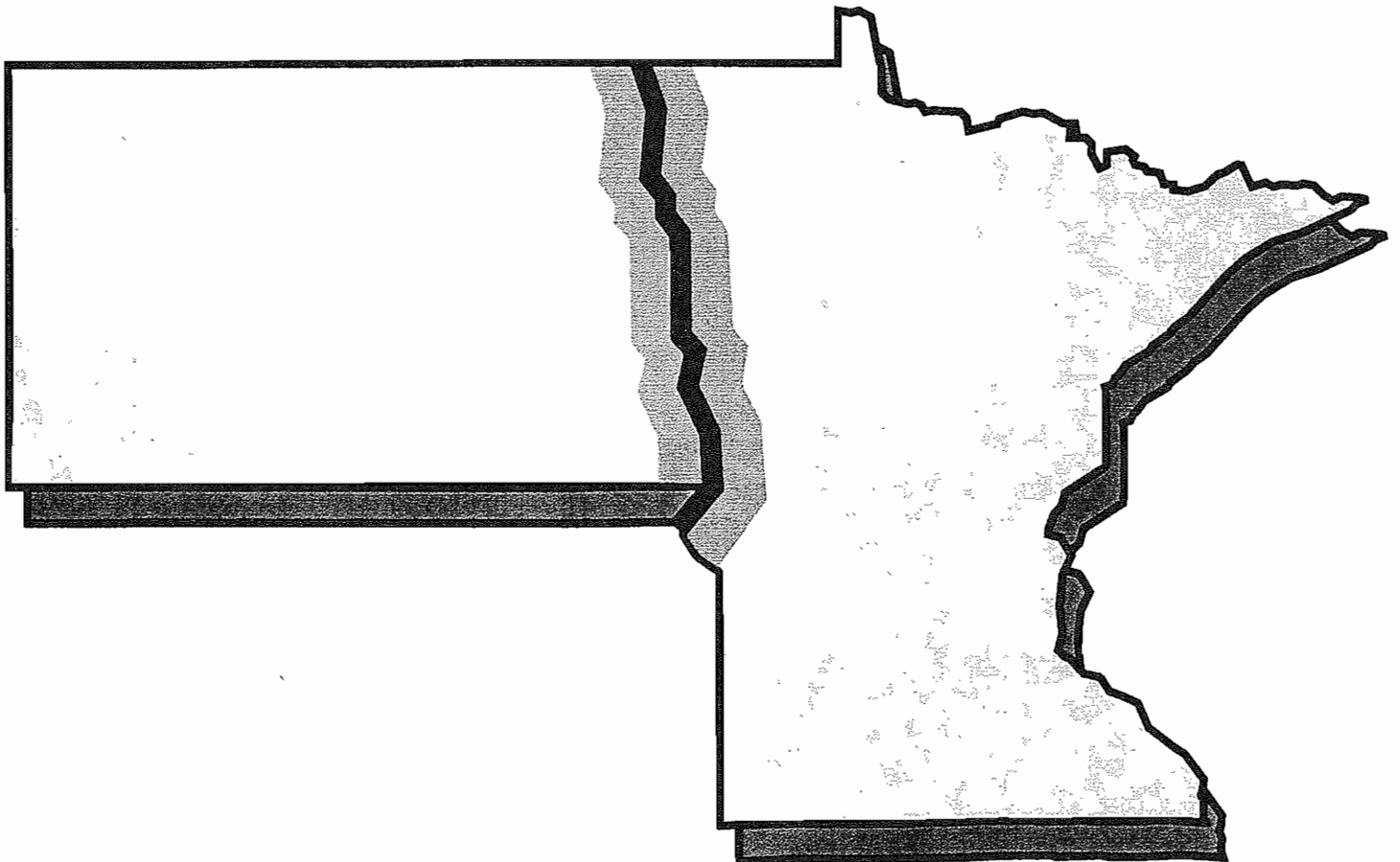


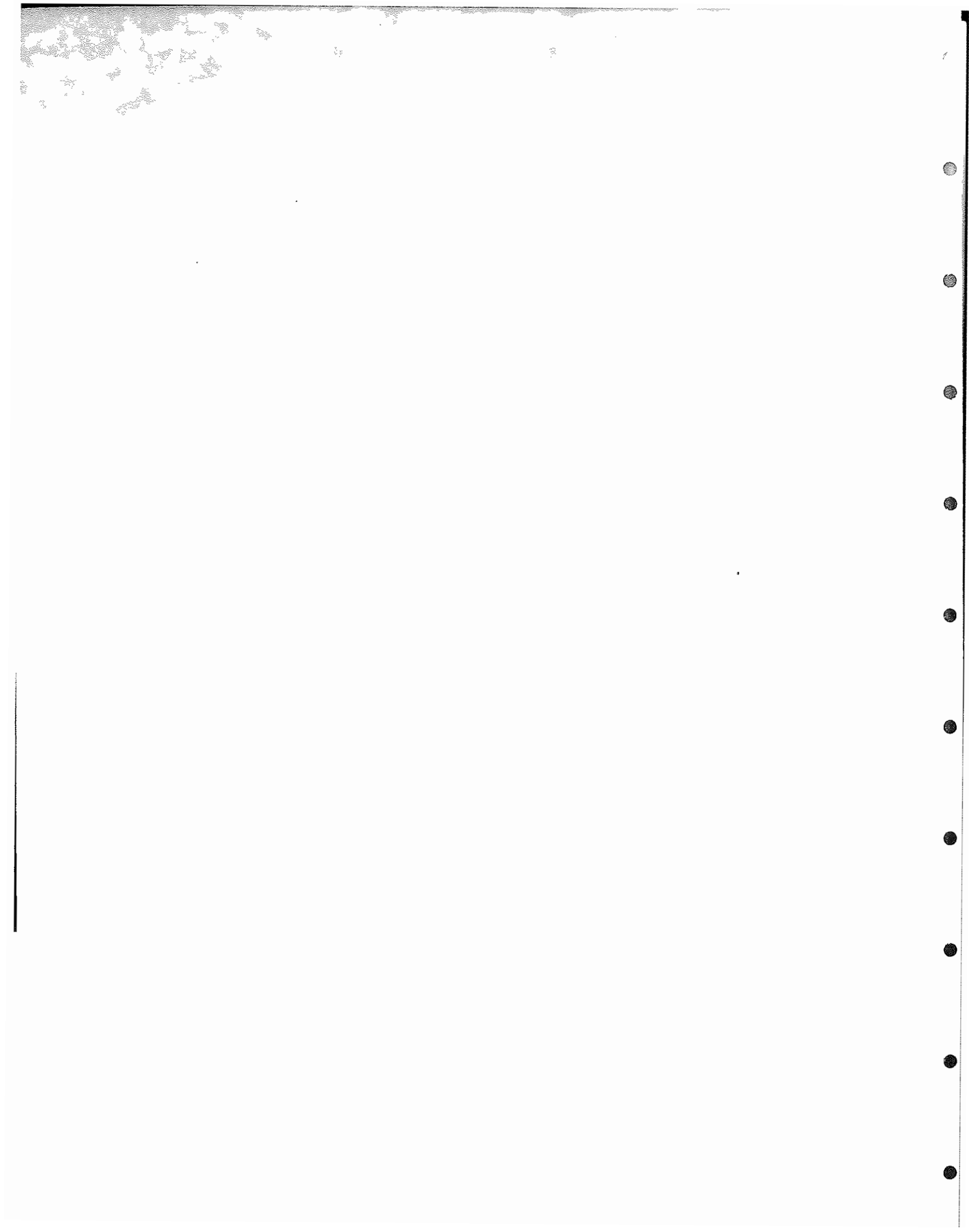
North Dakota
Farm and Ranch
Business Management
Education



Minnesota
Farm Business
Management
Education

1999 Red River Valley Report





**ND STATE BOARD FOR VOCATIONAL & TECHNICAL
EDUCATION BOARD MEMBERS**

Dr. Charles Brickner, Chairperson	Carrington
Mr. Darrel Remington, Vice Chairperson	Belfield
Ms. Betsy Dalrymple	Casselton
Ms. Mary Beth Ekeren	Enderlin
Ms. Jennifer Gladden	Bismarck
Mr. Jerry Isaak	Bismarck
Mr. Julian Bjornson	Grafton
Dr. Wayne Sanstead	Bismarck
Ms. Rita Wilhelmi	Stanley

**MINNESOTA STATE COLLEGES AND UNIVERSITIES
BOARD OF TRUSTEES**

Honorable Andrew Boss	Saint Paul
Honorable Nancy Brataas	Rochester
Honorable Kathleen Caffey	Loretto
Honorable Brent Calhoun	Little Falls
Honorable Mary Choate	Bloomington
Honorable Daniel G. Coborn	Saint Cloud
Honorable Dennis Dotson	Mankato
Honorable David Erickson	Mahtomedi
Honorable Robert Erickson	Bloomington
Honorable Christine Fritsche	Marshall
Honorable Jim Luoma	Cohasset
Honorable Joann Splonskowski	Rochert
Honorable Michael Vekich	Saint Louis Park
Honorable James Wafler	Little Canada

<

<

<

<

<

<

<

<

Minnesota Farm Business Management Education
and
North Dakota Farm Business Management Education

RED RIVER VALLEY AVERAGES
1999 ANNUAL REPORT

ACKNOWLEDGEMENTS

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

<u>North Dakota</u>	<u>Instructor</u>
Kindred High School	Ron Smithberg
Wahpeton (NDSCS)	Keith Torgerson
<u>Minnesota</u>	
NCTC-Barnesville	Sheldon Schmeiss
NCTC-East Grand Forks	Ron Dvergsten
NCTC-Fergus Falls	Rudy Hasbargen
NCTC-Hallock	Chad Anvinson
NCTC-Hawley	Dennis Olsen
NCTC-Mahnomen/Ulen	Mike Lockhart
NCTC-Moorhead	Rick Morgan
	Greg Tullis
NCTC-Red Lake Falls	Greg Kalinoski
NCTC-Thief River Falls	Danie Packard
	Greg Dvergsten

This report was made possible by the farm families who cooperated with their farm management instructors in getting the farm records for 1999 closed out on a timely basis. The farm management instructors cited above generated Finpack year-end farm analyses for 1999. Andrew Swenson, NDSU Extension Service, databased the Finpack analyses of farms geographically located within the Red River Valley and generated the comparative tables for this report.

A special acknowledgement is due Robert E. Bollesen, Dean of Management Education, 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 second annual Red River Valley Report.

1999 Red River Valley Report
Minnesota and North Dakota Farm Business Management Education

TABLE OF CONTENTS

Introduction	1
Explanatory Notes for the Farm Operators' Reports	2
Financial Guideline Measures	7
Five-Year Trend of Financial Measures	10
Table 1 - Farm Income Statement	11
Table 2 - Inventory Changes	13
Table 3 - Depreciation and Other Capital Adjustments	14
Table 4 - Profitability and Liquidity Analysis	15
Table 5 - Balance Sheet (Cost)	16
Table 6 - Balance Sheet (Market)	17
Table 7 - Statement of Cash Flows	18
Table 8 - Financial Guidelines Measures	19
Table 9 - Crop Production and Marketing Summary	20
Table 10 - Household and Personal Expenses	21
Table 11 - Operator Information, Nonfarm Income	22
Explanatory Notes for Crop Tables	23
Five Year Crop History of Yields and Cost of Production	24
Table 12 - 1 - Barley on Owned Land	25
Table 12 - 2 - Barley on Cash Rented Land	26
Table 12 - 3 - Navy Beans on Owned Land	27
Table 12 - 4 - Navy Beans on Cash Rented Land	28
Table 12 - 5 - Pinto Beans on Owned Land	29
Table 12 - 6 - Pinto Beans on Cash Rented Land	30
Table 12 - 7 - Canola on Cash Rented Land	31
Table 12 - 8 - Corn on Owned Land	32
Table 12 - 9 - Corn on Cash Rented Land	33
Table 12 - 10 - Corn on Share Rented Land	34
Table 12 - 11 - Alfalfa Hay on Owned Land	35
Table 12 - 12 - Alfalfa Hay on Cash Rented Land	36
Table 12 - 13 - Soybeans on Owned Land	37
Table 12 - 14 - Soybeans on Cash Rented Land	38
Table 12 - 15 - Soybeans on Share Rented Land	39
Table 12 - 16 - Sugar Beets on Owned Land	40
Table 12 - 17 - Sugar Beets on Owned Land-Joint Venture	41
Table 12 - 18 - Sugar Beets on Cash Rented Land	42
Table 12 - 19 - Sugar Beets on Cash Rented-Joint Venture	43
Table 12 - 20 - Sunflowers on Owned Land	44
Table 12 - 21 - Sunflowers on Cash Rented Land	45
Table 12 - 22 - Confectionery Sunflowers on Owned Land	46
Table 12 - 23 - Confectionery Sunflowers on Cash Rented Land	47
Table 12 - 24 - Spring Wheat on Owned Land	48
Table 12 - 25 - Spring Wheat on Cash Rented Land	49
Table 12 - 26 - Spring Wheat on Share Rented Land	50
Table 13 - 1 - Size Of Farm Report	51
Table 13 - 2 - Type Of Farm Report	52
Table 13 - 3 - Age Of Operator Report	53

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 11 present farm operator information. The table 12 series provide performance information on crop enterprises. Lastly, tables 13-1, 13-2 and 13-3 compares the analysis of farms sorted by total cash farm income, type of farm based on major crop and livestock enterprises, and by age of farm operator, respectively.

The 1999 Red River Valley Report is based upon data generated by the Finan 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 the FINPACK Center located at North Dakota State University, where the comparison tables were generated.

You may contact Robert E. Bollesen, Northland 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 4 and 7 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 5 and 6, 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 programs with the crop value 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 its entire value would be treated as 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 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. "Government Payments" refers to all farm government payments, including loan deficiency payments and disaster payments, but not including CRP payments.

The second section of Table 1 lists cash expenses. "Labor" includes only labor hired. "Interest" includes only interest actually paid. No opportunity charges on farm equity capital or unpaid labor are included.

The difference between "Gross Cash Farm Income" and "Total Cash Expenses" is the "Net Cash Farm Income." This is net farm income on a cash basis.

The last two sections of Table 1 deal with the non-cash changes in the farm business. The "Inventory Changes" and "Depreciation and Other Capital Adjustments" sections are used to convert the cash income statement (Net Cash Farm Income) derived from the first two sections into an accrual income statement. The "bottom line," labeled "Net farm Income," represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). In other words, it represents the return to all of the resources which are owned by the farm family and hence, not purchased or paid a wage. However, it does not include any debt forgiveness or asset repossessions.

Table 2. Inventory Changes

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

Table 3. Depreciation and Other Capital Adjustments

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

Table 4. Profitability and Liquidity Analysis

Various measures of performance are calculated for the farms in this report. These include measures of profitability and liquidity. (Solvency measures are in Table 5 and 6.) In Tables 1 through 3, no opportunity costs are used. In Table 4, opportunity costs for labor, capital, management are used. The measures and their components are described below.

Profitability

"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 \$20,000 per full time operator plus 5% of gross sales greater than \$200,000 was normally used.

"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.

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 5 and 6. Balance Sheet

The beginning and ending net worth statements and solvency measures are presented for sole proprietors only in Tables 5 and 6. 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 5, 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 6, the intermediate and long term assets are listed at market value, and deferred income tax liabilities are estimated.

Table 7. Statement of Cash Flows

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

Table 8. Financial Guidelines 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 9. 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 10. Household and Personal Expenses

For those farms that keep records, the household and personal expenses are summarized in Table 10. 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 7 presents calculated family living and includes all farms. Income tax paid is also shown on table 7 and includes all farms.

Table 11. Operator Information, Nonfarm Summary

Table 11 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.

Table 13-1. Size of Farm Report

Table 13-1 sorts farms according to total cash farm income. Each column, representing a range of cash farm income, gives profitability, liquidity, and solvency analysis as well as family living expense and farm acreage information. A study of each column reveals the number of farms and the various financial characteristics of each group.

Table 13-2. Type of Farm Report

Table 13-2 sorts farms according to type of farm. Each column represents a type of crop or livestock farm or combination of crop and livestock enterprises. Farms with 70% or more of total farm sales from the same enterprise are grouped together. A study of this table reveals the comparative profitability of each farm type.

Table 13-3. Age of Operator Report

Table 13-3 sorts farms according to age of operator. Each column, representing a range of age, gives profitability, liquidity, and solvency analysis as well as family living expense and farm acreage information. A study of each column reveals the number of farms and the various financial characteristics of each group.

Financial Guideline Measures

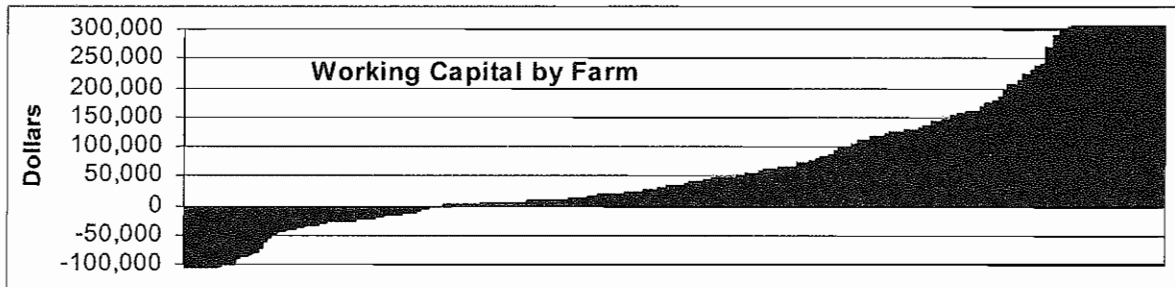
The Farm Financial Standards Task Force recommended the use of sixteen financial measures to evaluate a farm's financial position and financial performance. These measures are grouped by Liquidity, Solvency, Profitability, Repayment Capacity and Efficiency.

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.

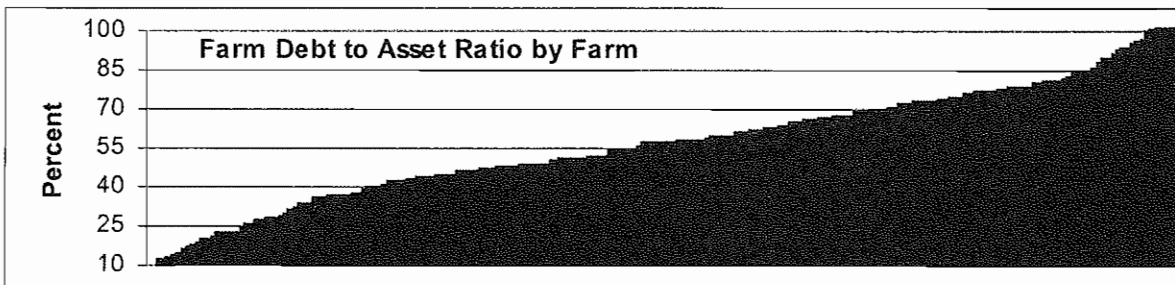
Working Capital: Working capital shows the dollar amount that current assets can or can not cover current liabilities. It approximates the amount of capital available to purchase crop and livestock inputs and equipment necessary to produce farm products. The amount of working capital considered adequate 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 which have debt against them. A higher ratio is considered an indicator of greater financial risk.



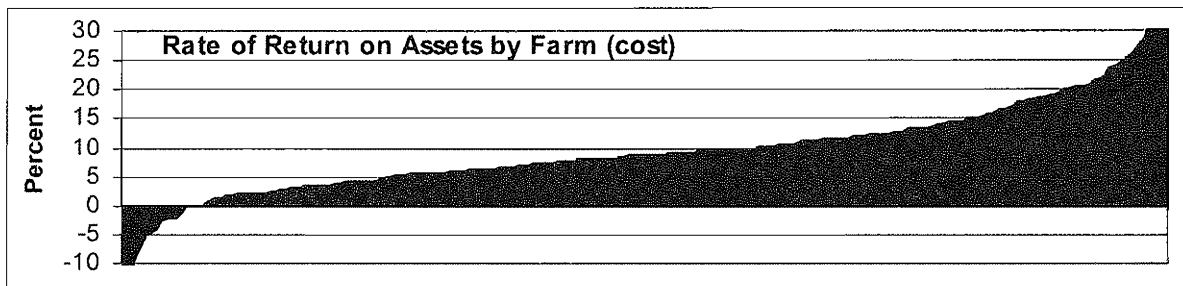
Farm Equity To Asset Ratio: The farm equity to asset ratio measures the farm equity relative to the value of the farm assets. It measures the proportion of the farm assets financed by the owner's equity whereas the debt to asset ratio measured the proportion of farm assets financed by debt.

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.

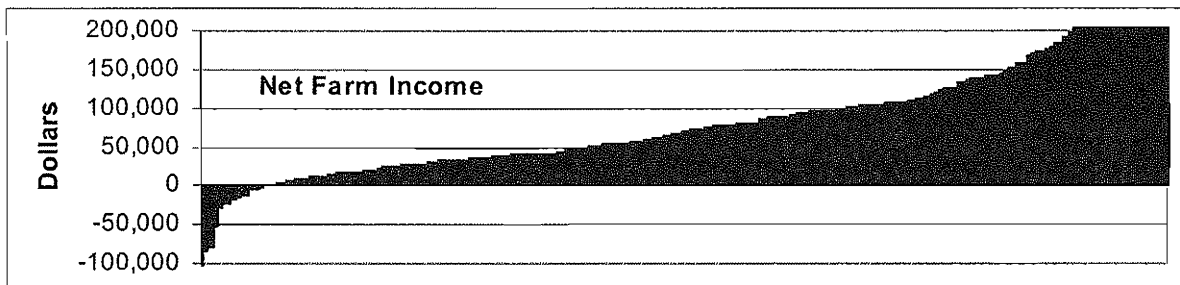
Rate of Return on Assets: Rate of return on assets is, in effect, the interest rate your farm earned in the past year on all money invested in the business. If assets are valued at market value, the rate of return on investment can be looked at as the “opportunity cost” of investing money in the farm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



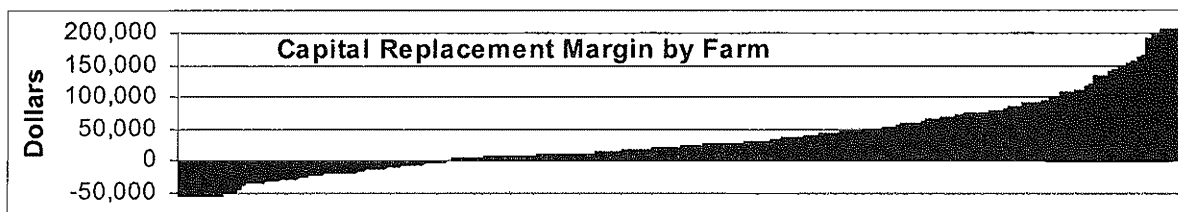
Operating Profit Margin: The operating profit margin is a measure of the profit margin from the employment of assets. It measures how effectively you are employing assets relative to the value of output produced. Low prices, high operating expenses, or production problems are all possible causes of a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

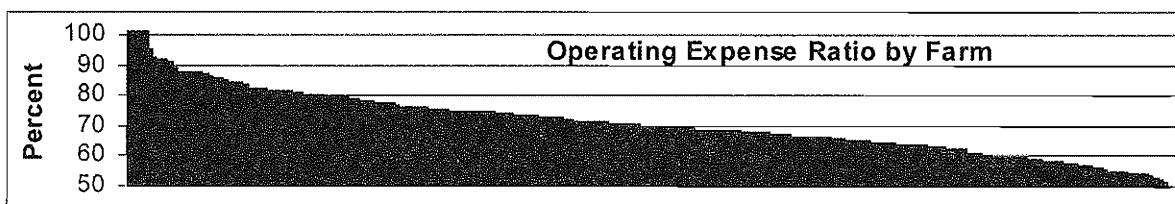


Efficiency

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.

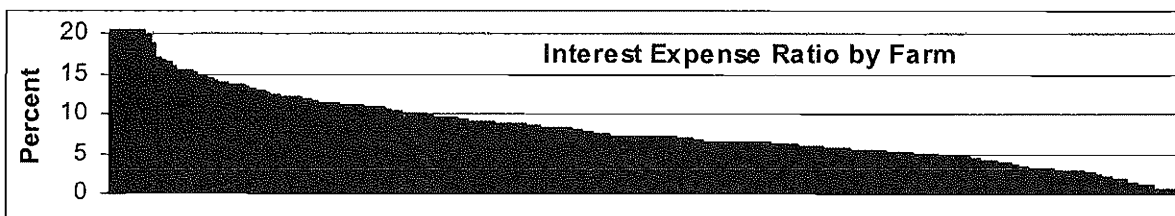
Asset Turnover: Asset turnover is a measure of how efficiently assets are used in the business. A farm with good operating profit margin and asset turnover will show a strong rate of return on farm assets. If operating profit margin is low, the asset turnover rate must be strong, or vice versa, to maintain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

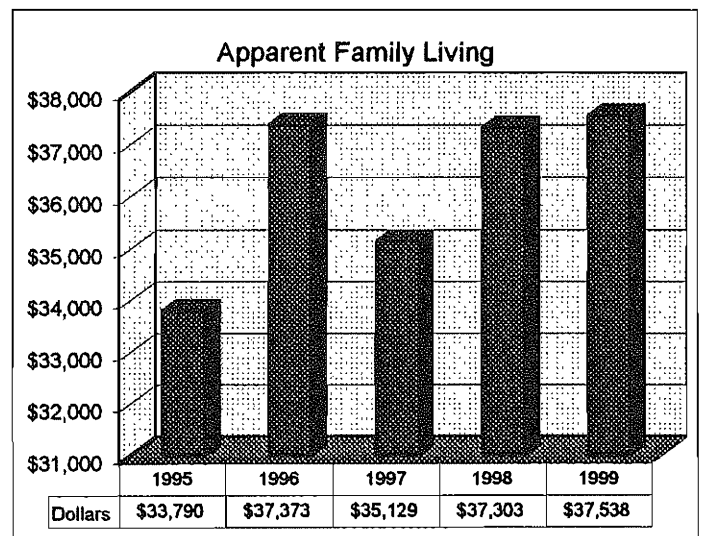
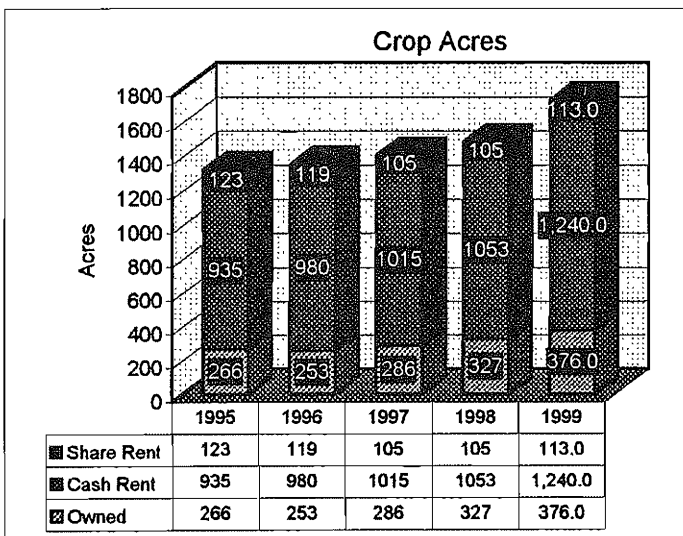
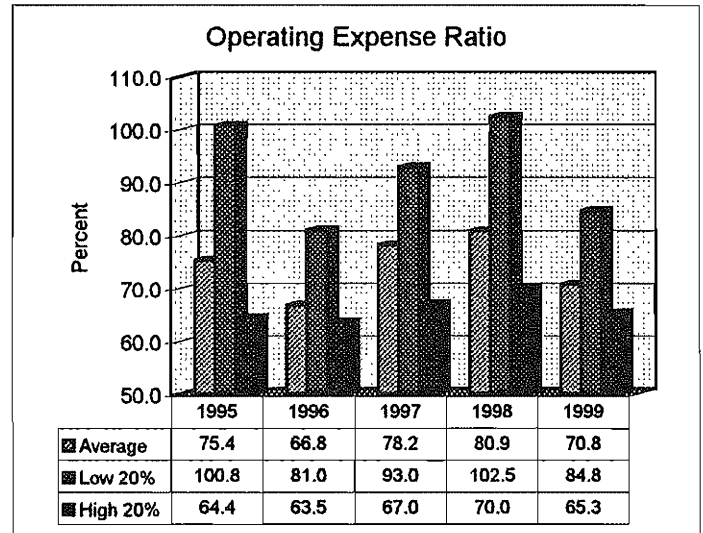
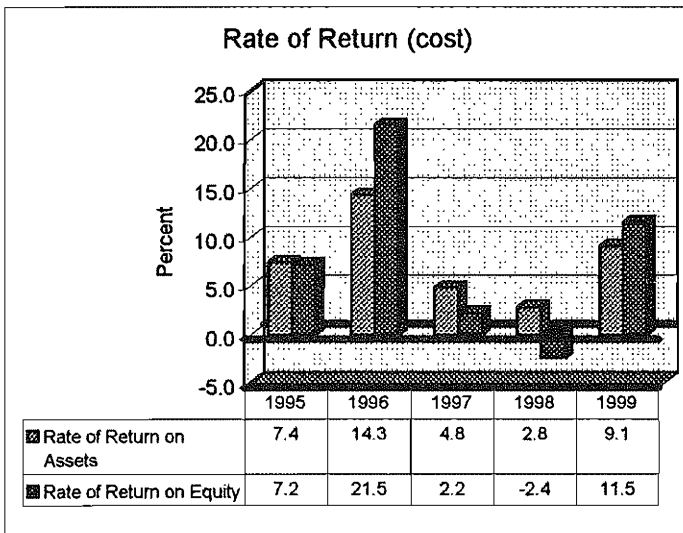
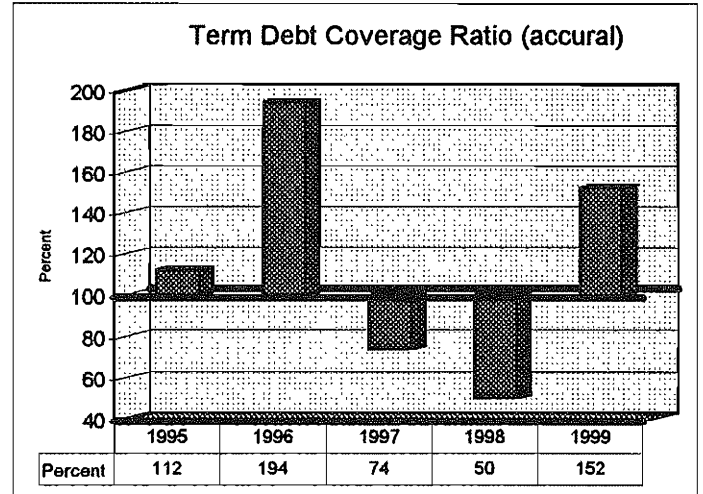
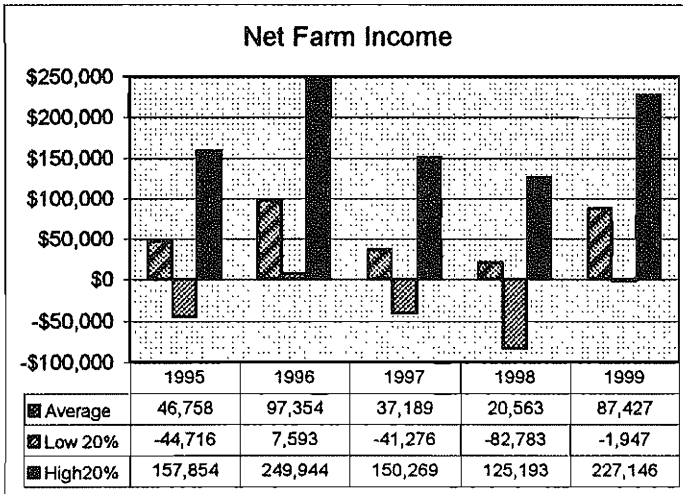


TABLE - 1
 FARM INCOME STATEMENT, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	211	42	42
CASH FARM INCOME			
Barley	5849	2916	11090
Malting Barley	400	391	1618
Black Turtle Beans	493	-	2208
Navy Beans	3501	2946	4970
Pinto Beans	4355	169	9175
Small Red Beans	156	-	786
Canola	1724	1235	3462
Corn	22134	10698	40546
Flax	218	66	851
Alfalfa Hay	897	688	1348
Oats	104	9	-
Potatoes	5977	3296	19814
Seed Potatoes	1574	-	6939
Soybeans	69853	49485	115162
Straw	1226	133	5612
Sugar Beets	118744	54756	214969
Sunflowers	3702	3243	7596
Confectionary Sunflowers	1256	491	3593
Durum Wheat	267	-	1146
Spring Wheat	72296	54056	118954
Winter Wheat	395	81	-
Other crops	645	5	411
Beef Calves	266	-	1334
Background Beef	236	-	-
Finish Beef Calves	1273	68	316
Finish Yrlg Steers	414	-	-
Raised Hogs	2011	-	10103
Finish Feeder Pigs	61	-	-
Weaning to Finish	273	-	-
Cull breeding livestock	218	-	1094
Misc. livestock income	487	156	1197
CRP payments	768	277	2166
Government payments	91375	62291	152716
Custom work income	6675	1718	6919
Patronage dividends, cash	4894	1886	7854
Insurance income	29074	17587	52453
Cash from hedging accts	383	38	943
Other farm income	13768	5575	17420
Gross Cash Farm Income	467944	274260	824767

TABLE - 1
 FARM INCOME STATEMENT, 1999 (Continued)
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	211	42	42
CASH FARM EXPENSE			
Seed	25693	17610	39741
Fertilizer	40026	24259	68425
Crop chemicals	58949	38595	106701
Crop insurance	11784	8309	22487
Drying fuel	669	326	1066
Irrigation energy	43	-	-
Crop marketing	3554	2056	5698
Crop miscellaneous	15415	5518	18996
Feeder livestock purchase	1452	661	1038
Livestock expenses	1694	3	5488
Interest	38289	25872	59659
Fuel & oil	14268	9117	23168
Repairs	27561	17867	39190
Custom hire	12755	8343	24192
Hired labor	21462	7718	43745
Land rent	83389	63665	136010
Machinery & bldg leases	7499	3706	15483
Real estate taxes	5473	3223	8961
Farm insurance	5992	3165	9533
Utilities	4476	2532	7678
Dues & professional fees	3148	2160	5824
Hedging account deposits	1586	901	5313
Miscellaneous	9778	8312	20532
Total cash expense	394956	253920	668928
Net cash farm income	72988	20340	155840
INVENTORY CHANGES			
Crops and feed	17143	-20821	57261
Market livestock	521	727	1035
Accounts receivable	7889	3458	25706
Prepaid expenses and supplies	6623	2631	10938
Accounts payable	937	6384	656
Total inventory change	33113	-7620	95596
Net operating profit	106101	12720	251436
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS			
Breeding livestock	155	-457	1253
Machinery and equipment	-21933	-14302	-36666
Buildings and improvements	-747	-546	-1373
Other farm capital	3475	639	10702
Total depr. and other capital adj	-19049	-14667	-26085
Net farm income	87052	-1947	225351

TABLE - 2
 INVENTORY CHANGES, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	211	42	42
Net cash farm income	72988	20340	155840
CROPS AND FEED			
Ending inventory	176842	85386	366170
Beginning inventory	159699	106207	308909
Inventory change	17143	-20821	57261
MARKET LIVESTOCK			
Ending inventory	3716	819	5916
Beginning inventory	3194	91	4881
Inventory change	521	727	1035
ACCTS RECEIVABLE & OTHER CURRENT ASSETS			
Ending inventory	46327	13077	96238
Beginning inventory	38438	9619	70531
Inventory change	7889	3458	25706
PREPAID EXPENSES AND SUPPLIES			
Ending inventory	27088	10741	46024
Beginning inventory	20465	8110	35086
Inventory change	6623	2631	10938
ACCOUNTS PAYABLE			
Beginning inventory	30484	28127	42393
Ending inventory	29547	21743	41737
Inventory change	937	6384	656
Total inventory change	33113	-7620	95596
Net operating profit	106101	12720	251436

TABLE - 3
 DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	211	42	42
Net operating profit	106101	12720	251436
BREEDING LIVESTOCK			
Ending inventory	1515	48	5951
Capital sales	88	-	186
Beginning inventory	1448	505	4885
Capital purchases	-	-	-
Depreciation, capital adj.	155	-457	1253
MACHINERY AND EQUIPMENT			
Ending inventory	216555	133488	392615
Capital sales	2159	1985	3734
Beginning inventory	208948	131314	371536
Capital purchases	31699	18461	61480
Depreciation, capital adj.	-21933	-14302	-36666
BUILDINGS AND IMPROVEMENTS			
Ending inventory	44068	21962	89079
Capital sales	12	60	-
Beginning inventory	43162	22000	88282
Capital purchases	1665	568	2170
Depreciation, capital adj.	-747	-546	-1373
OTHER CAPITAL ASSETS			
Ending inventory	185551	62705	336507
Capital sales	3913	955	2835
Beginning inventory	176195	53655	311282
Capital purchases	9793	9366	17357
Depreciation, capital adj.	3475	639	10702
Total depreciation, capital adj.	-19049	-14667	-26085
Net farm income	87052	-1947	225351

TABLE - 4
 PROFITABILITY AND LIQUIDITY ANALYSIS, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	210	42	42
PROFITABILITY (Cost)			
Net farm income	87254	-1947	225351
Labor and management earnings	59086	-13486	167563
Rate of return on assets	9.1 %	0.5 %	12.8 %
Rate of return on equity	11.4 %	-12.3 %	17.8 %
Operating profit margin	18.5 %	1.1 %	25.6 %
Asset turnover rate	49.5 %	46.2 %	49.8 %
Interest on farm net worth	28168	11540	57789
Farm interest expense	37989	26382	61068
Value of operator lbr and mgmt.	34259	21682	54796
Return on farm assets	90983	2753	231624
Average farm assets	995627	554907	1814628
Return on farm equity	52995	-23628	170556
Average farm equity	466317	191992	959740
Value of farm production	492628	256506	904556
Number of Farms	211	42	42
LIQUIDITY (Cash)			
Net cash farm income	72988	20340	155840
Net nonfarm income	16283	23669	7016
Family living and taxes	47136	29560	68668
Real estate principal payments	10004	6584	19030
Cash available for interm. debt	32131	7866	75157
Average intermediate debt	178347	117973	248247
Years to turnover interm. debt	5.6	15.0	3.3
Expense as a % of income	84 %	93 %	81 %
Interest as a % of income	8 %	9 %	7 %
LIQUIDITY (Accrual)			
Total accrual farm income	493497	257625	908769
Total accrual farm expense	387396	244904	657334
Net accrual operating income	106101	12720	251436
Net nonfarm income	16283	23669	7016
Family living and taxes	47136	29560	68668
Real estate principal payments	10004	6584	19030
Available for intermediate debt	65244	245	170754
Average intermediate debt	178347	117973	248247
Years to turnover interm. debt	2.7	480.8	1.5
Expense as a % of income	79 %	95 %	72 %
Interest as a % of income	8 %	10 %	7 %

TABLE - 5
BALANCE SHEET AT COST VALUES, 1999
Minnesota and North Dakota Farm Business Mgmt Education
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 20 %		Average Of High 20 %	
	175		40		26	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
ASSETS						
Current Farm Assets						
Cash and checking balance	12903	16279	8151	16290	16742	11559
Prepaid expenses & supplies	17670	23484	7655	10893	36241	47963
Growing crops	78	5	341	-	-	-
Accounts receivable	25061	33514	7841	12556	62931	88914
Hedging accounts	883	1580	317	430	1928	8319
Crops held for sale or feed	121847	140254	97675	82519	238611	301490
Crops under government loan	7946	4207	7252	1049	11016	4968
Market livestock held for sale	2202	2913	96	860	7251	9480
Other current assets	1884	2708	273	745	-	3861
Total current farm assets	190474	224943	129601	125342	374721	476554
Intermediate Farm Assets						
Breeding livestock	1363	1294	530	50	5487	6479
Machinery and equipment	177783	186418	128970	132302	322131	355509
Other intermediate assets	120031	128944	45126	54254	221480	256301
Total intermediate farm assets	299177	316656	174626	186606	549097	618289
Long-Term Farm Assets						
Farm land	269929	281037	220869	228106	500134	526588
Buildings and improvements	37678	38893	23023	22984	89135	90919
Other long-term assets	19867	21036	6133	6507	45769	50388
Total long-term farm assets	327474	340966	250025	257597	635038	667894
Total Farm Assets	817126	882564	554251	569545	1558855	1762738
Total Nonfarm Assets	125799	137345	88341	94888	188928	211677
Total Assets	942925	1019909	642592	664433	1747783	1974415
LIABILITIES						
Current Farm Liabilities						
Accrued interest	11830	11394	10577	11002	13665	14047
Accounts payable	12037	11176	16975	10330	20541	21784
Current notes	101774	102812	89157	78932	205250	229774
Government crop loans	5227	2661	3963	631	7956	4390
Principal due on term debt	32402	35696	22384	26772	56098	66449
Total current farm liabilities	163271	163739	143056	127667	303510	336446
Intermediate Farm Liabilities	125713	130806	88326	103774	197453	198805
Long-term Farm Liabilities	158567	168055	119897	142072	310652	317006
Total Farm Liabilities	447551	462600	351278	373513	811615	852256
Total Nonfarm Liabilities	21551	24625	18823	24198	35249	41008
Total Liabilities	469101	487225	370102	397712	846864	893265
Net Worth (farm and nonfarm)	473823	532684	272490	266721	900919	1081150
Net Worth Change		58861		-5769		180231
RATIO ANALYSIS						
Current Farm Liabilities / Assets	86 %	73 %	110 %	102 %	81 %	71 %
Curr. & Interm Farm Liab / Assets	59 %	54 %	76 %	74 %	54 %	49 %
Long Term Farm Liab. / Assets	48 %	49 %	48 %	55 %	49 %	47 %
Total Liabilities / Assets	50 %	48 %	58 %	60 %	48 %	45 %

TABLE - 6
BALANCE SHEET AT MARKET VALUES, 1999
Minnesota and North Dakota Farm Business Mgmt Education
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 20 %		Average Of High 20 %	
	175		40		26	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
ASSETS						
Current Farm Assets						
Cash and checking balance	12903	16279	8151	16290	16742	11559
Prepaid expenses & supplies	17670	23484	7655	10893	36241	47963
Growing crops	78	5	341	-	-	-
Accounts receivable	25061	33514	7841	12556	62931	88914
Hedging accounts	883	1580	317	430	1928	8319
Crops held for sale or feed	121847	140254	97675	82519	238611	301490
Crops under government loan	7946	4207	7252	1049	11016	4968
Market livestock held for sale	2202	2913	96	860	7251	9480
Other current assets	1884	2708	273	745	-	3861
Total current farm assets	190474	224943	129601	125342	374721	476554
Intermediate Farm Assets						
Breeding livestock	1247	1215	530	50	5033	5946
Machinery and equipment	241214	249660	169948	175847	408690	440267
Other intermediate assets	174021	180885	59126	67949	315517	352811
Total intermediate farm assets	416483	431760	229603	243846	729240	799024
Long-Term Farm Assets						
Farm land	311483	327183	237524	244336	584405	612116
Buildings and improvements	46316	48809	26031	28717	112265	113866
Other long-term assets	21854	22958	6570	6557	51790	54856
Total long-term farm assets	379652	398949	270125	279610	748460	780838
Total Farm Assets	986610	1055653	629329	648799	1852420	2056417
Total Nonfarm Assets	139102	153435	99802	110012	211524	234784
Total Assets	1125712	1209087	729131	758811	2063944	2291200
LIABILITIES						
Current Farm Liabilities						
Accrued interest	11830	11394	10577	11002	13665	14047
Accounts payable	12037	11176	16975	10330	20541	21784
Current notes	101774	102812	89157	78932	205250	229774
Government crop loans	5227	2661	3963	631	7956	4390
Principal due on term debt	32402	35696	22384	26772	56098	66449
Total current farm liabilities	163271	163739	143056	127667	303510	336446
Intermediate Farm Liabilities	125713	130806	88326	103774	197453	198805
Long-term Farm Liabilities	158567	168055	119897	142072	310652	317006
Total Farm Liabilities	447551	462600	351278	373513	811615	852256
Total Nonfarm Liabilities	21551	24625	18823	24198	35249	41008
Total Deferred Liabilities	93219	101401	44103	49990	170967	187217
Total Liabilities	562321	588626	414205	447702	1017831	1080482
Net Worth (farm and nonfarm)	563391	620462	314926	311109	1046113	1210719
Net Worth Change		57071		-3817		164606
RATIO ANALYSIS						
Current Farm Liabilities / Assets	86 %	73 %	110 %	102 %	81 %	71 %
Curr. & Interm Farm Liab. / Assets	48 %	45 %	64 %	63 %	45 %	42 %
Long Term Farm Liabilities / Assets	42 %	42 %	44 %	51 %	42 %	41 %
Total Liabilities / Assets	50 %	49 %	57 %	59 %	49 %	47 %

TABLE - 7
STATEMENT OF CASH FLOWS, 1999
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	211	42	42
(a) Beginning cash balance (farm & nonfarm)	19662	13305	27173
CASH FROM OPERATING ACTIVITIES			
Gross cash farm income	467944	274260	824767
Net nonfarm income (+)	16283	23669	7016
Total cash farm expense (-)	394956	253920	668928
Apparent family living expense (-)	37538	24547	55068
Income and social security tax (-)	9359	5013	13601
(b) Cash from operations (=)	42374	14449	94187
CASH FROM INVESTING ACTIVITIES			
Sale of breeding livestock	88	-	186
Sale of machinery & equipment (+)	2159	1985	3734
Sale of farm land (+)	177	890	-
Sale of farm buildings (+)	12	60	-
Sale of other farm assets (+)	3913	955	2835
Sale of nonfarm assets (+)	3414	167	793
Purchase of breeding livestock (-)	-	-	-
Purchase of machinery & equip. (-)	31699	18461	61480
Purchase of farm land (-)	11071	3663	25549
Purchase of farm buildings (-)	1665	568	2170
Purchase of other farm assets (-)	9793	9366	17357
Purchase of nonfarm assets (-)	8717	6742	16274
(c) Cash from investing activities (=)	-53182	-34745	-115282
CASH FROM FINANCING ACTIVITIES			
Money borrowed	304141	219500	536384
Cash gifts and inheritances (+)	3785	576	4714
Principal payments (-)	288186	190064	516664
Dividends paid (-)	239	-	-
Gifts given (-)	210	-	143
(d) Cash from financing activities (=)	19290	30012	24291
(e) Net change in cash balance (b+c+d)	8482	9717	3197
Ending cash balance (farm & nonfarm)	28144	23022	30370

TABLE - 8
 FINANCIAL GUIDELINES MEASURES, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Net Farm Income)

	Average Of All Farms		Average Of Low 20 %		Average Of High 20 %	
Number of Farms	211		42		42	
LIQUIDITY	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current ratio	1.22	1.43	0.89	0.95	1.36	1.66
Working capital	41866	82711	-16812	-6178	116243	213404
SOLVENCY (Market)	Beginning	Ending	Beginning	Ending	Beginning	Ending
Farm debt to asset ratio	54 %	52 %	64 %	65 %	51 %	47 %
Farm equity to asset ratio	46 %	48 %	36 %	35 %	49 %	53 %
Farm debt to equity ratio	119 %	109 %	175 %	185 %	102 %	89 %
PROFITABILITY (Cost)						
Rate of return on farm assets	9.1 %		0.5 %		12.8 %	
Rate of return on farm equity	11.4 %		-12.3 %		17.8 %	
Operating profit margin	18.5 %		1.1 %		25.6 %	
Net farm income	87254		-1947		225351	
REPAYMENT CAPACITY	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	102 %	151 %	77 %	60 %	129 %	220 %
Capital replacement margin	1560	34673	-10183	-17803	30104	125700
EFFICIENCY						
Asset turnover rate (cost)	49.5 %		46.2 %		49.8 %	
Operating expense ratio	70.8 %		84.8 %		65.6 %	
Depreciation expense ratio	3.9 %		5.7 %		2.9 %	
Interest expense ratio	7.7 %		10.2 %		6.7 %	
Net farm income ratio	17.6 %		-0.8 %		24.8 %	

TABLE - 9
 CROP PRODUCTION AND MARKETING SUMMARY, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	211	42	42
ACREAGE SUMMARY			
Total Acres Owned	412	292	747
Total Crop Acres	1729	1181	2957
Crop Acres Owned	376	248	659
Crop Acres Cash Rented	1240	902	2131
Crop Acres Share Rented	113	32	167
Total Pasture Acres	2	-	11
AVERAGE PRICE RECEIVED (Cash Sales Only)			
Wheat, Spring per bu.	3.03	2.94	3.10
Soybeans per bu.	4.27	4.19	4.32
Corn per bu.	1.74	1.56	1.67
Barley per bu.	1.62	1.60	1.45
Potatoes per cwt.	5.26	-	-
Beans, Pinto per cwt.	14.68	-	14.24
Sunflowers per cwt.	9.33	8.65	8.82
Beans, Navy per cwt.	15.05	14.96	14.40
Canola per cwt.	9.43	-	-
AVERAGE YIELD PER ACRE			
Wheat, Spring (bu.)	42.19	37.64	43.81
Soybeans (bu.)	36.54	31.78	38.76
Sugar Beets (ton)	19.69	18.08	20.78
Corn (bu.)	134.47	103.28	145.29
Sunflowers (cwt.)	15.54	16.87	15.76
Beans, Navy (cwt.)	13.30	14.31	11.23
Sunflowers, Confectionary (cwt.)	14.60	12.55	16.58
Beans, Pinto (cwt.)	14.15	-	13.82

TABLE - 10
HOUSEHOLD AND PERSONAL EXPENSES, 1999
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

	Average Of All Farms
Number of Sole Proprietors	17
Average family size	3.6
FAMILY LIVING EXPENSES	
Food and meals expense	6265
Medical care and health insurance	3454
Cash donations	2048
Household supplies	3485
Clothing	3142
Personal care	3338
Child / Dependent care	1437
Gifts	1342
Education	1466
Recreation	3016
Utilities (household share)	1000
Nonfarm vehicle operating expense	1337
Household real estate taxes	73
Dwelling rent	33
Household repairs	2297
Nonfarm interest	613
Life insurance payments	1420
Total cash family living expense	35764
Family living from the farm	-
Total family living	35764
OTHER NONFARM EXPENDITURES	
Income taxes	11334
Furnishing & appliance purchases	99
Nonfarm vehicle purchases	264
Nonfarm real estate purchases	-
Other nonfarm capital purchases	140
Nonfarm savings & investments	118
Total other nonfarm expenditures	11955
Total cash family living, investment & nonfarm capital purch	47719

TABLE - 11
 OPERATOR INFORMATION & NONFARM SUMMARY, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of Farms	211	42	42
OPERATOR INFORMATION			
Average number of operators	1.2	1.1	1.5
Average age of operators	42.9	42.5	44.2
Average number of years farming	20.0	19.8	22.9
NONFARM INCOME			
Nonfarm wages & salary	10033	14530	3828
Nonfarm business income	2013	6727	-732
Nonfarm rental income	655	1008	-114
Nonfarm interest income	347	128	525
Nonfarm cash dividends	793	62	2
Tax refunds	672	627	1157
Gifts and inheritances	3785	576	4714
Other nonfarm income	1771	586	2351
Total nonfarm income	20068	24245	11730

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. The last section of each crop table contains economic efficiency measures which provide useful standards or goals for the individual managers and net return per acre including 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 \$1525 (the average sugar beet stock sales price in 1999) by 8% and subtracting the interest paid on beet stock debt in 1999.

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 returns to overhead 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.

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.

The "unit" referred to the "Value per unit" and the efficiency measure at the bottom is the unit of measurement for the principal product from this enterprise. It is "bushel" for corn, soybeans, wheat and oats. It is "ton" for corn silage and hay.

"Total direct costs per unit" and "Total listed costs per unit" are calculated by dividing "Total direct costs per acre" and "Total listed costs per acre," respectively, by "Yield per acre." "Breakeven yield per acre" is "Total listed costs per acre" minus "Miscellaneous income per acre," divided by "Value per unit."

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

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

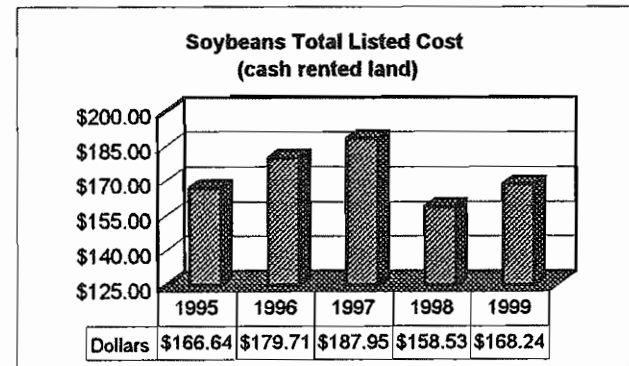
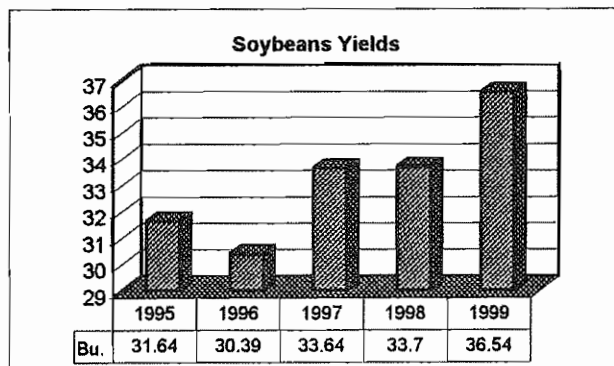
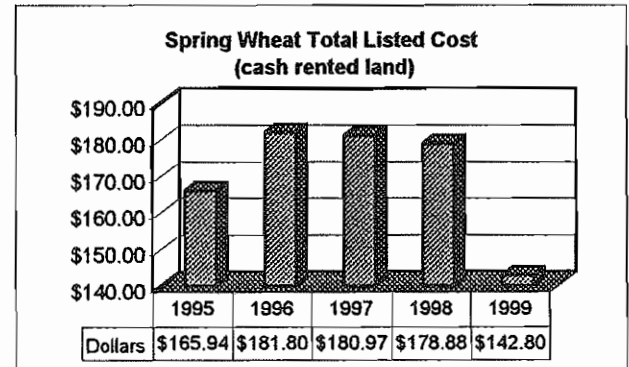
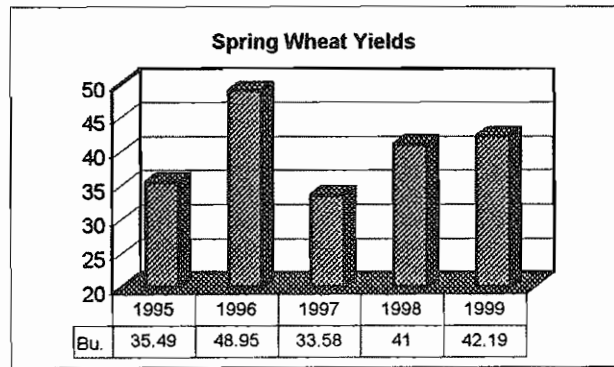
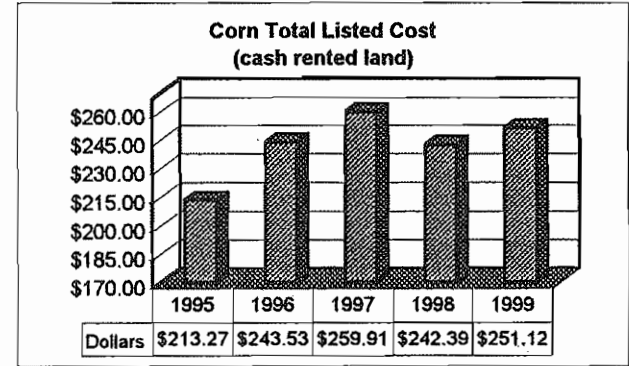
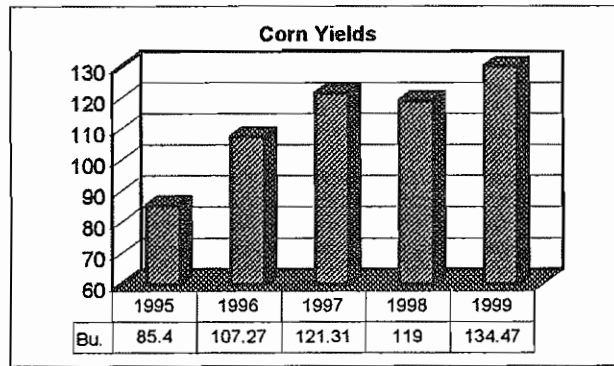
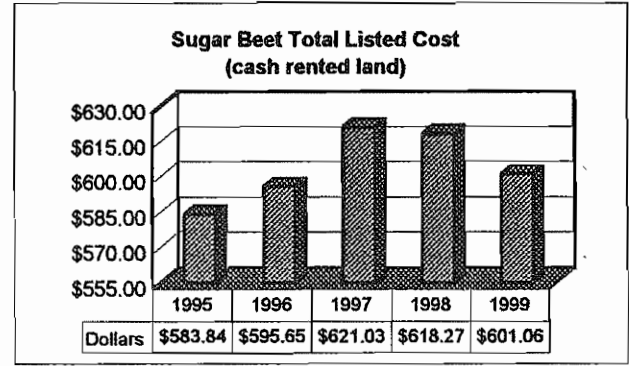
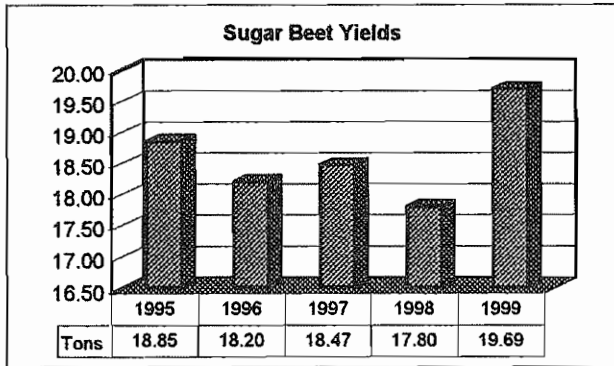


TABLE 12 - 1
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

BARLEY ON OWNED LAND

	Average For All Farms
Number of fields	6
Number of farms	6
Acres	81.45
Yield per acre (bushel)	63.71
Operators share of yield %	100.00
Value per bushel	1.69
Total product return per acre	107.65
Miscellaneous income per acre	7.05
Gross return per acre	114.70
Direct expenses per acre	
Seed	6.33
Fertilizer	26.36
Crop chemicals	13.40
Crop insurance	11.79
Fuel & oil	4.85
Repairs	10.55
Custom hire	2.88
Operating interest	3.07
Total direct expenses per acre	79.23
Return over direct expenses per acre	35.46
Overhead expenses per acre	
Custom hire	1.16
Hired labor	5.59
Machinery & bldg leases	1.25
RE & pers. property taxes	13.88
Farm insurance	4.07
Utilities	1.73
Dues & professional fees	0.94
Interest	20.55
Mach & bldg depreciation	6.28
Miscellaneous	1.13
Total overhead expenses per acre	56.58
Total listed expenses per acre	135.81
Net return per acre	-21.11
Total direct expense per bushel	1.24
Total listed expense per bushel	2.13
Net return per bushel	-0.33
Breakeven yield per acre	76.20
Net return including govt. payments	25.03
Lbr & mgt charge per acre	12.86
Net return over lbr & mgt	12.18

TABLE 12 - 2
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

BARLEY ON CASH RENTED LAND

	Average For All Farms
Number of fields	20
Number of farms	18
Acres	151.76
Yield per acre (bushel)	54.10
Operators share of yield %	100.00
Value per bushel	1.97
Total product return per acre	106.73
Miscellaneous income per acre	39.34
Gross return per acre	146.08
Direct expenses per acre	
Seed	6.93
Fertilizer	19.44
Crop chemicals	15.54
Crop insurance	5.27
Fuel & oil	4.79
Repairs	11.81
Custom hire	1.30
Hired labor	0.04
Land rent	56.12
Operating interest	4.37
Total direct expenses per acre	125.60
Return over direct expenses per acre	20.47
Overhead expenses per acre	
Custom hire	0.74
Hired labor	3.49
Machinery & bldg leases	2.15
Farm insurance	2.47
Utilities	1.20
Dues & professional fees	0.75
Interest	3.80
Mach & bldg depreciation	6.10
Miscellaneous	1.73
Total overhead expenses per acre	22.43
Total listed expenses per acre	148.03
Net return per acre	-1.96
Total direct expense per bushel	2.32
Total listed expense per bushel	2.74
Net return per bushel	-0.04
Breakeven yield per acre	55.09
Net return including govt. payments	31.27
Lbr & mgt charge per acre	11.13
Net return over lbr & mgt	20.14

TABLE 12 - 3
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

NAVY BEANS ON OWNED LAND

	Average For All Farms
Number of fields	15
Number of farms	15
Acres	81.52
Yield per acre (cwt)	12.31
Operators share of yield %	100.00
Value per cwt	15.37
Total product return per acre	189.31
Miscellaneous income per acre	62.62
Gross return per acre	251.92
Direct expenses per acre	
Seed	31.36
Fertilizer	20.51
Crop chemicals	31.24
Crop insurance	12.00
Fuel & oil	8.03
Repairs	16.32
Custom hire	2.72
Hired labor	0.19
Operating interest	6.30
Total direct expenses per acre	128.69
Return over direct expenses per acre	123.23
Overhead expenses per acre	
Custom hire	0.87
Hired labor	10.65
Machinery & bldg leases	5.93
RE & pers. property taxes	13.12
Farm insurance	3.64
Utilities	3.41
Dues & professional fees	2.12
Interest	37.33
Mach & bldg depreciation	9.28
Miscellaneous	4.18
Total overhead expenses per acre	90.53
Total listed expenses per acre	219.22
Net return per acre	32.71
Total direct expense per cwt	10.45
Total listed expense per cwt	17.80
Net return per cwt	2.66
Breakeven yield per acre	10.19
Net return including govt. payments	32.71
Lbr & mgt charge per acre	20.58
Net return over lbr & mgt	12.13

TABLE 12 - 4
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

NAVY BEANS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	26	5	5
Number of farms	26	5	5
Acres	164.03	169.66	202.82
Yield per acre (cwt)	12.12	5.34	13.63
Operators share of yield %	100.00	100.00	100.00
Value per cwt	15.12	15.07	16.02
Total product return per acre	183.30	80.50	218.26
Miscellaneous income per acre	73.05	71.73	125.30
Gross return per acre	256.35	152.23	343.56
Direct expenses per acre			
Seed	27.96	27.53	30.52
Fertilizer	18.63	25.61	20.32
Crop chemicals	27.89	28.65	28.51
Crop insurance	14.73	18.25	14.79
Fuel & oil	7.66	9.04	7.44
Repairs	17.81	18.43	16.89
Custom hire	3.15	1.05	5.95
Land rent	62.34	53.58	61.52
Operating interest	5.54	5.95	3.07
Miscellaneous	0.65	1.13	0.00
Total direct expenses per acre	186.36	189.22	189.00
Return over direct expenses per acre	69.99	-36.99	154.57
Overhead expenses per acre			
Custom hire	1.69	4.18	2.31
Hired labor	10.48	11.19	15.48
Machinery & bldg leases	4.11	6.25	1.53
Farm insurance	4.67	3.85	8.50
Utilities	2.48	3.58	2.23
Dues & professional fees	2.02	2.18	3.22
Interest	4.13	2.90	2.31
Mach & bldg depreciation	9.28	2.12	10.65
Miscellaneous	2.53	3.30	2.21
Total overhead expenses per acre	41.38	39.54	48.44
Total listed expenses per acre	227.74	228.76	237.44
Net return per acre	28.62	-76.53	106.13
Total direct expense per cwt	15.37	35.43	13.87
Total listed expense per cwt	18.78	42.84	17.43
Net return per cwt	2.36	-14.33	7.79
Breakeven yield per acre	10.23	10.42	7.00
Net return including govt. payments	28.62	-76.53	106.13
Lbr & mgt charge per acre	18.70	22.96	18.21
Net return over lbr & mgt	9.92	-99.49	87.92

TABLE 12 - 5
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

PINTO BEANS ON OWNED LAND

	Average For All Farms
Number of fields	10
Number of farms	9
Acres	98.59
Yield per acre (cwt)	13.87
Operators share of yield %	100.00
Value per cwt	14.18
Total product return per acre	196.58
Miscellaneous income per acre	40.32
Gross return per acre	236.90
Direct expenses per acre	
Seed	26.41
Fertilizer	18.68
Crop chemicals	32.78
Crop insurance	12.89
Fuel & oil	7.14
Repairs	16.87
Custom hire	2.68
Operating interest	8.75
Total direct expenses per acre	126.19
Return over direct expenses per acre	110.72
Overhead expenses per acre	
Custom hire	2.91
Hired labor	12.14
Machinery & bldg leases	1.44
RE & pers. property taxes	13.69
Farm insurance	5.68
Utilities	2.83
Dues & professional fees	1.38
Interest	38.76
Mach & bldg depreciation	12.13
Miscellaneous	2.29
Total overhead expenses per acre	93.24
Total listed expenses per acre	219.43
Net return per acre	17.47
Total direct expense per cwt	9.10
Total listed expense per cwt	15.83
Net return per cwt	1.26
Breakeven yield per acre	12.63
Net return including govt. payments	17.47
Lbr & mgt charge per acre	15.02
Net return over lbr & mgt	2.45

TABLE 12 - 6
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

PINTO BEANS ON CASH RENTED LAND

	Average For All Farms
Number of fields	24
Number of farms	13
Acres	124.35
Yield per acre (cwt)	11.97
Operators share of yield %	100.00
Value per cwt	13.88
Total product return per acre	166.19
Miscellaneous income per acre	100.81
Gross return per acre	267.00
Direct expenses per acre	
Seed	30.54
Fertilizer	16.24
Crop chemicals	31.68
Crop insurance	11.98
Fuel & oil	8.32
Repairs	19.29
Custom hire	1.29
Land rent	59.05
Operating interest	9.12
Miscellaneous	0.11
Total direct expenses per acre	187.62
Return over direct expenses per acre	79.38
Overhead expenses per acre	
Custom hire	4.66
Hired labor	11.62
Machinery & bldg leases	2.88
Farm insurance	5.63
Utilities	2.97
Dues & professional fees	1.87
Interest	4.80
Mach & bldg depreciation	12.72
Miscellaneous	2.97
Total overhead expenses per acre	50.11
Total listed expenses per acre	237.73
Net return per acre	29.27
Total direct expense per cwt	15.67
Total listed expense per cwt	19.85
Net return per cwt	2.44
Breakeven yield per acre	9.86
Net return including govt. payments	29.27
Lbr & mgt charge per acre	19.10
Net return over lbr & mgt	10.17

TABLE 12 - 7
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

CANOLA ON CASH RENTED LAND

	Average For All Farms
Number of fields	13
Number of farms	12
Acres	188.02
Yield per acre (cwt)	16.21
Operators share of yield %	100.00
Value per cwt	8.40
Total product return per acre	136.17
Miscellaneous income per acre	51.62
Gross return per acre	187.79
Direct expenses per acre	
Seed	17.53
Fertilizer	24.25
Crop chemicals	18.83
Crop insurance	8.32
Fuel & oil	6.78
Repairs	8.96
Custom hire	8.99
Land rent	41.84
Operating interest	3.65
Total direct expenses per acre	139.16
Return over direct expenses per acre	48.63
Overhead expenses per acre	
Custom hire	1.46
Hired labor	6.45
Machinery & bldg leases	1.05
Farm insurance	3.20
Utilities	1.55
Dues & professional fees	1.02
Interest	2.18
Mach & bldg depreciation	6.02
Miscellaneous	1.86
Total overhead expenses per acre	24.80
Total listed expenses per acre	163.96
Net return per acre	23.83
Total direct expense per cwt	8.59
Total listed expense per cwt	10.12
Net return per cwt	1.47
Breakeven yield per acre	13.37
Net return including govt. payments	62.55
Lbr & mgt charge per acre	12.66
Net return over lbr & mgt	49.88

TABLE 12 - 8
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

CORN ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	32	8	6
Number of farms	28	6	6
Acres	101.50	70.58	72.78
Yield per acre (bushel)	130.36	106.84	144.55
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.68	1.68	1.59
Total product return per acre	218.83	178.97	230.54
Miscellaneous income per acre	18.44	6.45	47.34
Gross return per acre	237.26	185.42	277.88
Direct expenses per acre			
Seed	31.48	30.68	32.54
Fertilizer	35.42	33.00	39.18
Crop chemicals	20.45	18.80	18.73
Crop insurance	8.34	6.99	8.69
Drying fuel	6.08	9.98	6.09
Fuel & oil	7.47	6.83	8.77
Repairs	17.03	17.71	21.67
Custom hire	0.88	1.66	0.10
Operating interest	5.79	6.72	4.03
Miscellaneous	0.32	0.00	0.50
Total direct expenses per acre	133.25	132.37	140.30
Return over direct expenses per acre	104.01	53.04	137.58
Overhead expenses per acre			
Custom hire	1.38	0.24	3.01
Hired labor	8.92	10.96	9.35
Machinery & bldg leases	2.89	1.17	2.07
RE & pers. property taxes	10.42	10.68	10.26
Farm insurance	3.13	3.46	3.56
Utilities	1.91	2.32	1.82
Dues & professional fees	1.43	1.64	0.99
Interest	36.70	50.74	30.85
Mach & bldg depreciation	13.70	12.32	18.19
Miscellaneous	2.54	1.99	3.56
Total overhead expenses per acre	83.01	95.51	83.67
Total listed expenses per acre	216.26	227.89	223.97
Net return per acre	21.01	-42.47	53.91
Total direct expense per bushel	1.02	1.24	0.97
Total listed expense per bushel	1.66	2.13	1.55
Net return per bushel	0.16	-0.40	0.37
Breakeven yield per acre	117.84	132.19	110.75
Net return including govt. payments	52.32	-2.39	78.31
Lbr & mgt charge per acre	16.26	17.73	19.65
Net return over lbr & mgt	36.07	-20.12	58.66

TABLE 12 - 9
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

CORN ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	77	17	15
Number of farms	63	13	13
Acres	190.14	129.33	219.67
Yield per acre (bushel)	126.90	108.64	142.47
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.67	1.41	1.85
Total product return per acre	211.81	152.89	263.44
Miscellaneous income per acre	22.36	22.35	26.43
Gross return per acre	234.18	175.24	289.87
Direct expenses per acre			
Seed	33.76	37.65	35.02
Fertilizer	33.33	33.97	29.89
Crop chemicals	22.06	21.46	20.84
Crop insurance	6.79	8.20	6.33
Drying fuel	5.00	6.07	6.45
Fuel & oil	8.83	9.14	8.59
Repairs	17.29	16.62	21.18
Custom hire	3.17	5.28	2.38
Hired labor	0.66	0.33	2.22
Land rent	63.00	69.18	53.24
Operating interest	8.66	8.67	7.52
Miscellaneous	1.82	0.00	7.35
Total direct expenses per acre	204.38	216.58	201.02
Return over direct expenses per acre	29.80	-41.34	88.85
Overhead expenses per acre			
Custom hire	2.21	4.16	0.85
Hired labor	8.91	4.57	15.50
Machinery & bldg leases	4.77	6.02	3.63
Farm insurance	2.95	1.46	6.03
Utilities	2.22	2.22	2.74
Dues & professional fees	1.62	1.57	1.20
Interest	7.61	6.91	8.97
Mach & bldg depreciation	13.35	10.38	11.32
Miscellaneous	3.09	1.63	4.51
Total overhead expenses per acre	46.74	38.92	54.76
Total listed expenses per acre	251.12	255.50	255.79
Net return per acre	-16.95	-80.26	34.09
Total direct expense per bushel	1.61	1.99	1.41
Total listed expense per bushel	1.98	2.35	1.80
Net return per bushel	-0.13	-0.74	0.24
Breakeven yield per acre	137.05	165.67	124.04
Net return including govt. payments	10.65	-52.42	54.60
Lbr & mgt charge per acre	19.57	21.40	18.02
Net return over lbr & mgt	-8.92	-73.82	36.58

TABLE 12 - 10
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

CORN ON SHARE RENTED LAND

	Average For All Farms
Number of fields	11
Number of farms	9
Acres	139.18
Yield per acre (bushel)	130.40
Operators share of yield %	67.13
Value per bushel	1.71
Total product return per acre	149.67
Miscellaneous income per acre	29.07
Gross return per acre	178.74
Direct expenses per acre	
Seed	28.54
Fertilizer	32.21
Crop chemicals	17.58
Crop insurance	7.59
Drying fuel	5.11
Fuel & oil	8.26
Repairs	14.04
Custom hire	2.83
Operating interest	3.98
Total direct expenses per acre	120.12
Return over direct expenses per acre	58.63
Overhead expenses per acre	
Hired labor	14.66
Machinery & bldg leases	4.46
Farm insurance	2.93
Utilities	2.25
Dues & professional fees	2.02
Interest	5.29
Mach & bldg depreciation	16.68
Miscellaneous	3.12
Total overhead expenses per acre	51.40
Total listed expenses per acre	171.52
Net return per acre	7.22
Total direct expense per bushel	1.37
Total listed expense per bushel	1.96
Net return per bushel	0.08
Breakeven yield per acre	123.85
Net return including govt. payments	27.33
Lbr & mgt charge per acre	17.27
Net return over lbr & mgt	10.06

TABLE 12 - 11
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

ALFALFA HAY: ON OWNED LAND

	Average For All Farms
Number of fields	7
Number of farms	7
Acres	28.73
Yield per acre (ton)	2.79
Operators share of yield %	100.00
Value per ton	39.85
Total product return per acre	111.27
Miscellaneous income per acre	0.00
Gross return per acre	111.27
Direct expenses per acre	
Fertilizer	3.74
Crop insurance	1.40
Fuel & oil	6.36
Repairs	13.52
Custom hire	12.74
Operating interest	3.68
Total direct expenses per acre	41.44
Return over direct expenses per acre	69.83
Overhead expenses per acre	
Custom hire	1.09
Hired labor	3.48
Machinery & bldg leases	0.64
RE & pers. property taxes	11.59
Farm insurance	3.06
Utilities	1.72
Dues & professional fees	1.01
Interest	34.28
Mach & bldg depreciation	8.37
Miscellaneous	2.29
Total overhead expenses per acre	67.51
Total listed expenses per acre	108.95
Net return per acre	2.32
Total direct expense per ton	14.84
Total listed expense per ton	39.02
Net return per ton	0.83
Breakeven yield per acre	2.73
Net return including govt. payments	29.26
Lbr & mgt charge per acre	11.40
Net return over lbr & mgt	17.86

TABLE 12 - 12
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

ALFALFA HAY ON CASH RENTED LAND

	Average For All Farms
Number of fields	14
Number of farms	14
Acres	102.08
Yield per acre (ton)	2.83
Operators share of yield %	100.00
Value per ton	56.40
Total product return per acre	159.40
Miscellaneous income per acre	27.44
Gross return per acre	186.84
Direct expenses per acre	
Seed	6.30
Fertilizer	4.49
Crop chemicals	0.87
Crop insurance	1.94
Fuel & oil	9.17
Repairs	18.05
Custom hire	3.12
Land rent	63.92
Operating interest	6.72
Total direct expenses per acre	114.58
Return over direct expenses per acre	72.26
Overhead expenses per acre	
Custom hire	4.08
Hired labor	7.04
Machinery & bldg leases	3.33
Farm insurance	1.62
Utilities	2.40
Dues & professional fees	1.47
Interest	6.95
Mach & bldg depreciation	14.26
Miscellaneous	1.80
Total overhead expenses per acre	42.94
Total listed expenses per acre	157.52
Net return per acre	29.32
Total direct expense per ton	40.54
Total listed expense per ton	55.74
Net return per ton	10.37
Breakeven yield per acre	2.31
Net return including govt. payments	56.30
Lbr & mgt charge per acre	23.82
Net return over lbr & mgt	32.48

TABLE 12 - 13
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

SOYBEANS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	132	23	30
Number of farms	104	21	21
Acres	145.43	141.22	101.45
Yield per acre (bushel)	35.43	29.40	44.41
Operators share of yield %	100.00	100.00	100.00
Value per bushel	4.39	4.31	4.38
Total product return per acre	155.36	126.63	194.43
Miscellaneous income per acre	33.84	11.71	43.72
Gross return per acre	189.20	138.35	238.15
Direct expenses per acre			
Seed	14.49	13.42	14.10
Fertilizer	6.72	12.85	4.51
Crop chemicals	22.24	24.03	18.86
Crop insurance	7.14	6.80	5.66
Fuel & oil	6.62	8.70	6.23
Repairs	12.34	14.56	12.17
Custom hire	2.16	3.73	1.00
Operating interest	4.43	3.73	3.26
Miscellaneous	0.55	0.29	0.19
Total direct expenses per acre	76.69	88.11	65.97
Return over direct expenses per acre	112.51	50.24	172.18
Overhead expenses per acre			
Custom hire	1.05	1.46	0.50
Hired labor	5.84	5.89	6.00
Machinery & bldg leases	3.03	4.71	1.37
RE & pers. property taxes	11.83	10.61	10.30
Farm insurance	2.94	2.70	3.46
Utilities	1.94	2.49	2.37
Dues & professional fees	1.25	1.44	1.36
Interest	36.58	35.49	27.32
Mach & bldg depreciation	11.98	10.10	14.35
Miscellaneous	3.01	3.43	3.06
Total overhead expenses per acre	79.45	78.31	70.08
Total listed expenses per acre	156.14	166.42	136.06
Net return per acre	33.05	-28.07	102.09
Total direct expense per bushel	2.16	3.00	1.49
Total listed expense per bushel	4.41	5.66	3.06
Net return per bushel	0.93	-0.95	2.30
Breakeven yield per acre	27.89	35.92	21.09
Net return including govt. payments	64.42	12.16	124.60
Lbr & mgt charge per acre	15.86	17.97	19.20
Net return over lbr & mgt	48.57	-5.81	105.39

TABLE 12 - 14
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

SOYBEANS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	252	53	53
Number of farms	159	32	32
Acres	268.21	210.35	266.20
Yield per acre (bushel)	35.66	29.85	41.91
Operators share of yield %	100.00	100.00	100.00
Value per bushel	4.41	4.18	4.71
Total product return per acre	157.27	124.84	197.47
Miscellaneous income per acre	37.43	29.03	53.59
Gross return per acre	194.70	153.86	251.06
Direct expenses per acre			
Seed	14.20	14.88	14.92
Fertilizer	4.32	7.45	3.25
Crop chemicals	22.71	25.28	21.19
Crop insurance	7.83	8.73	7.43
Fuel & oil	6.23	5.98	6.89
Repairs	11.90	11.17	14.36
Custom hire	2.48	4.32	3.59
Land rent	59.68	61.96	58.76
Operating interest	5.14	6.04	3.06
Miscellaneous	0.73	0.48	0.99
Total direct expenses per acre	135.20	146.29	134.46
Return over direct expenses per acre	59.50	7.57	116.60
Overhead expenses per acre			
Custom hire	1.19	1.58	0.57
Hired labor	5.83	5.05	6.81
Machinery & bldg leases	3.04	3.05	3.18
Farm insurance	2.75	2.58	2.77
Utilities	1.75	1.89	1.99
Dues & professional fees	1.25	1.09	1.51
Interest	4.69	3.95	5.67
Mach & bldg depreciation	10.05	8.71	14.15
Miscellaneous	2.48	2.52	2.84
Total overhead expenses per acre	33.04	30.42	39.47
Total listed expenses per acre	168.24	176.72	173.92
Net return per acre	26.46	-22.86	77.13
Total direct expense per bushel	3.79	4.90	3.21
Total listed expense per bushel	4.72	5.92	4.15
Net return per bushel	0.74	-0.77	1.84
Breakeven yield per acre	29.66	35.31	25.54
Net return including govt. payments	55.79	13.14	101.78
Lbr & mgt charge per acre	14.77	15.67	16.32
Net return over lbr & mgt	41.02	-2.53	85.46

TABLE 12 - 15
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

SOYBEANS ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	62	10	8
Number of farms	36	7	7
Acres	136.85	102.93	152.46
Yield per acre (bushel)	39.42	30.53	47.40
Operators share of yield %	65.88	62.71	69.95
Value per bushel	4.60	4.10	4.67
Total product return per acre	119.43	78.98	154.10
Miscellaneous income per acre	16.84	23.06	32.16
Gross return per acre	136.27	102.04	186.26
Direct expenses per acre			
Seed	12.76	9.20	13.94
Fertilizer	2.22	8.83	0.00
Crop chemicals	19.23	18.81	17.90
Crop insurance	4.77	5.10	7.90
Fuel & oil	8.15	9.80	7.77
Repairs	12.37	14.63	11.70
Custom hire	2.15	0.89	3.12
Operating interest	2.67	2.21	1.80
Miscellaneous	0.35	0.75	0.00
Total direct expenses per acre	64.67	70.22	64.13
Return over direct expenses per acre	71.60	31.82	122.13
Overhead expenses per acre			
Custom hire	0.26	0.52	0.00
Hired labor	5.54	3.94	9.38
Machinery & bldg leases	3.68	4.05	5.05
Farm insurance	2.42	1.80	2.43
Utilities	2.13	2.33	2.25
Dues & professional fees	1.14	0.56	1.87
Interest	4.17	5.43	2.98
Mach & bldg depreciation	13.39	10.08	13.84
Miscellaneous	3.27	2.74	3.97
Total overhead expenses per acre	36.00	31.46	41.76
Total listed expenses per acre	100.67	101.68	105.89
Net return per acre	35.60	0.36	80.37
Total direct expense per bushel	2.49	3.67	1.93
Total listed expense per bushel	3.88	5.31	3.19
Net return per bushel	1.37	0.02	2.42
Breakeven yield per acre	27.63	30.61	22.56
Net return including govt. payments	52.40	22.31	97.57
Lbr & mgt charge per acre	15.48	17.65	17.61
Net return over lbr & mgt	36.92	4.66	79.95

TABLE 12 - 16
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

SUGAR BEETS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	68	15	12
Number of farms	55	11	11
Acres	99.63	98.93	118.69
Yield per acre (ton)	20.97	17.08	25.40
Operators share of yield %	100.00	100.00	100.00
Value per ton	33.66	31.72	34.12
Total product return per acre	705.85	541.77	866.87
Miscellaneous income per acre	8.47	15.17	5.28
Gross return per acre	714.32	556.93	872.14
Direct expenses per acre			
Seed	42.49	45.33	37.12
Fertilizer	29.16	30.23	29.30
Crop chemicals	117.83	119.01	107.57
Crop insurance	11.58	9.92	15.84
Fuel & oil	23.06	21.02	23.99
Repairs	51.64	53.30	54.67
Custom hire	23.57	13.66	31.14
Hired labor	17.92	21.19	10.08
Machinery & bldg leases	0.63	1.40	0.00
Operating interest	17.64	17.91	18.88
Miscellaneous	1.59	1.21	2.75
Total direct expenses per acre	337.11	334.18	331.36
Return over direct expenses per acre	377.21	222.76	540.79
Overhead expenses per acre			
Custom hire	5.88	10.98	2.24
Hired labor	35.44	26.90	54.74
Machinery & bldg leases	7.65	7.23	8.72
RE & pers. property taxes	15.14	13.44	14.21
Farm insurance	5.21	4.66	5.77
Utilities	7.87	6.29	8.65
Dues & professional fees	7.42	7.28	7.37
Interest	54.14	55.44	42.28
Mach & bldg depreciation	45.63	40.47	52.75
Miscellaneous	7.74	4.19	13.88
Total overhead expenses per acre	192.12	176.87	210.59
Total listed expenses per acre	529.23	511.05	541.95
Net return per acre	185.09	45.88	330.19
Total direct expense per ton	16.08	19.56	13.04
Total listed expense per ton	25.24	29.92	21.33
Net return per ton	8.83	2.69	13.00
Breakeven yield per acre	15.47	15.64	15.73
Net return including govt. payments	216.36	74.30	363.04
Lbr & mgt charge per acre	56.92	54.88	49.16
Net return over lbr & mgt	159.44	19.42	313.88
Sugar beet stock equity charge	107.73	114.67	111.07
Net return over sugar beet stock	51.71	-95.25	202.81

TABLE 12 - 17
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

SUGAR BEETS ON OWNED LAND - JOINT VENTURE

	Average For All Farms
Number of fields	20
Number of farms	18
Acres	49.81
Yield per acre (ton)	18.72
Operators share of yield %	100.00
Value per ton	32.67
Total product return per acre	611.68
Miscellaneous income per acre	23.77
Gross return per acre	635.45
Direct expenses per acre	
Seed	39.69
Fertilizer	31.12
Crop chemicals	111.85
Crop insurance	9.12
Fuel & oil	22.94
Repairs	41.86
Custom hire	8.22
Hired labor	14.78
Machinery & bldg leases	3.77
Stock rent (joint venture)	186.98
Operating interest	18.14
Miscellaneous	0.46
Total direct expenses per acre	488.93
Return over direct expenses per acre	146.51
Overhead expenses per acre	
Custom hire	1.26
Hired labor	17.70
Machinery & bldg leases	6.69
RE & pers. property taxes	13.26
Farm insurance	2.65
Utilities	5.26
Dues & professional fees	6.52
Interest	53.23
Mach & bldg depreciation	42.64
Miscellaneous	6.40
Total overhead expenses per acre	155.62
Total listed expenses per acre	644.55
Net return per acre	-9.11
Total direct expense per ton	26.11
Total listed expense per ton	34.43
Net return per ton	-0.49
Breakeven yield per acre	19.00
Net return including govt. payments	22.10
Lbr & mgt charge per acre	57.67
Net return over lbr & mgt	-35.57

TABLE 12 - 18
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

SUGAR BEETS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	132	40	23
Number of farms	96	19	19
Acres	175.60	179.30	141.11
Yield per acre (ton)	19.50	16.82	22.08
Operators share of yield %	100.00	100.00	100.00
Value per ton	33.30	33.20	34.45
Total product return per acre	649.24	558.54	760.80
Miscellaneous income per acre	14.19	4.59	53.29
Gross return per acre	663.43	563.14	814.09
Direct expenses per acre			
Seed	43.73	45.70	37.81
Fertilizer	28.28	25.32	28.59
Crop chemicals	119.20	124.11	105.17
Crop insurance	11.48	10.24	10.29
Fuel & oil	24.30	26.40	24.25
Repairs	53.97	69.38	47.75
Custom hire	16.22	12.28	25.16
Hired labor	18.73	23.08	10.56
Land rent	73.72	73.88	65.63
Machinery & bldg leases	0.72	1.81	0.00
Operating interest	20.02	26.98	15.06
Miscellaneous	1.44	0.79	1.97
Total direct expenses per acre	411.81	439.97	372.24
Return over direct expenses per acre	251.62	123.17	441.85
Overhead expenses per acre			
Custom hire	7.22	5.16	16.43
Hired labor	35.10	51.38	34.65
Machinery & bldg leases	10.62	8.10	18.96
Farm insurance	5.00	5.93	4.04
Utilities	6.74	8.10	6.82
Dues & professional fees	5.04	5.24	4.60
Interest	29.67	34.81	30.88
Mach & bldg depreciation	36.94	33.55	35.27
Miscellaneous	9.49	12.03	8.22
Total overhead expenses per acre	145.82	164.30	159.89
Total listed expenses per acre	557.63	604.26	532.12
Net return per acre	105.80	-41.13	281.96
Total direct expense per ton	21.12	26.15	16.86
Total listed expense per ton	28.60	35.92	24.10
Net return per ton	5.43	-2.44	12.77
Breakeven yield per acre	16.32	18.06	13.90
Net return including govt. payments	133.80	-15.49	311.65
Lbr & mgt charge per acre	57.58	54.74	57.92
Net return over lbr & mgt	76.22	-70.23	253.72
Sugar beet stock equity charge	109.95	111.17	104.33
Net return over sugar beet stock	-33.73	-181.40	149.39

TABLE 12 - 19
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

SUGAR BEETS ON CASH RENTED LAND - JOINT VENTURE

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	62	12	12
Number of farms	50	10	10
Acres	179.29	190.67	145.88
Yield per acre (ton)	19.28	17.26	21.51
Operators share of yield %	100.00	100.00	100.00
Value per ton	33.44	31.19	34.87
Total product return per acre	644.59	538.45	750.10
Miscellaneous income per acre	16.14	12.76	33.55
Gross return per acre	660.73	551.21	783.65
Direct expenses per acre			
Seed	41.62	38.85	40.48
Fertilizer	29.16	25.28	28.96
Crop chemicals	111.85	109.20	92.28
Crop insurance	10.97	11.31	9.72
Fuel & oil	22.03	18.97	21.40
Repairs	40.51	42.74	45.31
Custom hire	19.24	26.01	24.04
Hired labor	11.12	9.05	11.61
Land rent	68.13	67.20	67.16
Machinery & bldg leases	1.44	5.62	0.00
Stock rent (joint venture)	198.41	218.41	184.33
Operating interest	27.07	29.17	15.83
Miscellaneous	0.71	1.02	0.53
Total direct expenses per acre	582.26	602.84	541.66
Return over direct expenses per acre	78.47	-51.63	241.99
Overhead expenses per acre			
Custom hire	7.96	11.15	1.54
Hired labor	21.00	19.47	20.35
Machinery & bldg leases	13.75	8.81	13.50
Farm insurance	2.94	2.24	2.99
Utilities	5.28	4.83	6.23
Dues & professional fees	3.80	5.71	4.62
Interest	18.74	20.36	14.03
Mach & bldg depreciation	28.50	24.01	27.33
Miscellaneous	7.41	6.52	9.16
Total overhead expenses per acre	109.38	103.09	99.76
Total listed expenses per acre	691.63	705.93	641.42
Net return per acre	-30.90	-154.72	142.23
Total direct expense per ton	30.20	34.92	25.18
Total listed expense per ton	35.88	40.89	29.82
Net return per ton	-1.60	-8.96	6.61
Breakeven yield per acre	20.20	22.22	17.43
Net return including govt. payments	-2.87	-121.46	165.69
Lbr & mgt charge per acre	49.32	44.37	47.73
Net return over lbr & mgt	-52.18	-165.83	117.96

TABLE 12 - 20
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

SUNFLOWERS ON OWNED LAND

	Average For All Farms
Number of fields	14
Number of farms	12
Acres	92.75
Yield per acre (cwt)	14.45
Operators share of yield %	100.00
Value per cwt	8.87
Total product return per acre	128.23
Miscellaneous income per acre	48.71
Gross return per acre	176.94
Direct expenses per acre	
Seed	15.30
Fertilizer	19.55
Crop chemicals	15.76
Crop insurance	5.18
Fuel & oil	7.57
Repairs	15.76
Custom hire	4.21
Operating interest	4.43
Miscellaneous	0.56
Total direct expenses per acre	88.33
Return over direct expenses per acre	88.62
Overhead expenses per acre	
Custom hire	2.02
Hired labor	6.98
Machinery & bldg leases	1.99
RE & pers. property taxes	10.72
Farm insurance	3.32
Utilities	2.11
Dues & professional fees	1.67
Interest	28.50
Mach & bldg depreciation	15.77
Miscellaneous	2.71
Total overhead expenses per acre	75.78
Total listed expenses per acre	164.11
Net return per acre	12.83
Total direct expense per cwt	6.11
Total listed expense per cwt	11.36
Net return per cwt	0.89
Breakeven yield per acre	13.00
Net return including govt. payments	41.84
Lbr & mgt charge per acre	17.29
Net return over lbr & mgt	24.56

TABLE 12 - 21
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

SUNFLOWERS ON CASH RENTED LAND

	Average For All Farms
Number of fields	25
Number of farms	22
Acres	166.17
Yield per acre (cwt)	15.83
Operators share of yield %	100.00
Value per cwt	8.44
Total product return per acre	133.54
Miscellaneous income per acre	56.16
Gross return per acre	189.69
Direct expenses per acre	
Seed	15.47
Fertilizer	15.92
Crop chemicals	13.06
Crop insurance	6.18
Drying fuel	0.39
Fuel & oil	5.88
Repairs	12.88
Custom hire	5.62
Land rent	55.02
Operating interest	4.48
Miscellaneous	0.26
Total direct expenses per acre	135.16
Return over direct expenses per acre	54.54
Overhead expenses per acre	
Custom hire	0.80
Hired labor	4.74
Machinery & bldg leases	3.73
Farm insurance	2.28
Utilities	1.92
Dues & professional fees	1.29
Interest	6.16
Mach & bldg depreciation	13.92
Miscellaneous	3.17
Total overhead expenses per acre	38.01
Total listed expenses per acre	173.17
Net return per acre	16.52
Total direct expense per cwt	8.54
Total listed expense per cwt	10.94
Net return per cwt	1.04
Breakeven yield per acre	13.87
Net return including govt. payments	45.40
Lbr & mgt charge per acre	14.16
Net return over lbr & mgt	31.24

TABLE 12 - 22
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

CONFECTIONARY SUNFLOWERS ON OWNED LAND

	Average For All Farms
Number of fields	5
Number of farms	5
Acres	78.86
Yield per acre (cwt)	13.22
Operators share of yield %	100.00
Value per cwt	14.78
Total product return per acre	195.50
Miscellaneous income per acre	71.32
Gross return per acre	266.82
Direct expenses per acre	
Seed	19.56
Fertilizer	20.44
Crop chemicals	14.74
Crop insurance	5.72
Fuel & oil	7.01
Repairs	17.18
Custom hire	4.18
Operating interest	3.89
Total direct expenses per acre	92.72
Return over direct expenses per acre	174.10
Overhead expenses per acre	
Custom hire	0.03
Hired labor	8.53
Machinery & bldg leases	1.22
RE & pers. property taxes	9.68
Farm insurance	5.87
Utilities	1.86
Dues & professional fees	0.93
Interest	36.76
Mach & bldg depreciation	8.53
Miscellaneous	3.08
Total overhead expenses per acre	76.50
Total listed expenses per acre	169.21
Net return per acre	97.61
Total direct expense per cwt	7.01
Total listed expense per cwt	12.80
Net return per cwt	7.38
Breakeven yield per acre	6.62
Net return including govt. payments	117.90
Lbr & mgt charge per acre	17.05
Net return over lbr & mgt	100.84

TABLE 12 - 23
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of All Farms)

CONFECTIONARY SUNFLOWERS ON CASH RENTED LAND

	Average For All Farms
Number of fields	16
Number of farms	15
Acres	171.62
Yield per acre (cwt)	14.29
Operators share of yield %	100.00
Value per cwt	12.76
Total product return per acre	182.38
Miscellaneous income per acre	53.17
Gross return per acre	235.55
Direct expenses per acre	
Seed	19.41
Fertilizer	17.41
Crop chemicals	20.33
Crop insurance	5.56
Drying fuel	0.06
Fuel & oil	6.69
Repairs	13.94
Custom hire	4.30
Land rent	62.68
Operating interest	6.91
Miscellaneous	0.54
Total direct expenses per acre	157.82
Return over direct expenses per acre	77.73
Overhead expenses per acre	
Custom hire	1.31
Hired labor	8.10
Machinery & bldg leases	2.47
Farm insurance	3.82
Utilities	1.65
Dues & professional fees	1.76
Interest	5.86
Mach & bldg depreciation	8.04
Miscellaneous	2.40
Total overhead expenses per acre	35.41
Total listed expenses per acre	193.24
Net return per acre	42.31
Total direct expense per cwt	11.04
Total listed expense per cwt	13.52
Net return per cwt	2.96
Breakeven yield per acre	10.98
Net return including govt. payments	71.16
Lbr & mgt charge per acre	16.24
Net return over lbr & mgt	54.92

TABLE 12 - 24
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

SPRING WHEAT ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	161	34	34
Number of farms	124	25	25
Acres	181.81	131.74	225.36
Yield per acre (bushel)	42.07	36.88	42.45
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.05	2.93	3.14
Total product return per acre	128.42	108.10	133.36
Miscellaneous income per acre	34.03	15.96	62.33
Gross return per acre	162.46	124.06	195.69
Direct expenses per acre			
Seed	10.18	10.13	11.14
Fertilizer	23.91	24.96	19.63
Crop chemicals	19.36	19.64	16.90
Crop insurance	6.42	6.35	8.12
Drying fuel	0.13	0.21	0.26
Fuel & oil	4.95	6.12	3.85
Repairs	9.77	12.81	9.50
Custom hire	2.47	2.84	3.00
Operating interest	3.79	3.77	3.25
Miscellaneous	0.59	0.43	0.64
Total direct expenses per acre	81.58	87.25	76.28
Return over direct expenses per acre	80.87	36.82	119.40
Overhead expenses per acre			
Custom hire	1.00	0.48	1.18
Hired labor	5.71	3.54	5.70
Machinery & bldg leases	1.71	1.88	1.39
RE & pers. property taxes	13.31	12.52	14.59
Farm insurance	3.63	2.88	5.44
Utilities	1.62	1.69	1.82
Dues & professional fees	1.19	1.30	1.37
Interest	31.90	29.80	29.45
Mach & bldg depreciation	8.87	7.13	8.90
Miscellaneous	2.35	2.33	2.28
Total overhead expenses per acre	71.30	63.54	72.11
Total listed expenses per acre	152.88	150.79	148.39
Net return per acre	9.57	-26.72	47.29
Total direct expense per bushel	1.94	2.37	1.80
Total listed expense per bushel	3.63	4.09	3.50
Net return per bushel	0.23	-0.72	1.11
Breakeven yield per acre	38.94	45.99	27.39
Net return including govt. payments	41.68	12.43	78.83
Lbr & mgt charge per acre	12.13	15.87	10.91
Net return over lbr & mgt	29.55	-3.45	67.93

TABLE 12 - 25
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

SPRING WHEAT ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	291	56	56
Number of farms	181	36	36
Acres	334.56	256.64	370.60
Yield per acre (bushel)	42.13	34.32	44.67
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.03	2.97	3.07
Total product return per acre	127.72	101.94	137.06
Miscellaneous income per acre	30.55	18.01	48.32
Gross return per acre	158.27	119.95	185.38
Direct expenses per acre			
Seed	9.87	9.65	9.83
Fertilizer	24.74	24.71	21.07
Crop chemicals	20.10	23.13	21.57
Crop insurance	6.06	6.93	5.60
Drying fuel	0.15	0.14	0.28
Fuel & oil	4.90	5.10	4.67
Repairs	9.62	8.55	10.08
Custom hire	2.77	2.47	2.44
Land rent	59.86	64.81	52.17
Operating interest	4.14	5.19	3.85
Miscellaneous	0.62	0.50	0.17
Total direct expenses per acre	142.80	151.17	131.73
Return over direct expenses per acre	15.46	-31.22	53.65
Overhead expenses per acre			
Custom hire	1.08	1.77	1.18
Hired labor	5.22	3.95	7.32
Machinery & bldg leases	2.49	2.36	1.56
Farm insurance	3.21	2.16	4.65
Utilities	1.39	1.37	1.60
Dues & professional fees	1.03	0.76	1.26
Interest	3.80	3.46	3.69
Mach & bldg depreciation	7.60	7.33	7.71
Miscellaneous	1.91	1.78	2.03
Total overhead expenses per acre	27.72	24.94	30.99
Total listed expenses per acre	170.52	176.11	162.72
Net return per acre	-12.26	-56.16	22.66
Total direct expense per bushel	3.39	4.41	2.95
Total listed expense per bushel	4.05	5.13	3.64
Net return per bushel	-0.29	-1.64	0.51
Breakeven yield per acre	46.17	53.22	37.28
Net return including govt. payments	18.35	-20.56	55.55
Lbr & mgt charge per acre	11.72	12.16	10.04
Net return over lbr & mgt	6.63	-32.72	45.51

TABLE 12 - 26
 Crop Enterprise Analysis, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms sorted by Return to Overhead)

SPRING WHEAT ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	71	10	10
Number of farms	42	8	8
Acres	136.82	115.67	129.23
Yield per acre (bushel)	42.31	35.99	46.06
Operators share of yield %	64.56	64.50	65.91
Value per bushel	3.10	2.94	3.13
Total product return per acre	84.77	68.38	93.65
Miscellaneous income per acre	13.02	12.06	24.95
Gross return per acre	97.78	80.43	118.60
Direct expenses per acre			
Seed	8.34	5.90	8.61
Fertilizer	23.01	20.20	24.25
Crop chemicals	10.49	22.17	6.91
Crop insurance	3.79	4.09	2.56
Drying fuel	0.15	0.00	0.00
Fuel & oil	5.56	6.58	4.53
Repairs	9.41	10.84	9.77
Custom hire	3.39	3.07	0.18
Operating interest	1.89	2.97	2.22
Miscellaneous	0.32	0.87	0.00
Total direct expenses per acre	66.36	76.69	59.03
Return over direct expenses per acre	31.42	3.74	59.57
Overhead expenses per acre			
Custom hire	0.28	0.48	0.13
Hired labor	4.78	3.69	3.39
Machinery & bldg leases	2.18	1.50	2.28
Farm insurance	3.46	3.57	2.74
Utilities	1.55	1.42	1.09
Dues & professional fees	1.00	0.92	0.44
Interest	3.41	1.58	2.94
Mach & bldg depreciation	8.85	5.96	7.13
Miscellaneous	2.41	1.62	2.49
Total overhead expenses per acre	27.90	20.74	22.63
Total listed expenses per acre	94.26	97.44	81.66
Net return per acre	3.52	-17.00	36.94
Total direct expense per bushel	2.43	3.30	1.94
Total listed expense per bushel	3.45	4.20	2.69
Net return per bushel	0.13	-0.73	1.22
Breakeven yield per acre	40.54	45.06	27.48
Net return including govt. payments	20.42	6.45	52.48
Lbr & mgt charge per acre	11.96	14.82	11.08
Net return over lbr & mgt	8.46	-8.36	41.40

TABLE 13 - 1
 Size Of Farm Report, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Farms Sorted By Gross Cash Farm Income)

	Average For All Farms	40,001 - 100,000	100,001 - 200,000	200,001 - 500,000	500,001 +
Number of farms	211	8	29	107	66
Income Statement					
Gross cash farm income	467944	74146	148906	336289	875883
Total cash farm expense	394956	59958	126694	281976	741797
Net cash farm income	72988	14188	22212	54313	134086
Inventory change	33113	1871	17358	21519	62984
Depreciation and capital adjustment	-19049	-6356	-5512	-14264	-34552
Net farm income	87052	9702	34058	61568	162517
Profitability (cost)					
Labor and management earnings	59086	1291	24011	41176	111155
Rate of return on assets	9 %	2 %	8 %	9 %	10 %
Rate of return on equity	11 %	-4 %	10 %	10 %	12 %
Operating profit margin	18 %	6 %	17 %	18 %	19 %
Asset turnover rate	50 %	28 %	48 %	49 %	50 %
Liquidity					
Term debt coverage ratio	151 %	105 %	157 %	144 %	157 %
Expense as a percent of income	79 %	80 %	76 %	79 %	79 %
Interest as a percent of income	8 %	13 %	7 %	8 %	8 %
Solvency (market)					
Number of sole proprietors	170	6	28	99	36
Ending farm assets	1050062	434258	431304	912175	2032413
Ending farm liabilities	549732	188867	237561	460165	1110682
Ending total assets	1204742	536520	498027	1074100	2246445
Ending total liabilities	587866	193482	263290	490806	1184196
Ending net worth	616875	343037	234737	583294	1062250
Net worth change	58499	15306	25102	53208	102569
Ending farm debt to asset ratio	52 %	43 %	55 %	50 %	55 %
Beg total debt to asset ratio	50 %	38 %	53 %	48 %	54 %
End total debt to asset ratio	49 %	36 %	53 %	46 %	53 %
Nonfarm Information					
Farms reporting living expenses	23	2	3	15	2
Total family living expense	31543	-	-	33975	-
Total living, invest, & capital purch	45512	-	-	45259	-
Net nonfarm income	16283	20958	19109	19385	9106
Crop Acres					
Total acres owned	412	209	175	321	692
Total crop acres	1729	441	746	1381	2906
Total crop acres owned	376	186	152	285	648
Total crop acres cash rented	1240	171	498	981	2134
Total crop acres share rented	113	84	97	115	124

TABLE 13 - 2
 Type Of Farm Report, 1999
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley

	Average For All Farms	Crop	Other
Number of farms	211	97	112
Income Statement			
Gross cash farm income	467944	508600	430800
Total cash farm expense	394956	423611	368094
Net cash farm income	72988	84988	62706
Inventory change	33113	25505	39086
Depreciation and capital adjustment	-19049	-16488	-21123
Net farm income	87052	94005	80669
Profitability (cost)			
Labor and management earnings	59086	60899	57092
Rate of return on assets	9 %	9 %	9 %
Rate of return on equity	11 %	10 %	12 %
Operating profit margin	18 %	18 %	19 %
Asset turnover rate	50 %	50 %	50 %
Liquidity			
Term debt coverage ratio	151 %	142 %	159 %
Expense as a percent of income	79 %	79 %	78 %
Interest as a percent of income	8 %	7 %	8 %
Solvency (market)			
Number of sole proprietors	170	74	94
Ending farm assets	1050062	1116280	988411
Ending farm liabilities	549732	529251	555659
Ending total assets	1204742	1320252	1104792
Ending total liabilities	587866	566750	593892
Ending net worth	616875	753502	510901
Net worth change	58499	65665	53120
Ending farm debt to asset ratio	52 %	47 %	56 %
Beg total debt to asset ratio	50 %	44 %	55 %
End total debt to asset ratio	49 %	43 %	54 %
Nonfarm Information			
Farms reporting living expenses	23	10	13
Total family living expense	31543	27068	34986
Total living, invest, & capital purch	45512	39330	50267
Net nonfarm income	16283	12285	19806
Crop Acres			
Total acres owned	412	386	434
Total crop acres	1729	1752	1709
Total crop acres owned	376	346	402
Total crop acres cash rented	1240	1279	1204
Total crop acres share rented	113	127	104

TABLE 13 - 3
Age Of Operator Report, 1999
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley

	Average For All Farms	Under 31	31 - 40	41 - 50	51 - 60
Number of farms	211	17	64	94	32
Income Statement					
Gross cash farm income	467944	298855	435418	471422	576231
Total cash farm expense	394956	266607	365850	394228	476260
Net cash farm income	72988	32248	69568	77193	99971
Inventory change	33113	31830	30176	34792	32152
Depreciation and capital adjustment	-19049	-10026	-15126	-21556	-26469
Net farm income	87052	54053	84618	90430	105654
Profitability (cost)					
Labor and management earnings	59086	46332	67550	57020	60382
Rate of return on assets	9 %	12 %	11 %	9 %	7 %
Rate of return on equity	11 %	24 %	18 %	10 %	8 %
Operating profit margin	18 %	17 %	19 %	19 %	19 %
Asset turnover rate	50 %	72 %	61 %	46 %	40 %
Liquidity					
Term debt coverage ratio	151 %	169 %	155 %	155 %	162 %
Expense as a percent of income	79 %	80 %	78 %	77 %	79 %
Interest as a percent of income	8 %	7 %	7 %	7 %	8 %
Solvency (market)					
Number of sole proprietors	170	14	51	78	24
Ending farm assets	1050062	523312	808987	1147556	1598590
Ending farm liabilities	549732	366921	462097	582429	776765
Ending total assets	1204742	560679	936023	1304488	1873528
Ending total liabilities	587866	389391	503684	620722	819551
Ending net worth	616875	171287	432339	683766	1053977
Net worth change	58499	36745	51454	54103	106445
Ending farm debt to asset ratio	52 %	70 %	57 %	51 %	49 %
Beg total debt to asset ratio	50 %	70 %	56 %	49 %	46 %
End total debt to asset ratio	49 %	69 %	54 %	48 %	44 %
Nonfarm Information					
Farms reporting living expenses	23	1	8	12	2
Total family living expense	31543	-	28186	34805	-
Total living, invest, & capital purch	45512	-	34786	53350	-
Net nonfarm income	16283	11942	15164	15755	23853
Crop Acres					
Total acres owned	412	215	252	439	762
Total crop acres	1729	1217	1794	1678	1992
Total crop acres owned	376	152	228	402	729
Total crop acres cash rented	1240	1046	1446	1151	1141
Total crop acres share rented	113	18	120	126	122

(

(

(

(

(

(

(

(

(

(

(

(

(

(