.16	10.25	54.19
Government payments	10.59	10.15	10.25	11.53
Net return with govt payments	18.84	-27.01	20.49	65.72
Cost of Production				
Total direct expense per bu.	3.66	4.54	3.97	2.95
Total dir & ovhd exp per bu.	5.41	6.92	5.61	4.19
With labor & management	6.29	7.99	6.27	4.89
Total exp less govt & oth income	5.71	7.47	5.43	4.30

TABLE 13 - 16
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Soybeans, Food on Cash Rent

	Avg. Of All Farms
Number of fields	11
Number of farms	10
Acres	218.24
Yield per acre (bu.)	27.12
Operators share of yield %	100.00
Value per bu.	8.60
Total product return per acre	233.28
Miscellaneous income per acre	12.80
Gross return per acre	246.08
Direct Expenses	
Seed	7.58
Fertilizer	2.02
Crop chemicals	25.36
Crop insurance	12.05
Fuel & oil	7.76
Repairs	15.17
Custom hire	0.44
Hired labor	0.59
Land rent	64.67
Operating interest	3.20
Miscellaneous	0.05
Total direct expenses per acre	138.88
Return over direct exp per acre	107.20
Overhead Expenses	
Custom hire	0.60
Hired labor	4.93
Machinery & bldg leases	3.34
Farm insurance	4.30
Utilities	1.05
Dues & professional fees	1.16
Interest	2.80
Mach & bldg depreciation	10.68
Miscellaneous	1.36
Total overhead expenses per acre	30.21
Total dir & ovhd expenses per acre	169.09
Net return per acre	76.99
Lbr & mgt charge per acre	17.12
Net return over lbr & mgt	59.87
Government payments	13.64
Net return with govt payments	73.51
Cost of Production	
Total direct expense per bu.	5.12
Total dir & ovhd exp per bu.	6.23
With labor & management	6.87
Total exp less govt & oth income	5.89

TABLE 13 - 17
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(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	53	8	13	11
Number of farms	44	8	9	9
Acres	105.08	88.97	156.82	67.67
Yield per acre (ton)	20.72	19.67	20.18	22.12
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	39.67	37.86	40.31	40.03
Total product return per acre	821.88	744.73	813.69	885.67
Miscellaneous income per acre	23.89	2.81	33.70	21.96
Gross return per acre	845.77	747.54	847.39	907.63
Direct Expenses				
Seed	47.96	50.73	51.34	44.55
Fertilizer	27.43	24.76	20.86	29.88
Crop chemicals	128.57	143.26	126.08	116.62
Crop insurance	15.65	19.51	11.56	13.16
Fuel & oil	33.29	35.86	30.47	32.64
Repairs	67.75	81.70	67.12	58.01
Custom hire	11.71	14.90	15.19	9.47
Hired labor	23.19	19.45	27.32	17.94
Machinery & bldg leases	0.86	-	-	-
Operating interest	9.88	16.50	7.37	4.81
Miscellaneous	3.15	3.65	5.95	1.20
Total direct expenses per acre	369.45	410.32	363.26	328.29
Return over direct exp per acre	476.33	337.22	484.13	579.34
Overhead Expenses				
Custom hire	7.12	8.41	8.97	6.03
Hired labor	37.35	60.39	40.57	15.11
Machinery & bldg leases	7.12	12.41	9.42	6.08
RE & pers. property taxes	11.83	13.98	12.73	9.20
Farm insurance	5.48	5.61	4.40	6.17
Utilities	6.80	6.42	6.02	6.00
Dues & professional fees	6.64	5.19	6.73	6.70
Interest	39.77	69.01	38.45	31.56
Mach & bldg depreciation	54.33	44.20	56.77	59.09
Miscellaneous	6.51	7.60	3.57	5.81
Total overhead expenses per acre	182.94	233.22	187.62	151.75
Total dir & ovhd expenses per acre	552.39	643.54	550.89	480.04
Net return per acre	293.39	104.00	296.50	427.59
Lbr & mgt charge per acre	76.82	58.52	75.64	85.21
Net return over lbr & mgt	216.57	45.48	220.86	342.38
Government payments	14.85	15.59	13.98	16.21
Net return with govt payments	231.42	61.08	234.85	358.58
Sugar beet stock equity charge	80.44	68.57	80.55	88.50
Net Return over sugar beet stock	150.98	-7.49	154.30	270.08
Cost of Production				
Total direct expense per ton	17.83	20.86	18.00	14.84
Total dir & ovhd exp per ton	26.66	32.71	27.29	21.70
With labor & management	30.37	35.69	31.04	25.55
Total exp less govt & oth income	28.50	34.75	28.68	23.82
With sugar beet stock equity charge	32.38	38.24	32.68	27.83

TABLE 13 - 18
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Sugar Beets on Owned Land - Joint venture	
	Avg. Of All Farms
Number of fields	27
Number of farms	24
Acres	90.54
Yield per acre (ton)	21.43
Operators share of yield %	100.00
Value per ton	40.56
Total product return per acre	869.24
Miscellaneous income per acre	21.37
Gross return per acre	890.61
Direct Expenses	
Seed	44.63
Fertilizer	29.73
Crop chemicals	124.84
Crop insurance	18.60
Fuel & oil	26.29
Repairs	53.12
Custom hire	10.36
Hired labor	18.17
Stock rent (joint venture)	170.63
Operating interest	11.42
Miscellaneous	0.89
Total direct expenses per acre	508.67
Return over direct exp per acre	381.94
Overhead Expenses	
Custom hire	3.89
Hired labor	19.38
Machinery & bldg leases	14.65
RE & pers. property taxes	9.68
Farm insurance	4.13
Utilities	6.64
Dues & professional fees	5.69
Interest	48.37
Mach & bldg depreciation	49.44
Miscellaneous	10.19
Total overhead expenses per acre	172.06
Total dir & ovhd expenses per acre	680.73
Net return per acre	209.88
Lbr & mgt charge per acre	65.42
Net return over lbr & mgt	144.46
Government payments	15.36
Net return with govt payments	159.82
Cost of Production	
Total direct expense per ton	23.74
Total dir & ovhd exp per ton	31.76
With labor & management	34.82
Total exp less govt & oth income	33.10

TABLE 13 - 19
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(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	112	22	24	20
Number of farms	88	17	17	18
Acres	173.27	137.97	189.25	146.65
Yield per acre (ton)	20.48	18.17	20.43	23.31
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	40.61	39.71	40.25	40.61
Total product return per acre	831.45	721.65	822.51	946.59
Miscellaneous income per acre	9.51	19.66	9.20	3.51
Gross return per acre	840.96	741.31	831.71	950.10
Direct Expenses				
Seed	45.90	49.37	48.57	43.50
Fertilizer	27.25	24.48	23.30	28.26
Crop chemicals	124.70	126.76	120.85	116.85
Crop insurance	15.67	17.13	13.49	16.05
Fuel & oil	31.06	33.97	34.29	26.17
Repairs	72.87	82.83	65.22	52.43
Custom hire	10.37	16.00	12.92	6.54
Hired labor	22.32	23.03	18.59	12.58
Land rent	73.07	71.65	73.29	70.39
Machinery & bldg leases	1.32	-	-	0.05
Operating interest	10.51	10.56	8.57	11.92
Miscellaneous	2.48	0.75	3.83	0.53
Total direct expenses per acre	437.52	456.54	422.91	385.28
Return over direct exp per acre	403.44	284.77	408.80	564.82
Overhead Expenses				
Custom hire	8.16	7.04	13.27	2.97
Hired labor	37.25	36.07	42.96	31.58
Machinery & bldg leases	6.52	6.19	4.68	4.25
Farm insurance	5.87	6.60	5.25	5.93
Utilities	6.82	8.99	7.87	3.87
Dues & professional fees	6.47	4.56	6.37	5.65
Interest	16.04	22.69	17.10	17.68
Mach & bldg depreciation	50.53	50.35	59.68	52.34
Miscellaneous	8.30	7.38	7.98	3.99
Total overhead expenses per acre	145.96	149.87	165.17	128.26
Total dir & ovhd expenses per acre	583.48	606.40	588.07	513.54
Net return per acre	257.48	134.91	243.64	436.56
Lbr & mgt charge per acre	83.07	66.04	82.62	69.91
Net return over lbr & mgt	174.41	68.86	161.02	366.65
Government payments	14.70	16.47	13.57	15.97
Net return with govt payments	189.11	85.34	174.58	382.62
Sugar beet stock equity charge	80.66	73.83	80.71	82.19
Net Return over sugar beet stock	108.45	11.51	93.87	300.43
Cost of Production				
Total direct expense per ton	21.37	25.12	20.70	16.53
Total dir & ovhd exp per ton	28.50	33.37	28.78	22.03
With labor & management	32.55	37.00	32.83	25.03
Total exp less govt & oth income	31.37	35.01	31.71	24.20
With sugar beet stock equity charge	35.30	39.08	35.66	27.72

TABLE 13 - 20
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(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	109	22	22	24
Number of farms	76	15	15	16
Acres	197.82	223.59	199.35	168.18
Yield per acre (ton)	19.75	17.71	19.01	21.98
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	40.65	39.22	41.11	41.03
Total product return per acre	802.81	694.75	781.41	902.02
Miscellaneous income per acre	14.19	24.79	11.56	20.66
Gross return per acre	817.01	719.54	792.97	922.68
Direct Expenses				
Seed	47.76	50.85	49.05	44.07
Fertilizer	27.55	31.32	22.87	27.90
Crop chemicals	122.94	132.85	119.78	109.66
Crop insurance	16.11	16.29	14.36	16.34
Fuel & oil	30.41	27.62	30.40	28.00
Repairs	54.97	54.35	50.62	44.49
Custom hire	13.22	9.38	15.89	13.96
Hired labor	21.68	19.76	22.18	25.55
Land rent	71.78	73.97	67.11	78.12
Machinery & bldg leases	1.06	-	1.23	0.34
Stock rent (joint venture)	174.19	182.09	162.60	156.34
Operating interest	13.80	13.90	10.94	13.46
Miscellaneous	1.48	0.88	2.00	1.01
Total direct expenses per acre	596.93	613.25	569.03	559.25
Return over direct exp per acre	220.08	106.29	223.94	363.43
Overhead Expenses				
Custom hire	7.79	14.21	3.60	2.24
Hired labor	27.06	30.92	27.21	14.85
Machinery & bldg leases	13.62	20.60	13.77	10.27
Farm insurance	5.02	6.02	4.94	4.48
Utilities	5.36	4.91	5.49	6.91
Dues & professional fees	5.32	4.20	6.60	5.47
Interest	13.87	13.97	13.84	13.75
Mach & bldg depreciation	42.58	47.52	36.31	45.91
Miscellaneous	8.76	10.99	8.62	7.08
Total overhead expenses per acre	129.37	153.34	120.38	110.95
Total dir & ovhd expenses per acre	726.30	766.58	689.41	670.20
Net return per acre	90.70	-47.04	103.57	252.48
Lbr & mgt charge per acre	63.42	57.03	63.30	69.63
Net return over lbr & mgt	27.28	-104.07	40.26	182.85
Government payments	14.00	13.05	12.13	16.13
Net return with govt payments	41.28	-91.02	52.39	198.98
Cost of Production				
Total direct expense per ton	30.23	34.62	29.93	25.44
Total dir & ovhd exp per ton	36.78	43.28	36.27	30.49
With labor & management	39.99	46.50	39.60	33.65
Total exp less govt & oth income	38.56	44.36	38.35	31.98

TABLE 13 - 21
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Sunflowers on Cash Rent

	Avg. Of All Farms
Number of fields	21
Number of farms	19
Acres	178.30
Yield per acre (cwt.)	17.43
Operators share of yield %	100.00
Value per cwt.	12.71
Total product return per acre	221.58
Miscellaneous income per acre	3.54
Gross return per acre	225.12
Direct Expenses	
Seed	16.95
Fertilizer	21.35
Crop chemicals	15.48
Crop insurance	10.59
Drying fuel	0.81
Fuel & oil	8.83
Repairs	14.75
Custom hire	2.31
Land rent	58.85
Machinery & bldg leases	0.09
Operating interest	2.67
Miscellaneous	1.45
Total direct expenses per acre	154.14
Return over direct exp per acre	70.99
Overhead Expenses	
Custom hire	2.02
Hired labor	5.17
Machinery & bldg leases	3.95
Farm insurance	4.10
Utilities	2.52
Dues & professional fees	1.64
Interest	3.40
Mach & bldg depreciation	15.87
Miscellaneous	3.15
Total overhead expenses per acre	41.83
Total dir & ovhd expenses per acre	195.96
Net return per acre	29.16
Lbr & mgt charge per acre	17.87
Net return over lbr & mgt	11.29
Government payments	16.51
Net return with govt payments	27.80
Cost of Production	
Total direct expense per cwt.	8.84
Total dir & ovhd exp per cwt.	11.24
With labor & management	12.27
Total exp less govt & oth income	11.12

TABLE 13 - 22
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Sunflowers, Confectionary on Cash Rent

	Avg. Of All Farms
Number of fields	12
Number of farms	10
Acres	266.93
Yield per acre (cwt.)	13.59
Operators share of yield %	100.00
Value per cwt.	15.51
Total product return per acre	210.73
Miscellaneous income per acre	26.81
Gross return per acre	237.54
Direct Expenses	
Seed	22.16
Fertilizer	23.80
Crop chemicals	24.32
Crop insurance	8.95
Fuel & oil	9.03
Repairs	13.73
Custom hire	4.68
Land rent	64.20
Operating interest	3.44
Miscellaneous	0.22
Total direct expenses per acre	174.54
Return over direct exp per acre	63.01
Overhead Expenses	
Custom hire	2.02
Hired labor	7.79
Machinery & bldg leases	2.67
Farm insurance	3.95
Utilities	2.13
Dues & professional fees	1.62
Interest	2.78
Mach & bldg depreciation	10.89
Miscellaneous	2.19
Total overhead expenses per acre	36.06
Total dir & ovhd expenses per acre	210.59
Net return per acre	26.95
Lbr & mgt charge per acre	20.05
Net return over lbr & mgt	6.90
Government payments	15.98
Net return with govt payments	22.88
Cost of Production	
Total direct expense per cwt.	12.84
Total dir & ovhd exp per cwt.	15.50
With labor & management	16.97
Total exp less govt & oth income	13.82

TABLE 13 - 23
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Wheat, Spring on Owned Land

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	171	24	31	36
Number of farms	122	24	25	25
Acres	160.67	162.95	160.40	187.98
Yield per acre (bu.)	60.69	53.82	60.22	65.59
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.68	3.62	3.70	3.75
Total product return per acre	223.12	195.01	222.81	246.28
Miscellaneous income per acre	1.67	3.46	0.02	1.16
Gross return per acre	224.79	198.47	222.83	247.44
Direct Expenses				
Seed	11.59	12.40	11.06	12.09
Fertilizer	28.50	30.05	28.24	26.13
Crop chemicals	22.97	23.58	22.45	19.74
Crop insurance	8.60	8.45	7.58	9.70
Fuel & oil	6.60	6.39	6.45	6.76
Repairs	12.91	12.28	13.36	11.33
Custom hire	3.01	2.35	1.71	3.33
Hired labor	0.27	1.43	0.15	0.17
Operating interest	2.32	3.36	2.16	1.61
Miscellaneous	0.80	0.96	0.91	0.54
Total direct expenses per acre	97.57	101.24	94.07	91.40
Return over direct exp per acre	127.22	97.22	128.76	156.04
Overhead Expenses				
Custom hire	1.75	1.35	1.15	2.64
Hired labor	6.35	5.57	5.46	5.41
Machinery & bldg leases	1.84	2.86	1.00	2.13
RE & pers. property taxes	9.54	11.39	11.05	8.29
Farm insurance	4.60	5.84	4.02	4.86
Utilities	1.76	2.31	1.72	1.50
Dues & professional fees	1.38	1.52	1.45	1.03
Interest	27.62	49.33	34.03	15.14
Mach & bldg depreciation	10.59	9.38	10.62	12.11
Miscellaneous	2.28	4.05	2.23	1.46
Total overhead expenses per acre	67.71	93.62	72.71	54.58
Total dir & ovhd expenses per acre	165.28	194.86	166.78	145.98
Net return per acre	59.50	3.60	56.05	101.46
Lbr & mgt charge per acre	14.80	15.42	16.83	13.93
Net return over lbr & mgt	44.70	-11.81	39.22	87.53
Government payments	15.37	15.72	14.91	15.06
Net return with govt payments	60.07	3.90	54.13	102.59
Cost of Production				
Total direct expense per bu.	1.61	1.88	1.56	1.39
Total dir & ovhd exp per bu.	2.72	3.62	2.77	2.23
With labor & management	2.97	3.91	3.05	2.44
Total exp less govt & oth income	2.69	3.55	2.80	2.19

TABLE 13 - 24
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Wheat, Spring on Cash Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	269	44	61	61
Number of farms	180	36	35	36
Acres	344.30	306.81	336.70	261.20
Yield per acre (bu.)	60.89	53.64	61.71	65.66
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	3.67	3.62	3.65	3.80
Total product return per acre	223.55	193.97	225.13	249.72
Miscellaneous income per acre	1.48	0.26	0.33	1.91
Gross return per acre	225.03	194.23	225.46	251.64
Direct Expenses				
Seed	12.04	12.28	13.48	11.36
Fertilizer	28.82	30.65	29.06	27.04
Crop chemicals	23.10	25.94	27.40	15.27
Crop insurance	8.57	8.93	9.33	8.90
Fuel & oil	6.21	6.84	6.07	5.85
Repairs	11.77	12.49	12.74	9.94
Custom hire	3.39	1.82	4.61	4.47
Hired labor	0.50	1.15	0.65	0.12
Land rent	61.41	65.10	57.65	58.43
Machinery & bldg leases	0.22	0.88	-	0.09
Operating interest	2.35	3.00	2.32	1.53
Miscellaneous	0.76	0.02	0.71	0.36
Total direct expenses per acre	159.15	169.09	164.01	143.34
Return over direct exp per acre	65.88	25.14	61.45	108.29
Overhead Expenses				
Custom hire	2.13	1.82	2.59	1.56
Hired labor	5.87	6.39	4.14	7.04
Machinery & bldg leases	2.00	1.22	3.35	2.18
Farm insurance	4.31	5.94	4.24	3.54
Utilities	1.76	2.18	1.47	1.58
Dues & professional fees	1.51	1.89	1.42	1.23
Interest	2.92	3.36	2.51	2.45
Mach & bldg depreciation	9.74	9.55	9.29	9.79
Miscellaneous	2.06	2.25	1.22	1.51
Total overhead expenses per acre	32.30	34.61	30.22	30.88
Total dir & ovhd expenses per acre	191.44	203.70	194.23	174.22
Net return per acre	33.58	-9.47	31.23	77.42
Lbr & mgt charge per acre	15.04	15.13	15.40	13.09
Net return over lbr & mgt	18.55	-24.60	15.83	64.33
Government payments	15.07	15.45	15.32	14.18
Net return with govt payments	33.62	-9.15	31.14	78.51
Cost of Production				
Total direct expense per bu.	2.61	3.15	2.66	2.18
Total dir & ovhd exp per bu.	3.14	3.80	3.15	2.65
With labor & management	3.39	4.08	3.40	2.85
Total exp less govt & oth income	3.12	3.79	3.14	2.61

TABLE 13 - 25
Crop Enterprise Analysis
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Net Return)

Wheat, Spring on Share Rent

	Avg. Of All Farms	Low 20%	40 - 60%	High 20%
Number of fields	58	11	9	9
Number of farms	32	6	7	7
Acres	125.18	74.40	166.58	221.81
Yield per acre (bu.)	60.34	54.05	62.96	63.46
Operators share of yield %	66.24	66.17	65.68	70.08
Value per bu.	3.73	3.66	3.69	3.88
Total product return per acre	149.05	131.05	152.77	172.65
Miscellaneous income per acre	3.29	-	3.55	3.16
Gross return per acre	152.34	131.05	156.32	175.81
Direct Expenses				
Seed	11.05	10.62	12.63	11.15
Fertilizer	28.30	27.43	34.38	28.37
Crop chemicals	13.99	18.16	15.99	7.27
Crop insurance	5.50	3.90	4.69	9.12
Fuel & oil	6.09	8.46	6.25	5.33
Repairs	12.05	16.86	12.47	9.32
Custom hire	2.81	7.96	1.28	4.10
Operating interest	1.58	2.71	2.26	0.80
Miscellaneous	0.58	-	0.48	0.87
Total direct expenses per acre	81.95	96.11	90.42	76.33
Return over direct exp per acre	70.39	34.94	65.90	99.48
Overhead Expenses				
Custom hire	1.37	0.30	0.65	0.07
Hired labor	5.73	5.74	5.85	7.52
Machinery & bldg leases	2.58	1.35	0.18	4.18
Farm insurance	3.84	2.53	3.15	3.21
Utilities	2.21	1.91	3.13	2.07
Dues & professional fees	1.66	1.79	1.63	1.66
Interest	2.35	3.76	3.03	1.29
Mach & bldg depreciation	11.43	15.29	13.08	10.47
Miscellaneous	2.41	3.64	4.70	1.68
Total overhead expenses per acre	33.58	36.31	35.41	32.17
Total dir & ovhd expenses per acre	115.53	132.42	125.83	108.50
Net return per acre	36.81	-1.38	30.48	67.31
Lbr & mgt charge per acre	15.42	15.14	15.87	14.37
Net return over lbr & mgt	21.38	-16.51	14.61	52.94
Government payments	10.53	9.43	9.95	11.69
Net return with govt payments	31.91	-7.09	24.56	64.63
Cost of Production				
Total direct expense per bu.	2.05	2.69	2.19	1.72
Total dir & ovhd exp per bu.	2.89	3.70	3.04	2.44
With labor & management	3.28	4.13	3.43	2.76
Total exp less govt & oth income	2.93	3.86	3.10	2.43

TABLE 14 - 1
Size of Farm Report
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Gross Farm Income)

	Avg. Of All Farms	50,001 - 100,000	100,001 - 250,000	250,001 - 500,000	500,001 - 1,000,000	Over 1,000,000
Number of farms	241	6	51	75	77	30
Income Statement						
Gross cash farm income	544,816	82,188	184,026	369,538	701,752	1,319,733
Total cash farm expense	433,152	68,412	148,433	292,638	546,538	1,077,294
Net cash farm income	111,664	13,776	35,593	76,901	155,214	242,440
Inventory change	37,055	17,650	18,343	28,940	39,577	88,704
Depreciation and capital adjust	-26,226	-6,439	-9,631	-20,163	-32,887	-58,205
Net farm income	122,493	24,987	44,304	85,678	161,903	272,939
Profitability (cost)						
Labor and management earnings	85,327	17,604	33,311	59,761	111,197	189,803
Rate of return on assets	9.4 %	8.3 %	8.5 %	9.4 %	9.8 %	9.1 %
Rate of return on equity	12.8 %	12.2 %	13.3 %	12.5 %	13.3 %	12.4 %
Operating profit margin	18.5 %	24.9 %	16.7 %	18.4 %	19.6 %	17.4 %
Asset turnover rate	50.7 %	33.5 %	50.9 %	51.1 %	49.7 %	52.1 %
Liquidity						
Ending current ratio	1.56	1.28	1.44	1.55	1.77	1.37
Ending working capital	101,444	11,345	38,852	86,108	149,193	147,414
End working capital to gross inc	18.6 %	13.8 %	21.1 %	23.3 %	21.3 %	11.2 %
Term debt coverage ratio	196.4 %	177.5 %	144.8 %	197.2 %	211.0 %	194.7 %
Expense as a percent of income	74.0 %	68.5 %	73.0 %	73.2 %	73.1 %	76.1 %
Interest as a percent of income	4.4 %	9.8 %	5.0 %	4.8 %	4.0 %	4.5 %
Solvency (market)						
Number of sole proprietors	211	6	51	73	61	18
Ending farm assets	1,187,646	338,701	480,179	942,611	1,692,455	2,870,709
Ending farm liabilities	587,324	191,883	266,811	431,341	769,001	1,699,257
Ending total assets	1,368,913	406,256	595,956	1,120,554	1,901,624	3,208,048
Ending total liabilities	634,756	222,823	302,685	469,511	822,957	1,801,287
Ending net worth	734,157	183,433	293,272	651,043	1,078,667	1,406,760
Net worth change	88,447	29,534	40,516	77,275	124,717	174,359
Ending farm debt to asset ratio	49 %	57 %	56 %	46 %	45 %	59 %
Beg total debt to asset ratio	48 %	55 %	51 %	44 %	45 %	58 %
End total debt to asset ratio	46 %	55 %	51 %	42 %	43 %	56 %
Nonfarm Information						
Net nonfarm income	16,177	32,431	22,074	18,774	9,225	12,289
Crop Acres						
Total acres owned	359	218	163	322	465	557
Total crop acres	1,701	402	822	1,352	2,106	3,391
Total crop acres owned	327	161	145	282	420	561
Total crop acres cash rented	1,283	212	558	993	1,573	2,789
Total crop acres share rented	91	29	119	78	113	40

TABLE 14 - 2
Age of Operator Report, 2003
Minnesota and North Dakota Farm Business Mgmt. Education
Red River Valley, 2003
(Farms Sorted By Age Of Operator)

	Avg. Of All Farms	Less than 31	31 - 40	41 - 50	51 - 60	Over 60
Number of farms	241	36	41	104	48	12
Income Statement						
Gross cash farm income	544,816	325,943	533,752	624,294	521,218	644,833
Total cash farm expense	433,152	260,194	435,328	495,899	406,913	505,752
Net cash farm income	111,664	65,749	98,424	128,395	114,305	139,082
Inventory change	37,055	26,404	36,989	35,586	41,234	65,247
Depreciation and capital adjust	-26,226	-13,158	-22,466	-29,791	-28,731	-37,350
Net farm income	122,493	78,995	112,947	134,189	126,809	166,979
Profitability (cost)						
Labor and management earnings	85,327	65,924	84,559	92,872	79,241	105,127
Rate of return on assets	9.4 %	13.5 %	10.0 %	9.2 %	8.4 %	9.1 %
Rate of return on equity	12.8 %	22.5 %	15.2 %	12.7 %	10.5 %	11.3 %
Operating profit margin	18.5 %	17.6 %	17.5 %	18.1 %	19.7 %	22.3 %
Asset turnover rate	50.7 %	76.4 %	57.1 %	50.6 %	42.9 %	41.1 %
Liquidity						
Ending current ratio	1.56	1.48	1.43	1.54	1.87	1.39
Ending working capital	101,444	51,015	77,440	122,081	126,110	57,215
End working capital to gross inc	18.6 %	15.7 %	14.5 %	19.6 %	24.2 %	8.9 %
Term debt coverage ratio	196.4 %	228.6 %	174.5 %	187.4 %	230.2 %	198.1 %
Expense as a percent of income	74.0 %	73.1 %	75.7 %	74.9 %	71.5 %	70.8 %
Interest as a percent of income	4.4 %	3.3 %	4.4 %	4.5 %	4.2 %	5.6 %
Solvency (market)						
Number of sole proprietors	211	35	34	91	42	9
Ending farm assets	1,187,646	491,480	1,062,406	1,418,996	1,321,569	1,403,901
Ending farm liabilities	587,324	302,621	559,041	723,577	529,740	692,412
Ending total assets	1,368,913	574,895	1,249,444	1,613,897	1,553,755	1,568,436
Ending total liabilities	634,756	354,019	626,839	768,540	563,587	735,842
Ending net worth	734,157	220,877	622,605	845,357	990,168	832,594
Net worth change	88,447	57,336	98,443	89,057	103,469	95,393
Ending farm debt to asset ratio	49 %	62 %	53 %	51 %	40 %	49 %
Beg total debt to asset ratio	48 %	64 %	52 %	49 %	38 %	51 %
End total debt to asset ratio	46 %	62 %	50 %	48 %	36 %	47 %
Nonfarm Information						
Net nonfarm income	16,177	17,733	12,668	17,461	19,202	263
Crop Acres						
Total acres owned	359	103	270	401	463	649
Total crop acres	1,701	963	1,756	1,908	1,685	1,995
Total crop acres owned	327	75	263	375	398	604
Total crop acres cash rented	1,283	851	1,402	1,436	1,158	1,337
Total crop acres share rented	91	37	91	97	129	54