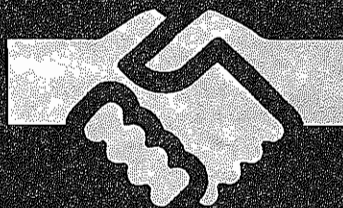
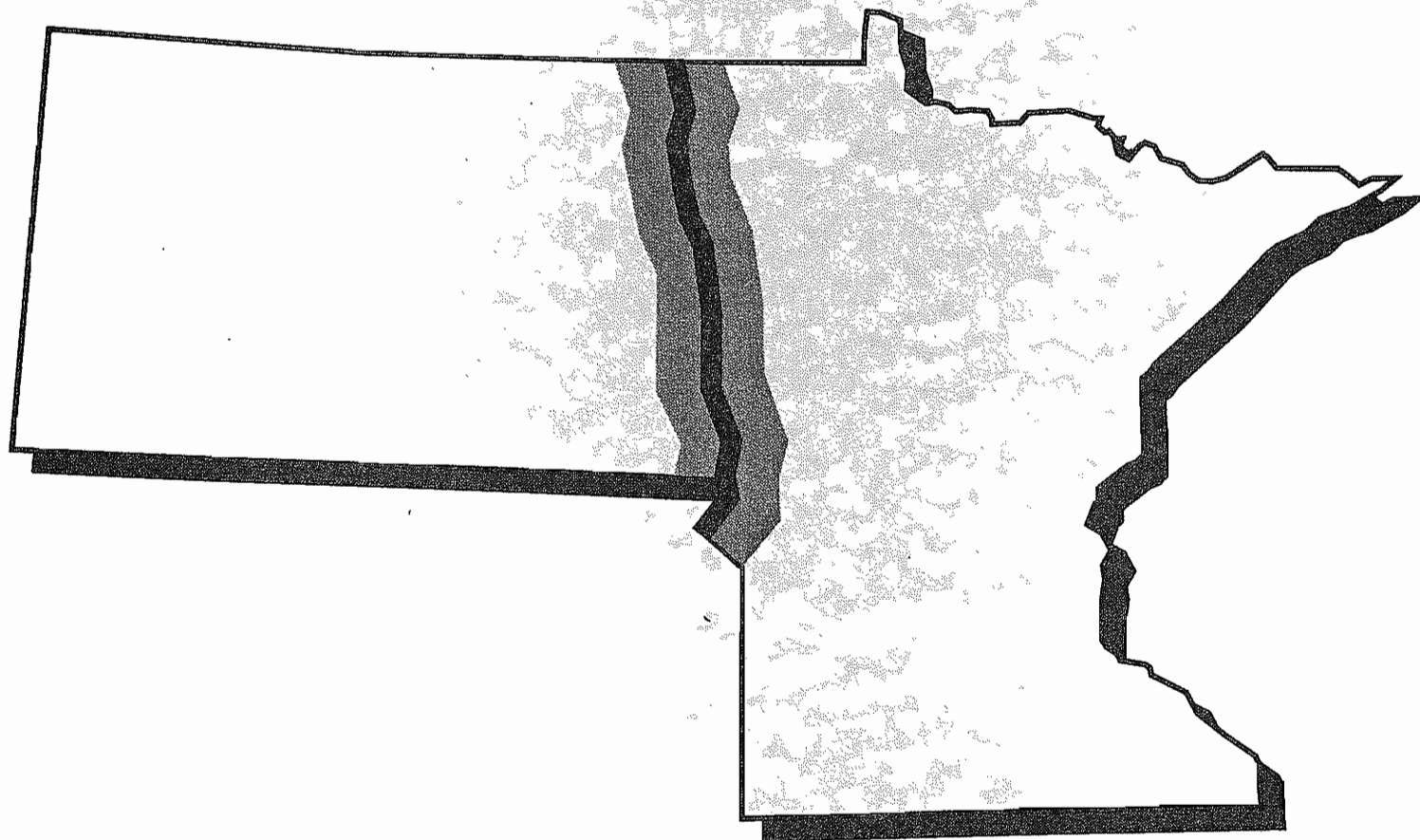


North Dakota
Farm and Ranch
Business Management
Education



Minnesota
Farm Management
Education

1994 Red River Valley Report



Minnesota Farm Management Education
and
North Dakota Farm Business Management Education

**RED RIVER VALLEY AVERAGES
1994 ANNUAL REPORT**

ACKNOWLEDGEMENTS

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

North Dakota

Instructor

Grafton (NVAVTC).....	Duane Maatz
Kindred High School.....	Ted Johnson
Wahpeton (NDSCS).....	Keith Torgerson

Minnesota

Barnsville.....	Ron Salber
Fergus Falls.....	Lance Brower
Hawley.....	Dennis Olsen
Mahnomen/Ulen.....	Mike Lockhart
NTC-Moorhead.....	Rick Morgan
	Greg Tullis
NTC-Thief River Falls.....	Bob Bollesen
	Danie Packard
NTC-Thief River Falls (East Grand Forks).....	Ron Dvergsten
NTC-Thief River Falls (Fertile).....	Carol Kleppe
NTC-Thief River Falls (Karlstad).....	Lynn Carlson

This report was made possible by the farm families who cooperated with their farm management instructors in getting the farm records for 1994 closed out on a timely basis. The farm management instructors cited above generated Finpack year-end farm analyses for 1994. 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 acknowledge is due the Farm Business Management Education programs of Minnesota and North Dakota and the North Dakota State Board for Vocational and Technical Education for cooperation in the development of the first annual Red River Valley Report.

1994 RED RIVER VALLEY REPORT
MINNESOTA AND NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

Table of Contents

Introduction	3
Explanatory Notes for the Farm Operators' Reports	4
Table 1 - Farm Income Statement	8
Table 2 - Inventory Changes	10
Table 3 - Depreciation and Other Capital Adjustments	11
Table 4 - Profitability and Liquidity Analysis	12
Table 5 - Balance Sheet (Cost)	13
Table 6 - Statement of Cash Flows	14
Table 7 - Financial Guidelines Measures	15
Table 8 - Crop Production and Marketing Summary	16
Table 9 - Household and Personal Expenses	17
Table 10 - Operator Information, Nonfarm Income	18
Table 11 - Net Farm Income after Extraordinary Items	19
Explanatory Notes for Crop Tables	20
Table 12 - 1 - Durum Wheat on Cash Rented Land	21
Table 12 - 2 - Spring Wheat on Owned Land	22
Table 12 - 3 - Spring Wheat on Cash Rented Land	23
Table 12 - 4 - Spring Wheat on Share Rented Land	24
Table 12 - 5 - Barley on Owned Land	25
Table 12 - 6 - Barley on Cash Rented Land	26
Table 12 - 7 - Barley on Share Rented Land	27
Table 12 - 8 - Navy Beans on Owned Land	28
Table 12 - 9 - Navy Beans on Cash Rented Land	29
Table 12 - 10 - Pinto Beans on Owned Land	30
Table 12 - 11 - Pinto Beans on Cash Rented Land	31
Table 12 - 12 - Pinto Beans on Share Rented Land	32
Table 12 - 13 - Corn on Owned Land	33
Table 12 - 14 - Corn on Cash Rented Land	34
Table 12 - 15 - Corn on Share Rented Land	35
Table 12 - 16 - Corn Silage on Cash Rented Land	36
Table 12 - 17 - Potatoes on Cash Rented Land	37
Table 12 - 18 - Soybeans on Owned Land	38
Table 12 - 19 - Soybeans on Cash Rented Land	39
Table 12 - 20 - Soybeans on Share Rented Land	40
Table 12 - 21 - Sugar Beets on Owned Land	41
Table 12 - 22 - Sugar Beets on Cash Rented Land	42
Table 12 - 23 - Sunflowers on Owned Land	43
Table 12 - 24 - Sunflowers on Cash Rented Land	44
Table 12 - 25 - Sunflowers on Share Rented Land	45
Table 12 - 26 - Confectionary Sunflowers on Owned Land	46
Table 12 - 27 - Confectionary Sunflowers on Cash Rented Land	47
Table 12 - 28 - Confectionary Sunflowers on Share Rented Land	48
Table 12 - 29 - Alfalfa Hay on Owned Land	49
Table 12 - 30 - Alfalfa Hay on Cash Rented Land	50
Table 12 - 31 - Fallow on Cash Rented Land	51
Explanatory Notes for Livestock Tables	52
Table 13 - 1 - Beef Cow-Calf -- Average per Cow	53
Table 13 - 2 - Beef Cow-Calf -- Average per cwt produced	54
Table 13 - 3 - Beef, Background Beef -- Average per cwt produced .	55
Table 13 - 4 - Beef, Background Beef -- Average per head sold/trans	56
Table 13 - 5 - Hogs, Farrow To Finish -- Average per cwt produced.	57
Table 13 - 6 - Hogs, Farrow To Finish -- Average per litter	58
Table 14 - 1 - Size Of Farm Report	59
Table 14 - 2 - Type Of Farm Report	60
Table 14 - 3 - Age Of Operator Report	61

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 and livestock 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 each section which includes the farm operators' reports, crop reports and livestock reports. Tables 1 through 11 present farm operator information. The table 12 series provide performance information on crop enterprises. The table 13 series provide performance results on livestock enterprises. Lastly, tables 14-1, 14-2 and 14-3 compares the analysis of farms sorted by total cash farm income, type of farm and age of farm operator, respectively.

The 1994 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 Farm Business Management, PO Box 6022, Bismarck, ND 58506, or Tom Risdal, Northwest Technical College, Highway 1 East, Thief River Falls, MN 56701, to order a copy of this report. Questions about comparison tables contained in this report may be addressed to Andrew Swenson, Box 5437, NDSU Extension Service, Fargo, ND 58105.

EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS

Tables 1 through 4 and 6 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, the Comparative Financial Statement, 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 and livestock 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 or livestock records were not complete enough to include in the respective crop or livestock tables.

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

Table 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 crop enterprises labeled as "CCC or Reserve" or "Sealed," which refers to 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. "Other Government Payments" refers to all farm government payments other than deficiency and 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 third and fourth 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.) In Tables 1-3, 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 (accrual)" is the accrued interest cost, usually it will be different from the cash interest expense shown on Table 1.

"Value of operator's labor and management" is the opportunity cost for unpaid operator's labor and management. An amount of \$20,000 per full time operator was normally assumed.

"Return of farm assets" is calculated by adding Farm interest paid" 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 feeder livestock purchased 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 along with 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 the sum of "Interest paid" and accrued interest which is then divided by "Gross farm revenue."

Table 5. Balance Sheet

The beginning and ending net worth statements and solvency measures are presented for sole proprietors only in Table 5. 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. 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.

Table 6. Statement of Cash Flows

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

Table 7. Financial Guidelines Measures

This table contains the 16 measures of financial performance recommended by the Farm Financial Standards Task Force.

Table 8. 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 9. Household and Personal Expenses

For those farms that keep records, the household and personal expenses are summarized in Table 9. The farms are grouped in the same ranking as in Table 1. Since not all farms keep these records, the numbers may be different for each group. Averages are determined by the number of farms keeping these records. Table 5 presents calculated family living and includes all farms. Income tax paid is also shown on table 5 and includes all farms.

Table 10. Operator Information, Nonfarm Summary

Table 10 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 11. Net Farm Income After Extraordinary Items

The value of debts forgiven which exceeds the value of assets repossessed is technically income to the business. (Whether it is taxable or not depends upon the specific situation.) The average values of debts forgiven and assets repossessed are reported in Table 11 and used to adjust the "Net farm income" from Table 1.

Table 14-1. Size of Farm Report

Table 14-1 sorts farms according to total cash farm income. Each column, representing a range of cash farm income, gives profitability and liquidity analysis, comparative financial statement as well as personal spending acreage size. A study of each column reveals the number of farms as well as the various financial characteristics of each group.

Table 14-2. Type of Farm Report

Table 14-2 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 are sorted to their respective group if 70% of the farm sales comes from that enterprise. A study of this table reveals the comparative profitability of each farm type.

Table 14-3. Age of Operator Report

Table 14-3 sorts farms according to age of operator. Each column, representing a range of age, gives profitability and liquidity analysis, comparative financial statement as well as personal spending and acreage size. A study of each column reveals the number of farms as well as the various financial characteristics of each group.

TABLE 1
FARM INCOME STATEMENT, 1994
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	233	47	47
CASH FARM INCOME			
Barley	14819	11790	21558
Black Turtle Beans	125	263	-
Dark Red Kidney Beans	154	-	-
Navy Beans	3260	1214	5795
Pink Beans	82	-	-
Pinto Beans	4543	7817	3603
Small Red Beans	85	72	-
Canola	134	-	426
Carrots	146	-	723
Corn	13198	8443	4580
Alfalfa Hay	528	-	837
Grass Hay	143	674	-
Millet	50	-	-
Potatoes	4666	-	14392
Seed Potatoes	1113	3082	-
Soybeans	26352	16132	29888
Straw	105	5	-
Sugar Beets	74828	38094	192773
Sunflowers	10426	11782	11747
Confectionary Sunflowers	4471	9782	4541
Durum Wheat	722	65	2339
Spring Wheat	53838	35504	89350
Winter Wheat	139	-	691
Rented Out	219	-	1088
Other crops	6591	18	21678
Miscellaneous crop income	145	161	364
Beef Bulls	210	-	-
Beef Calves	258	160	55
Background Beef	5100	8662	109
Finish Beef Calves	7139	27337	646
Finish Yrlg Steers	75	-	-
Milk	707	1666	-
Dairy Steers	445	504	-
Raised Hogs	3308	-	7919
Feeder Pigs	691	-	-
Finish Feeder Pigs	339	407	-
Fdr Lambs	174	-	-
Mkt Lambs	107	-	-
Finish Cull Cows	64	-	-
Cull breeding livestock	433	222	569
Misc. livestock income	803	120	1063
Deficiency payments	19247	17205	26738
CRP payments	388	182	870
Other government payments	8104	6229	12567
Custom work income	3859	7513	5532
Patronage dividends, cash	2154	1041	5468
Insurance income	19023	19008	20258
Cash from hedging accts	461	704	929
Other farm income	10021	9522	22324
Gross Cash Farm Income	303992	245381	511419

TABLE 1
FARM INCOME STATEMENT, 1994 (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	233	47	47
CASH FARM EXPENSE			
Seed	17456	13711	26567
Fertilizer	27033	19529	41730
Crop chemicals	26894	21036	45182
Crop insurance	8689	7295	13120
Drying fuel	464	510	282
Crop marketing	1566	986	3893
Crop miscellaneous	4036	4017	8019
Feeder livestock purchase	8432	27227	1629
Purchased feed	3190	2544	3580
Breeding fees	42	39	45
Veterinary	372	561	291
Livestock supplies	392	195	256
Livestock leases	20	79	-
Grazing fees	98	329	-
Livestock marketing	267	889	58
Interest	20071	17363	28904
Fuel & oil	11328	10503	16679
Repairs	20368	19038	31733
Custom hire	6241	8522	10581
Hired labor	16838	19020	34346
Land rent	54150	45736	83531
Machinery & bldg leases	5870	5187	7314
Real estate taxes	3010	2095	5922
Personal property taxes	68	18	219
Farm insurance	3631	3266	6407
Utilities	3202	3508	4574
Dues & professional fees	1694	1125	2980
Hedging account deposits	1013	528	1511
Miscellaneous	6226	4598	9321
Total cash expense	252661	239455	388675
Net cash farm income	51331	5926	122744
INVENTORY CHANGES			
Crops and feed	22383	1317	61627
Market livestock	-1740	-631	-596
Accounts receivable	-1172	-4609	1955
Prepaid expenses and supplies	1446	-1899	3598
Accounts payable	-3315	-6715	-6041
Total inventory change	17603	-12537	60544
Net operating profit	68934	-6611	183288
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS			
Breeding livestock	-145	-56	-671
Machinery and equipment	-14326	-17015	-23742
Buildings and improvements	-911	-806	-1871
Other farm capital	3351	1588	10561
Total depr. and other capital adj	-12030	-16289	-15723
Net farm income	56903	-22899	167565

TABLE 2
INVENTORY CHANGES, 1994
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	233	47	47
Net cash farm income	51331	5926	122744
CROPS AND FEED			
Ending inventory	133242	90071	276757
Beginning inventory	110859	88754	215130
Inventory change	22383	1317	61627
MARKET LIVESTOCK			
Ending inventory	7683	13974	2710
Beginning inventory	9423	14605	3305
Inventory change	-1740	-631	-596
ACCTS RECEIVABLE & OTHER CURRENT ASSETS			
Ending inventory	26607	25382	65821
Beginning inventory	27779	29991	63866
Inventory change	-1172	-4609	1955
PREPAID EXPENSES AND SUPPLIES			
Ending inventory	17915	6144	45428
Beginning inventory	16469	8043	41830
Inventory change	1446	-1899	3598
ACCOUNTS PAYABLE			
Beginning inventory	11355	7692	14949
Ending inventory	14670	14407	20990
Inventory change	-3315	-6715	-6041
Total inventory change	17603	-12537	60544
Net operating profit	68934	-6611	183288

TABLE 3
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1994
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	233	47	47
Net operating profit	68934	-6611	183288
BREEDING LIVESTOCK			
Ending inventory	4298	32	2201
Capital sales	237	-	588
Beginning inventory	4331	-	2185
Capital purchases	348	88	1276
Depreciation, capital adj.	-145	-56	-671
MACHINERY AND EQUIPMENT			
Ending inventory	145492	117412	249888
Capital sales	3737	5218	7833
Beginning inventory	131547	115939	219819
Capital purchases	32008	23706	61644
Depreciation, capital adj.	-14326	-17015	-23742
BUILDINGS AND IMPROVEMENTS			
Ending inventory	28479	18626	51508
Capital sales	323	53	1546
Beginning inventory	27248	18258	47967
Capital purchases	2464	1227	6958
Depreciation, capital adj.	-911	-806	-1871
OTHER CAPITAL ASSETS			
Ending inventory	83663	56199	175573
Capital sales	3493	106	13263
Beginning inventory	64818	46829	138441
Capital purchases	18987	7888	39834
Depreciation, capital adj.	3351	1588	10561
Total depreciation, capital adj.	-12030	-16289	-15723
Net farm income	56903	-22899	167565

TABLE 4
 PROFITABILITY AND LIQUIDITY ANALYSIS, 1994
 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	233	47	47
PROFITABILITY (Cost)			
Net farm income	56903	-22899	167565
Labor and management earnings	37675	-34747	125795
Rate of return on assets	9.2 %	-5.0 %	14.9 %
Rate of return on equity	11.1 %	-22.6 %	20.2 %
Operating profit margin	18.1 %	-10.6 %	30.2 %
Asset turnover rate	50.6 %	46.5 %	49.4 %
Interest on farm net worth	19228	11847	41770
Farm interest expense	21286	19536	31107
Value of operator lbr and mgmt.	21827	19166	26931
Return on farm assets	56363	-22530	171742
Average farm assets	615748	454654	1150158
Return on farm equity	35076	-42065	140635
Average farm equity	316608	186442	696163
Value of farm production	311697	211632	568525
Number of Farms	233	47	47
LIQUIDITY (Cash)			
Net cash farm income	51331	5926	122744
Net nonfarm income	12210	20277	6730
Family living and taxes	43012	27019	68641
Real estate principal payments	6550	3564	11832
Cash available for interm. debt	13979	-4380	49002
Average intermediate debt	83304	72146	130861
Years to turnover interm. debt	6.0	**	2.7
Expense as a % of income	83 %	98 %	76 %
Interest as a % of income	7 %	7 %	6 %
LIQUIDITY (Accrual)			
Total accrual farm income	323464	241458	574405
Total accrual farm expense	254530	248069	391117
Net accrual operating income	68934	-6611	183288
Net nonfarm income	12210	20277	6730
Family living and taxes	43012	27019	68641
Real estate principal payments	6550	3564	11832
Available for intermediate debt	31582	-16917	109546
Average intermediate debt	83304	72146	130861
Years to turnover interm. debt	2.6	**	1.2
Expense as a % of income	79 %	103 %	68 %
Interest as a % of income	7 %	8 %	5 %

** Income insufficient to meet debt servicing requirements

TABLE 5
BALANCE SHEET AT COST VALUES, 1994
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 %	
	194		38		29	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
ASSETS						
Current Farm Assets						
Cash and checking balance	8947	6953	5457	5370	13619	2725
Prepaid expenses & supplies	12636	14992	7477	4730	35753	45005
Growing crops	194	120	66	-	-	240
Accounts receivable	13237	11497	15360	15963	21517	7841
Hedging accounts	1056	388	2066	255	1190	774
Crops held for sale or feed	78482	102005	40867	47520	175248	247971
Crops under government loan	5153	5605	7604	3240	1464	5029
Market livestock held for sale	7295	6560	5072	5458	2840	2866
Other current assets	1173	761	916	1115	575	1298
Total current farm assets	128172	148882	84884	83651	252205	313748
Intermediate Farm Assets						
Breeding livestock	4651	4528	-	39	1880	997
Machinery and equipment	111923	125645	78137	80016	183859	218210
Other intermediate assets	36146	52196	28877	35108	72194	115696
Total intermediate farm assets	152720	182369	107013	115163	257933	334904
Long-Term Farm Assets						
Farm land	168364	183189	120316	126019	305192	349779
Buildings and improvements	22061	23568	17480	18001	22432	27775
Other long-term assets	13375	16932	940	1368	32330	42229
Total long-term farm assets	203799	223689	138737	145388	359955	419783
Total Farm Assets	484691	554940	330634	344203	870093	1068435
Total Nonfarm Assets	85860	94369	73497	82265	163041	182674
Total Assets	570551	649309	404131	426468	1033134	1251109
LIABILITIES						
Current Farm Liabilities						
Accrued interest	3850	5059	2984	5359	4193	5330
Accounts payable	5758	7402	3455	10028	8377	6817
Current notes	61220	77326	51212	66148	101865	140218
Government crop loans	1003	1805	405	690	236	665
Principal due on term debt	17833	22554	15510	17368	25282	38738
Total current farm liabilities	89664	114147	73566	99592	139953	191769
Intermediate Farm Liabilities	57491	70547	52188	54789	93905	117144
Long-term Farm Liabilities	101814	106970	95188	97347	134939	159433
Total Farm Liabilities	248968	291663	220943	251727	368796	468346
Total Nonfarm Liabilities	15661	16914	10613	12199	20108	18269
Total Liabilities	264629	308577	231555	263926	388905	486615
Net Worth (farm and nonfarm)	305922	340731	172576	162542	644229	764494
Net Worth Change		34810		-10034		120265
RATIO ANALYSIS						
Current Farm Liabilities / Assets	70 %	77 %	87 %	119 %	55 %	61 %
Curr. & Interm Farm Liab / Assets	52 %	56 %	66 %	78 %	46 %	48 %
Long Term Farm Liab. / Assets	50 %	48 %	69 %	67 %	37 %	38 %
Total Liabilities / Assets	46 %	48 %	57 %	62 %	38 %	39 %

TABLE 6
STATEMENT OF CASH FLOWS, 1994
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		233	47	47
(a) Beginning cash balance (farm & nonfarm)		14004	7672	22225
CASH FROM OPERATING ACTIVITIES				
Gross cash farm income		303992	245381	511419
Net nonfarm income	(+)	12210	20277	6730
Total cash farm expense	(-)	252661	239455	388675
Apparent family living expense	(-)	33552	22817	47434
Income and social security tax	(-)	9460	4202	21207
(b) Cash from operations	(=)	20529	-816	60834
CASH FROM INVESTING ACTIVITIES				
Sale of breeding livestock		237	-	588
Sale of machinery & equipment	(+)	3737	5218	7833
Sale of farm land	(+)	357	1351	419
Sale of farm buildings	(+)	323	53	1546
Sale of other farm assets	(+)	3493	106	13263
Sale of nonfarm assets	(+)	764	1756	1030
Purchase of breeding livestock	(-)	348	88	1276
Purchase of machinery & equip.	(-)	32008	23706	61644
Purchase of farm land	(-)	12626	4213	32964
Purchase of farm buildings	(-)	2464	1227	6958
Purchase of other farm assets	(-)	18987	7888	39834
Purchase of nonfarm assets	(-)	6258	3478	9861
(c) Cash from investing activities	(=)	-63781	-32114	-127855
CASH FROM FINANCING ACTIVITIES				
Money borrowed		196458	151023	290875
Cash gifts and inheritances	(+)	2710	1393	215
Principal payments	(-)	158175	121273	229495
Dividends paid	(-)	-	-	-
Gifts given	(-)	20	19	47
(d) Cash from financing activities	(=)	40974	31124	61549
(e) Net change in cash balance	(b+c+d)	-2278	-1806	-5473
Ending cash balance calculated	(a+e)	11726	5866	16751

TABLE 7
FINANCIAL GUIDELINES MEASURES, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted by Net Farm Income)

	Average For All Farms		Average For Low 20 %		Average For High 20 %	
Number of Farms	233		47		47	
LIQUIDITY	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current ratio	1.63	1.50	1.49	1.10	2.05	2.02
Working capital	68094	65049	49022	12216	175055	203512
SOLVENCY (Cost)	Beginning	Ending	Beginning	Ending	Beginning	Ending
Farm debt to asset ratio	48 %	49 %	56 %	62 %	40 %	39 %
Farm equity to asset ratio	52 %	51 %	44 %	38 %	60 %	61 %
Farm debt to equity ratio	93 %	96 %	126 %	165 %	65 %	65 %
PROFITABILITY (Cost)						
Rate of return on farm assets	9.2 %		-5.0 %		14.9 %	
Rate of return on farm equity	11.1 %		-22.6 %		20.2 %	
Operating profit margin	18.1 %		-10.6 %		30.2 %	
Net farm income	56903		-22899		167565	
REPAYMENT CAPACITY	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	99 %	152 %	38 %	-11 %	154 %	274 %
Capital replacement margin	-306	17297	-15764	-28300	26923	87467
EFFICIENCY						
Asset turnover rate (cost)	50.6 %		46.5 %		49.4 %	
Operating expense ratio	72.1 %		94.6 %		62.7 %	
Depreciation expense ratio	3.7 %		6.7 %		2.7 %	
Interest expense ratio	6.6 %		8.1 %		5.4 %	
Net farm income ratio	17.6 %		-9.5 %		29.2 %	

TABLE 8
CROP PRODUCTION AND MARKETING SUMMARY, 1994
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	233	47	47
ACREAGE SUMMARY			
Total Acres Owned	319	302	484
Total Crop Acres	1255	1081	1712
Crop Acres Owned	231	151	393
Crop Acres Cash Rented	891	794	1198
Crop Acres Share Rented	133	137	121
Total Pasture Acres	6	-	5
AVERAGE PRICE RECEIVED (Cash Sales Only)			
Wheat, Spring per bu.	3.39	3.18	3.32
Barley per bu.	1.75	1.70	1.79
Corn per bu.	1.99	2.29	-
Soybeans per bu.	5.74	5.73	5.80
Sugar Beets per ton	36.67	38.18	36.76
Potatoes per cwt.	5.08	-	-
Sunflowers per cwt.	11.59	11.35	11.79
Sunflowers, Confectionary per cwt.	14.96	14.06	-
Beans, Pinto per cwt.	19.66	21.02	-
Wheat, Durum per bu.	3.55	-	-
AVERAGE YIELD PER ACRE			
Wheat, Spring (bu.)	31.87	27.24	34.50
Soybeans (bu.)	32.34	31.91	37.11
Barley (bu.)	60.16	57.56	64.75
Sugar Beets (ton)	20.07	18.25	21.42
Corn (bu.)	117.94	115.97	132.32
Sunflowers (cwt.)	15.37	12.06	15.82
Sunflowers, Confectionary (cwt.)	12.25	7.37	16.25
Beans, Pinto (cwt.)	11.83	9.62	-
Beans, Navy (cwt.)	14.52	-	18.43
Wheat, Durum (bu.)	22.25	-	-

TABLE 9
HOUSEHOLD AND PERSONAL EXPENSES, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

	Average For All Farms
Number of Sole Proprietors	23
Average family size	3.3
FAMILY LIVING EXPENSES	
Food and meals expense	5606
Medical care and health insurance	4196
Cash donations	1067
Household supplies	3260
Clothing	2205
Personal care	3884
Child / Dependent care	997
Gifts	937
Education	696
Recreation	2705
Utilities (household share)	799
Nonfarm vehicle operating expense	1432
Household real estate taxes	152
Dwelling rent	21
Household repairs	775
Nonfarm interest	813
Life insurance payments	1254
Total cash family living expense	30798
Family living from the farm	199
Total family living	30997
OTHER NONFARM EXPENDITURES	
Income taxes	10334
Furnishing & appliance purchases	437
Nonfarm vehicle purchases	2252
Nonfarm real estate purchases	2863
Other nonfarm capital purchases	694
Nonfarm savings & investments	2688
Total other nonfarm expenditures	19268
Total cash family living, investment & nonfarm capital purch	50066

TABLE 10
 OPERATOR INFORMATION & NONFARM SUMMARY, 1994
 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	233	47	47
OPERATOR INFORMATION			
Average number of operators	1.2	1.1	1.4
Average age of operators	40.0	39.7	41.6
Average number of years farming	16.5	15.1	18.4
NONFARM INCOME			
Nonfarm wages & salary	6991	6150	3056
Nonfarm business income	1274	1812	1653
Nonfarm rental income	484	662	479
Nonfarm interest income	254	141	388
Nonfarm cash dividends	156	15	616
Tax refunds	216	152	118
Other nonfarm income	2835	11344	421
Total nonfarm income	12210	20277	6730

TABLE 11
NET FARM INCOME AFTER EXTRAORDINARY ITEMS, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

	Average Of All Farms
Number of Farms	233
Gross cash farm income	303992
Cash farm expense	252661
Total inventory change	17603
Depr. and other capital adjustments	-12030
Net Farm Income (Before Repossessions & Debts Forgiven)	56903
Debts Forgiven	
Farm accounts payable forgiven	-
Current farm loans forgiven	-
Intermediate farm loans forgiven	369
Long term farm loans forgiven	-
Nonfarm debts forgiven	-
Total Debts Forgiven	369
Total Assets Repossessed	-
Net Farm Income (After Repossessions & Debts Forgiven)	57273

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. All costs are actual costs; no opportunity costs are included, except some producers entered an opportunity cost of sugar beet stock ownership in the "marketing" cost line item. The "Net Return per Acre" is the "Gross Return per Acre" minus the direct and overhead costs. The last section of each crop table contains economic efficiency measures which provide useful standards or goals for the individual managers.

Note: "Net return per acre including govt. payments" is the bottom line for government program crops. The difference between "Net return per acre" and "Net return including govt. payments" should reflect the effect of government farm program participation. However, this interpretation is erroneous because most farms included government payments under "Miscellaneous income per acre," therefore it is contained in "net return per acre."

There are potentially three tables for each group 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. "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. "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. 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.

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.

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

TABLE 12 - 1
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

DURUM WHEAT ON CASH RENTED LAND

	Average For All Farms
Number of fields	12
Number of farms	9
Acres	100.51
Yield per acre (bushel)	21.11
Operator's share of yield %	100.00
Value per bushel	3.73
Crop product return per acre	78.65
Miscellaneous income per acre	64.03
Gross return per acre	142.68
Direct costs per acre	
Seed	13.97
Fertilizer	23.22
Crop chemicals	11.37
Crop insurance	6.76
Fuel & oil	5.90
Repairs	13.94
Custom hire	4.78
Land rent	57.72
Operating interest	3.32
Total direct costs per acre	140.98
Return to overhead per acre	1.70
Overhead costs per acre	
Hired labor	10.41
Machinery & bldg leases	4.76
Farm insurance	2.53
Utilities	1.22
Dues & professional fees	1.32
Interest	4.09
Mach & bldg depreciation	5.54
Miscellaneous	3.03
Total overhead costs per acre	32.91
Total listed costs per acre	173.89
Net return per acre	-31.21
Total direct costs per bushel	6.68
Total listed costs per bushel	8.24
Net return per bushel	-1.48
Breakeven yield per acre	29.49

TABLE 12 - 2
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SPRING WHEAT ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	167	36	28
Number of farms	111	22	22
Acres	116.37	128.29	91.72
Yield per acre (bushel)	30.82	25.81	38.91
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.46	3.35	3.72
Crop product return per acre	106.64	86.46	144.78
Other product return per acre	0.03	0.19	0.00
Miscellaneous income per acre	48.04	35.23	48.48
Gross return per acre	154.68	121.70	193.25
Direct costs per acre			
Seed	11.04	13.09	10.50
Fertilizer	23.95	25.25	21.73
Crop chemicals	14.68	20.17	13.38
Crop insurance	6.09	7.41	5.64
Drying fuel	0.14	0.18	0.00
Fuel & oil	6.05	5.97	5.43
Repairs	10.84	11.09	11.25
Custom hire	1.31	3.11	1.58
Hired labor	0.73	0.24	0.00
Machinery & bldg leases	0.24	0.96	0.00
Utilities	0.01	0.00	0.00
Marketing	0.01	0.00	0.00
Operating interest	3.74	6.13	3.58
Miscellaneous	0.27	0.53	0.07
Total direct costs per acre	79.11	94.11	73.17
Return to overhead per acre	75.57	27.58	120.09
Overhead costs per acre			
Hired labor	4.21	4.19	3.21
Machinery & bldg leases	1.35	1.95	1.54
RE & pers. property taxes	11.39	12.46	10.68
Farm insurance	3.08	3.73	3.57
Utilities	1.67	1.73	1.87
Dues & professional fees	0.90	0.59	1.18
Interest	26.99	28.28	16.58
Mach & bldg depreciation	8.10	9.11	11.54
Miscellaneous	2.74	4.15	2.62
Total overhead costs per acre	60.44	66.18	52.80
Total listed costs per acre	139.55	160.30	125.96
Net return per acre	15.13	-38.60	67.29
Total direct costs per bushel	2.57	3.65	1.88
Total listed costs per bushel	4.53	6.21	3.24
Net return per bushel	0.49	-1.50	1.73
Breakeven yield per acre	26.44	37.27	20.83
Net return including govt. payments	17.82	-38.05	71.03

TABLE 12 - 3
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SPRING WHEAT ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	378	85	91
Number of farms	181	36	36
Acres	206.05	189.13	204.83
Yield per acre (bushel)	31.10	30.45	34.08
Operators share of yield %	100.00	100.00	100.00
Value per bushel	3.45	3.20	3.71
Crop product return per acre	107.40	97.59	126.33
Other product return per acre	0.07	0.00	0.18
Miscellaneous income per acre	46.81	30.44	62.66
Gross return per acre	154.21	128.03	188.99
Direct costs per acre			
Seed	11.41	12.60	10.25
Fertilizer	23.13	26.80	20.22
Crop chemicals	13.70	16.98	10.57
Crop insurance	6.17	6.97	5.38
Drying fuel	0.20	0.24	0.25
Fuel & oil	5.51	5.07	5.42
Repairs	9.41	9.55	8.97
Custom hire	2.16	5.84	1.64
Hired labor	0.24	0.24	0.05
Land rent	53.57	63.47	44.08
Machinery & bldg leases	0.54	0.50	1.57
Utilities	0.04	0.00	0.07
Marketing	0.05	0.14	0.00
Operating interest	3.66	4.77	4.24
Miscellaneous	0.23	0.17	0.39
Total direct costs per acre	130.21	153.36	113.10
Return to overhead per acre	24.01	-25.33	75.88
Overhead costs per acre			
Hired labor	4.91	5.47	7.12
Machinery & bldg leases	2.89	1.71	6.15
RE & pers. property taxes	0.03	0.08	0.00
Farm insurance	2.62	3.45	2.67
Utilities	1.39	1.36	1.64
Dues & professional fees	0.80	0.96	0.89
Interest	2.62	2.99	1.27
Mach & bldg depreciation	6.49	6.05	7.53
Miscellaneous	2.62	2.30	2.96
Total overhead costs per acre	24.87	24.35	30.23
Total listed costs per acre	155.08	177.71	143.33
Net return per acre	-0.86	-49.69	45.65
Total direct costs per bushel	4.19	5.04	3.32
Total listed costs per bushel	4.99	5.84	4.21
Net return per bushel	-0.03	-1.63	1.34
Breakeven yield per acre	31.33	45.95	21.72
Net return including govt. payments	3.35	-45.42	49.01

TABLE 12 - 4
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SPRING WHEAT ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	73	14	15
Number of farms	45	9	9
Acres	171.03	159.14	152.95
Yield per acre (bushel)	36.24	26.15	52.70
Operators share of yield %	61.91	64.04	64.75
Value per bushel	3.61	3.39	3.71
Crop product return per acre	79.55	53.96	124.31
Other product return per acre	0.58	0.00	0.00
Miscellaneous income per acre	21.88	30.84	2.72
Gross return per acre	101.43	84.80	127.03
Direct costs per acre			
Seed	7.17	9.23	7.30
Fertilizer	17.82	18.64	15.25
Crop chemicals	7.49	7.95	4.94
Crop insurance	4.63	9.49	3.28
Drying fuel	0.09	0.22	0.04
Fuel & oil	5.83	6.11	6.64
Repairs	9.49	9.35	8.75
Custom hire	0.60	0.77	0.84
Hired labor	0.40	1.72	0.00
Marketing	0.01	0.00	0.00
Operating interest	2.73	4.41	2.61
Miscellaneous	1.25	0.00	0.00
Total direct costs per acre	57.52	67.89	49.65
Return to overhead per acre	43.91	16.91	77.38
Overhead costs per acre			
Hired labor	3.75	1.48	5.84
Machinery & bldg leases	1.74	0.73	2.83
RE & pers. property taxes	0.00	0.00	0.00
Farm insurance	1.97	1.04	1.62
Utilities	1.50	1.43	1.87
Dues & professional fees	0.70	1.04	1.16
Interest	2.74	2.98	1.67
Mach & bldg depreciation	26.00	5.53	6.41
Miscellaneous	3.21	2.65	3.35
Total overhead costs per acre	41.61	16.88	24.76
Total listed costs per acre	99.13	84.77	74.41
Net return per acre	2.30	0.03	52.62
Total direct costs per bushel	1.59	2.60	0.94
Total listed costs per bushel	2.74	3.24	1.41
Net return per bushel	0.06	0.00	1.00
Breakeven yield per acre	34.27	24.86	29.80
Net return including govt. payments	5.95	0.56	59.69

TABLE 12 - 5
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

BARLEY ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	52	11	11
Number of farms	45	9	9
Acres	87.68	72.93	61.16
Yield per acre (bushel)	56.66	48.31	80.53
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.75	1.65	1.98
Crop product return per acre	99.33	79.56	159.07
Miscellaneous income per acre	39.57	21.79	33.93
Gross return per acre	138.90	101.35	193.00
Direct costs per acre			
Seed	8.30	9.22	7.84
Fertilizer	21.49	28.39	21.36
Crop chemicals	12.73	13.75	13.39
Crop insurance	5.12	6.58	6.17
Drying fuel	0.02	0.02	0.06
Fuel & oil	5.80	4.45	5.16
Repairs	10.27	10.76	8.68
Custom hire	0.87	2.78	0.74
Hired labor	0.44	0.30	0.00
Machinery & bldg leases	0.05	0.20	0.09
Marketing	0.03	0.00	0.00
Operating interest	2.80	3.35	2.40
Miscellaneous	0.42	0.28	0.62
Total direct costs per acre	68.34	80.08	66.49
Return to overhead per acre	70.56	21.27	126.51
Overhead costs per acre			
Hired labor	4.35	4.48	4.50
Machinery & bldg leases	1.91	1.32	5.11
RE & pers. property taxes	12.56	12.25	12.73
Farm insurance	3.27	3.18	4.33
Utilities	1.55	1.66	1.77
Dues & professional fees	0.87	0.88	1.58
Interest	27.77	32.31	23.54
Mach & bldg depreciation	7.75	9.58	7.28
Miscellaneous	2.89	3.81	3.06
Total overhead costs per acre	62.91	69.47	63.91
Total listed costs per acre	131.25	149.55	130.40
Net return per acre	7.64	-48.20	62.60
Total direct costs per bushel	1.21	1.66	0.83
Total listed costs per bushel	2.32	3.10	1.62
Net return per bushel	0.13	-1.00	0.78
Breakeven yield per acre	52.30	77.58	48.84
Net return including govt. payments	11.39	-46.70	67.40

TABLE 12 - 6
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

BARLEY ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	139	23	37
Number of farms	109	22	22
Acres	133.35	103.78	178.95
Yield per acre (bushel)	60.28	50.34	68.38
Operators share of yield %	100.00	100.00	100.00
Value per bushel	1.73	1.62	1.94
Crop product return per acre	104.41	81.50	132.67
Miscellaneous income per acre	32.44	25.78	37.16
Gross return per acre	136.85	107.28	169.83
Direct costs per acre			
Seed	8.49	9.16	7.87
Fertilizer	21.32	22.41	17.87
Crop chemicals	13.35	14.01	11.30
Crop insurance	6.14	7.97	4.86
Drying fuel	0.13	0.00	0.04
Fuel & oil	5.59	5.50	6.10
Repairs	9.90	10.81	8.23
Custom hire	2.28	3.29	1.46
Hired labor	0.17	0.21	0.54
Land rent	54.17	62.52	44.39
Machinery & bldg leases	0.52	0.47	1.67
Utilities	0.02	0.00	0.08
Marketing	0.02	0.00	0.00
Operating interest	4.03	7.16	3.35
Miscellaneous	0.25	0.01	0.29
Total direct costs per acre	126.36	143.52	108.05
Return to overhead per acre	10.49	-36.24	61.78
Overhead costs per acre			
Hired labor	5.30	5.26	6.00
Machinery & bldg leases	2.38	2.27	2.94
RE & pers. property taxes	0.09	0.00	0.00
Farm insurance	2.49	2.37	2.61
Utilities	1.39	1.68	1.50
Dues & professional fees	0.73	0.38	0.74
Interest	2.85	4.23	1.31
Mach & bldg depreciation	6.21	4.04	7.89
Miscellaneous	2.69	2.95	3.10
Total overhead costs per acre	24.14	23.17	26.08
Total listed costs per acre	150.50	166.69	134.13
Net return per acre	-13.65	-59.42	35.70
Total direct costs per bushel	2.10	2.85	1.58
Total listed costs per bushel	2.50	3.31	1.96
Net return per bushel	-0.23	-1.18	0.52
Breakeven yield per acre	68.16	87.04	49.98
Net return including govt. payments	-9.50	-56.25	42.44

TABLE 12 - 7
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

BARLEY ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	29	6	5
Number of farms	24	5	5
Acres	102.25	65.80	74.03
Yield per acre (bushel)	64.79	36.00	98.23
Operators share of yield %	62.71	66.89	65.27
Value per bushel	1.84	1.58	1.83
Crop product return per acre	75.06	37.93	114.97
Miscellaneous income per acre	16.59	17.14	13.69
Gross return per acre	91.65	55.07	128.66
Direct costs per acre			
Seed	5.47	7.91	5.98
Fertilizer	12.66	13.87	15.47
Crop chemicals	10.94	15.01	4.18
Crop insurance	3.45	3.49	3.03
Drying fuel	0.04	0.12	0.00
Fuel & oil	6.43	6.35	5.91
Repairs	9.73	10.44	9.32
Custom hire	0.22	0.00	0.00
Marketing	0.04	0.00	0.00
Operating interest	2.39	7.20	3.45
Miscellaneous	2.60	0.00	0.00
Total direct costs per acre	53.97	64.39	47.33
Return to overhead per acre	37.68	-9.32	81.32
Overhead costs per acre			
Hired labor	4.75	0.48	3.69
Machinery & bldg leases	1.65	1.59	1.69
RE & pers. property taxes	0.02	0.00	0.00
Farm insurance	2.35	1.46	1.61
Utilities	1.88	2.33	1.10
Dues & professional fees	0.36	0.61	0.03
Interest	3.97	4.83	1.18
Mach & bldg depreciation	46.75	5.70	8.54
Miscellaneous	3.74	4.63	3.76
Total overhead costs per acre	65.47	21.63	21.60
Total listed costs per acre	119.44	86.02	68.93
Net return per acre	-27.79	-30.95	59.73
Total direct costs per bushel	0.83	1.79	0.48
Total listed costs per bushel	1.84	2.39	0.70
Net return per bushel	-0.43	-0.86	0.61
Breakeven yield per acre	89.29	65.36	46.13
Net return including govt. payments	-20.34	-30.95	67.10

TABLE 12 - 8
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

NAVY BEANS ON OWNED LAND

	Average For All Farms
Number of fields	11
Number of farms	10
Acres	56.48
Yield per acre (cwt)	15.13
Operator's share of yield %	100.00
Value per cwt	21.99
Crop product return per acre	332.76
Miscellaneous income per acre	7.69
Gross return per acre	340.45
Direct costs per acre	
Seed	37.46
Fertilizer	16.09
Crop chemicals	20.71
Crop insurance	16.26
Drying fuel	0.56
Fuel & oil	9.21
Repairs	16.85
Custom hire	4.39
Hired labor	2.69
Machinery & bldg leases	0.13
Operating interest	5.25
Miscellaneous	0.08
Total direct costs per acre	129.68
Return to overhead per acre	210.77
Overhead costs per acre	
Hired labor	9.79
Machinery & bldg leases	1.85
RE & pers. property taxes	12.37
Farm insurance	2.57
Utilities	2.71
Dues & professional fees	1.56
Interest	38.68
Mach & bldg depreciation	8.21
Miscellaneous	4.53
Total overhead costs per acre	82.28
Total listed costs per acre	211.96
Net return per acre	128.50
Total direct costs per cwt	8.57
Total listed costs per cwt	14.01
Net return per cwt	8.49
Breakeven yield per acre	9.29

TABLE 12 - 9
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)
NAVY BEANS ON CASH RENTED LAND

	Average For All Farms
Number of fields	23
Number of farms	20
Acres	90.04
Yield per acre (cwt)	13.36
Operator's share of yield %	100.00
Value per cwt	23.60
Crop product return per acre	315.41
Other product return per acre	1.67
Miscellaneous income per acre	44.99
Gross return per acre	360.40
Direct costs per acre	
Seed	32.15
Fertilizer	13.84
Crop chemicals	31.69
Crop insurance	19.74
Drying fuel	0.17
Fuel & oil	8.60
Repairs	14.36
Custom hire	4.78
Hired labor	2.14
Land rent	58.70
Operating interest	5.16
Miscellaneous	0.26
Total direct costs per acre	191.59
Return to overhead per acre	168.80
Overhead costs per acre	
Hired labor	7.84
Machinery & bldg leases	2.88
Farm insurance	3.18
Utilities	2.34
Dues & professional fees	1.65
Interest	4.38
Mach & bldg depreciation	9.38
Miscellaneous	3.00
Total overhead costs per acre	34.66
Total listed costs per acre	226.25
Net return per acre	134.15
Total direct costs per cwt	14.34
Total listed costs per cwt	16.93
Net return per cwt	10.04
Breakeven yield per acre	7.61

TABLE 12 - 10
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

PINTO BEANS ON OWNED LAND

	Average For All Farms
Number of fields	9
Number of farms	9
Acres	91.46
Yield per acre (cwt)	10.35
Operators share of yield %	100.00
Value per cwt	16.05
Crop product return per acre	166.04
Miscellaneous income per acre	58.86
Gross return per acre	224.90
Direct costs per acre	
Seed	27.38
Fertilizer	6.59
Crop chemicals	17.37
Crop insurance	15.71
Fuel & oil	12.29
Repairs	19.70
Custom hire	0.66
Hired labor	0.36
Operating interest	8.30
Total direct costs per acre	108.37
Return to overhead per acre	116.53
Overhead costs per acre	
Hired labor	9.41
Machinery & bldg leases	3.49
RE & pers. property taxes	14.55
Farm insurance	3.64
Utilities	3.27
Dues & professional fees	2.00
Interest	41.24
Mach & bldg depreciation	12.95
Miscellaneous	3.16
Total overhead costs per acre	93.71
Total listed costs per acre	202.08
Net return per acre	22.82
Total direct costs per cwt	10.47
Total listed costs per cwt	19.53
Net return per cwt	2.21
Breakeven yield per acre	8.92

TABLE 12 - 11
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

PINTO BEANS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	35	9	6
Number of farms	25	5	5
Acres	143.79	260.62	127.53
Yield per acre (cwt)	9.39	3.55	16.98
Operators share of yield %	100.00	100.00	100.00
Value per cwt	15.37	12.49	15.95
Crop product return per acre	144.20	44.38	270.80
Miscellaneous income per acre	41.92	42.07	7.82
Gross return per acre	186.12	86.45	278.62
Direct costs per acre			
Seed	28.66	25.60	32.70
Fertilizer	8.63	6.72	8.43
Crop chemicals	18.93	21.03	14.71
Crop insurance	12.78	10.85	9.74
Fuel & oil	8.72	7.07	8.19
Repairs	12.17	11.72	9.05
Custom hire	3.54	0.84	5.44
Hired labor	0.41	0.00	1.10
Land rent	43.07	20.20	53.74
Machinery & bldg leases	1.92	6.17	0.00
Operating interest	8.46	11.63	4.84
Miscellaneous	0.16	0.00	0.72
Total direct costs per acre	147.46	121.83	148.66
Return to overhead per acre	38.66	-35.38	129.96
Overhead costs per acre			
Hired labor	7.43	6.12	6.79
Machinery & bldg leases	6.00	10.64	5.32
Farm insurance	2.05	1.10	1.48
Utilities	2.79	3.08	1.92
Dues & professional fees	0.72	0.84	0.51
Interest	3.94	0.92	1.71
Mach & bldg depreciation	12.72	23.09	8.29
Miscellaneous	3.17	1.71	3.48
Total overhead costs per acre	38.81	47.49	29.50
Total listed costs per acre	186.28	169.33	178.16
Net return per acre	-0.15	-82.88	100.46
Total direct costs per cwt	15.71	34.29	8.75
Total listed costs per cwt	19.85	47.65	10.49
Net return per cwt	-0.02	-23.32	5.92
Breakeven yield per acre	9.40	10.19	10.68

TABLE 12 - 12
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

PINTO BEANS ON SHARE RENTED LAND

	Average For All Farms
Number of fields	9
Number of farms	6
Acres	60.63
Yield per acre (cwt)	10.09
Operator's share of yield %	60.78
Value per cwt	17.17
Crop product return per acre	105.48
Other product return per acre	4.52
Miscellaneous income per acre	36.75
Gross return per acre	142.23
Direct costs per acre	
Seed	16.47
Fertilizer	7.70
Crop chemicals	11.05
Crop insurance	8.60
Fuel & oil	10.34
Repairs	18.86
Custom hire	3.26
Hired labor	0.80
Operating interest	3.18
Total direct costs per acre	80.27
Return to overhead per acre	61.96
Overhead costs per acre	
Hired labor	3.25
Machinery & bldg leases	3.66
Farm insurance	1.58
Utilities	3.69
Dues & professional fees	0.35
Interest	6.21
Mach & bldg depreciation	8.08
Miscellaneous	4.83
Total overhead costs per acre	31.66
Total listed costs per acre	111.93
Net return per acre	30.31
Total direct costs per cwt	7.95
Total listed costs per cwt	11.09
Net return per cwt	3.00
Breakeven yield per acre	6.77

TABLE 12 - 13
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

CORN ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	38	7	8
Number of farms	31	6	6
Acres	111.64	102.83	157.93
Yield per acre (bushel)	116.89	89.79	145.31
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.02	2.02	1.94
Crop product return per acre	236.22	181.08	281.97
Other product return per acre	2.20	0.00	0.00
Miscellaneous income per acre	21.40	27.39	15.69
Gross return per acre	257.61	208.47	297.66
Direct costs per acre			
Seed	23.75	21.06	22.89
Fertilizer	33.00	35.11	27.73
Crop chemicals	23.63	42.63	19.42
Crop insurance	7.22	8.02	5.91
Drying fuel	4.24	3.01	2.48
Fuel & oil	8.04	7.31	5.98
Repairs	14.63	15.01	10.95
Custom hire	0.58	0.71	0.18
Operating interest	7.83	12.46	3.96
Miscellaneous	0.50	1.80	0.00
Total direct costs per acre	123.42	147.13	99.49
Return to overhead per acre	134.19	61.34	198.17
Overhead costs per acre			
Hired labor	4.23	3.59	4.46
Machinery & bldg leases	4.77	0.86	3.75
RE & pers. property taxes	7.32	6.59	5.08
Farm insurance	2.07	2.13	1.44
Utilities	2.86	2.63	2.25
Dues & professional fees	0.71	1.03	0.68
Interest	36.65	19.25	34.42
Mach & bldg depreciation	8.57	7.48	4.72
Miscellaneous	2.59	2.57	0.95
Total overhead costs per acre	69.77	46.13	57.74
Total listed costs per acre	193.19	193.26	157.23
Net return per acre	64.42	15.21	140.43
Total direct costs per bushel	1.06	1.64	0.68
Total listed costs per bushel	1.65	2.15	1.08
Net return per bushel	0.55	0.17	0.97
Breakeven yield per acre	83.92	82.25	72.94
Net return including govt. payments	71.85	15.21	152.69

TABLE 12 - 14
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

CORN ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	106	23	12
Number of farms	57	11	11
Acres	109.87	112.17	90.80
Yield per acre (bushel)	114.88	90.65	137.13
Operators share of yield %	100.00	100.00	100.00
Value per bushel	2.01	1.94	2.02
Crop product return per acre	231.42	175.70	276.99
Other product return per acre	1.66	0.00	0.00
Miscellaneous income per acre	21.32	11.14	31.44
Gross return per acre	252.74	186.83	308.43
Direct costs per acre			
Seed	23.36	23.47	22.42
Fertilizer	33.49	29.86	30.76
Crop chemicals	19.29	46.27	12.74
Crop insurance	6.22	6.13	5.39
Drying fuel	4.02	2.40	6.89
Fuel & oil	7.66	9.54	6.98
Repairs	11.54	15.28	9.99
Custom hire	1.48	0.78	0.35
Hired labor	0.06	0.07	0.00
Land rent	52.54	54.56	52.35
Operating interest	6.52	8.01	3.91
Miscellaneous	0.37	0.69	0.06
Total direct costs per acre	166.54	197.05	151.83
Return to overhead per acre	86.20	-10.22	156.60
Overhead costs per acre			
Hired labor	4.77	4.62	4.61
Machinery & bldg leases	4.35	3.67	2.93
Farm insurance	1.76	2.28	1.45
Utilities	1.86	2.89	1.47
Dues & professional fees	0.82	0.54	0.41
Interest	4.52	2.26	6.85
Mach & bldg depreciation	5.04	5.56	6.04
Miscellaneous	3.73	1.74	2.72
Total overhead costs per acre	26.85	23.58	26.49
Total listed costs per acre	193.39	220.63	178.31
Net return per acre	59.35	-33.80	130.12
Total direct costs per bushel	1.45	2.17	1.11
Total listed costs per bushel	1.68	2.43	1.30
Net return per bushel	0.52	-0.37	0.95
Breakeven yield per acre	84.59	108.08	72.71
Net return including govt. payments	68.70	-20.69	140.48

TABLE 12 - 15
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

CORN ON SHARE RENTED LAND

	Average For All Farms
Number of fields	20
Number of farms	12
Acres	96.37
Yield per acre (bushel)	138.77
Operators share of yield %	62.87
Value per bushel	2.04
Crop product return per acre	179.55
Other product return per acre	0.32
Miscellaneous income per acre	13.11
Gross return per acre	192.67
Direct costs per acre	
Seed	21.10
Fertilizer	19.57
Crop chemicals	15.33
Crop insurance	6.11
Drying fuel	3.25
Fuel & oil	8.21
Repairs	12.31
Custom hire	1.37
Operating interest	6.47
Total direct costs per acre	93.72
Return to overhead per acre	98.95
Overhead costs per acre	
Hired labor	7.16
Machinery & bldg leases	1.91
RE & pers. property taxes	0.68
Farm insurance	2.00
Utilities	2.81
Dues & professional fees	0.90
Interest	6.07
Mach & bldg depreciation	5.81
Miscellaneous	3.85
Total overhead costs per acre	31.19
Total listed costs per acre	124.91
Net return per acre	67.76
Total direct costs per bushel	0.68
Total listed costs per bushel	0.90
Net return per bushel	0.49
Breakeven yield per acre	87.04
Net return including govt. payments	78.64

TABLE 12 - 16
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

CORN SILAGE ON CASH RENTED LAND

	Average For All Farms
Number of fields	8
Number of farms	8
Acres	47.96
Yield per acre (ton)	7.78
Operators share of yield %	100.00
Value per ton	16.90
Crop product return per acre	131.41
Miscellaneous income per acre	42.69
Gross return per acre	174.10
Direct costs per acre	
Seed	21.69
Fertilizer	33.66
Crop chemicals	18.43
Crop insurance	9.00
Fuel & oil	10.10
Repairs	15.41
Land rent	48.04
Operating interest	6.85
Total direct costs per acre	163.17
Return to overhead per acre	10.93
Overhead costs per acre	
Hired labor	4.30
Machinery & bldg leases	4.92
Farm insurance	1.76
Utilities	2.91
Dues & professional fees	0.92
Interest	7.53
Mach & bldg depreciation	3.03
Miscellaneous	2.56
Total overhead costs per acre	27.91
Total listed costs per acre	191.09
Net return per acre	-16.99
Total direct costs per ton	20.99
Total listed costs per ton	24.58
Net return per ton	-2.18
Breakeven yield per acre	8.78
Net return including govt. payments	-9.61

TABLE 12 - 17
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

POTATOES ON CASH RENTED LAND

	Average For All Farms
Number of fields	19
Number of farms	7
Acres	114.09
Yield per acre (cwt)	102.23
Operators share of yield %	100.00
Value per cwt	3.50
Crop product return per acre	357.63
Miscellaneous income per acre	345.05
Gross return per acre	702.68
Direct costs per acre	
Seed	122.02
Fertilizer	44.01
Crop chemicals	88.28
Crop insurance	25.21
Fuel & oil	29.12
Repairs	42.53
Custom hire	24.45
Hired labor	20.99
Land rent	71.38
Machinery & bldg leases	1.50
Operating interest	26.84
Miscellaneous	0.69
Total direct costs per acre	497.02
Return to overhead per acre	205.66
Overhead costs per acre	
Hired labor	36.94
Machinery & bldg leases	15.64
Farm insurance	7.41
Utilities	13.71
Dues & professional fees	2.65
Interest	13.24
Mach & bldg depreciation	35.90
Miscellaneous	21.23
Total overhead costs per acre	146.72
Total listed costs per acre	643.75
Net return per acre	58.94
Total direct costs per cwt	4.86
Total listed costs per cwt	6.30
Net return per cwt	0.58
Breakeven yield per acre	85.38

TABLE 12 - 18
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SOYBEANS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	78	16	16
Number of farms	55	11	11
Acres	84.40	98.66	76.70
Yield per acre (bushel)	33.48	20.24	45.93
Operators share of yield %	100.00	100.00	100.00
Value per bushel	5.15	5.36	5.16
Crop product return per acre	172.29	108.53	236.89
Miscellaneous income per acre	3.48	6.24	2.31
Gross return per acre	175.77	114.77	239.20
Direct costs per acre			
Seed	12.24	12.67	11.29
Fertilizer	3.73	0.99	1.38
Crop chemicals	20.20	18.86	18.27
Crop insurance	7.60	7.11	5.63
Fuel & oil	7.28	10.49	6.37
Repairs	13.65	23.65	10.27
Custom hire	1.97	1.85	0.00
Hired labor	0.40	0.22	0.13
Machinery & bldg leases	0.05	0.00	0.00
Operating interest	4.90	6.37	2.32
Miscellaneous	0.21	0.13	0.00
Total direct costs per acre	72.23	82.35	55.67
Return to overhead per acre	103.54	32.42	183.53
Overhead costs per acre			
Hired labor	3.22	4.56	1.62
Machinery & bldg leases	1.93	1.22	0.11
RE & pers. property taxes	8.89	9.78	6.61
Farm insurance	2.36	3.92	1.66
Utilities	2.49	3.55	1.85
Dues & professional fees	1.24	1.28	0.63
Interest	30.68	29.69	45.09
Mach & bldg depreciation	7.20	8.43	5.84
Miscellaneous	3.74	5.84	1.73
Total overhead costs per acre	61.74	68.27	65.14
Total listed costs per acre	133.98	150.61	120.81
Net return per acre	41.79	-35.84	118.39
Total direct costs per bushel	2.16	4.07	1.21
Total listed costs per bushel	4.00	7.44	2.63
Net return per bushel	1.25	-1.77	2.58
Breakeven yield per acre	25.36	26.92	22.98

TABLE 12 - 19
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SOYBEANS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	223	53	38
Number of farms	125	25	25
Acres	135.49	115.52	101.28
Yield per acre (bushel)	31.76	25.08	41.24
Operators share of yield %	100.00	100.00	100.00
Value per bushel	5.28	5.26	5.26
Crop product return per acre	167.81	131.97	216.78
Miscellaneous income per acre	6.54	3.03	0.48
Gross return per acre	174.35	134.99	217.26
Direct costs per acre			
Seed	12.72	14.88	11.98
Fertilizer	3.38	8.33	4.95
Crop chemicals	20.49	20.85	18.40
Crop insurance	7.78	9.29	7.36
Drying fuel	0.11	0.00	0.00
Fuel & oil	7.03	7.40	6.51
Repairs	11.43	14.53	9.91
Custom hire	1.44	4.88	0.45
Hired labor	0.26	0.11	1.01
Land rent	53.93	58.98	49.88
Machinery & bldg leases	0.01	0.00	0.00
Operating interest	5.07	5.66	4.29
Miscellaneous	0.26	0.01	0.32
Total direct costs per acre	123.91	144.93	115.06
Return to overhead per acre	50.44	-9.93	102.20
Overhead costs per acre			
Hired labor	6.32	5.47	3.57
Machinery & bldg leases	4.74	1.48	1.89
RE & pers. property taxes	0.03	0.00	0.13
Farm insurance	1.96	3.32	1.73
Utilities	1.74	2.25	1.40
Dues & professional fees	0.94	0.68	0.92
Interest	3.11	5.78	3.62
Mach & bldg depreciation	7.18	6.38	5.37
Miscellaneous	2.82	3.24	2.23
Total overhead costs per acre	28.86	28.60	20.86
Total listed costs per acre	152.77	173.53	135.92
Net return per acre	21.58	-38.53	81.34
Total direct costs per bushel	3.90	5.78	2.79
Total listed costs per bushel	4.81	6.92	3.30
Net return per bushel	0.68	-1.54	1.97
Breakeven yield per acre	27.68	32.41	25.77

TABLE 12 - 20
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SOYBEANS ON SHARE RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	64	15	11
Number of farms	38	8	8
Acres	117.21	125.65	88.81
Yield per acre (bushel)	32.80	21.31	42.93
Operators share of yield %	59.71	59.36	63.53
Value per bushel	5.24	5.29	5.17
Crop product return per acre	102.88	67.01	141.79
Other product return per acre	0.16	0.00	0.00
Miscellaneous income per acre	1.99	2.55	0.11
Gross return per acre	104.87	69.56	141.90
Direct costs per acre			
Seed	6.53	5.76	6.38
Fertilizer	1.81	1.93	1.30
Crop chemicals	15.18	14.85	14.69
Crop insurance	5.02	5.07	3.28
Drying fuel	0.07	0.00	0.00
Fuel & oil	7.09	8.11	4.54
Repairs	12.83	15.39	9.04
Custom hire	0.33	0.37	0.00
Hired labor	0.36	0.00	2.03
Operating interest	4.17	2.59	2.16
Miscellaneous	0.04	0.00	0.00
Total direct costs per acre	53.44	54.07	43.42
Return to overhead per acre	51.43	15.50	98.48
Overhead costs per acre			
Hired labor	4.88	5.97	1.80
Machinery & bldg leases	2.02	1.10	2.62
RE & pers. property taxes	0.08	0.01	0.46
Farm insurance	2.18	1.62	1.48
Utilities	1.84	1.99	1.95
Dues & professional fees	0.82	0.73	0.01
Interest	2.27	3.35	0.91
Mach & bldg depreciation	8.58	9.36	4.68
Miscellaneous	3.75	2.51	2.27
Total overhead costs per acre	26.41	26.64	16.18
Total listed costs per acre	79.85	80.70	59.60
Net return per acre	25.02	-11.14	82.30
Total direct costs per bushel	1.63	2.54	1.01
Total listed costs per bushel	2.43	3.79	1.39
Net return per bushel	0.76	-0.52	1.92
Breakeven yield per acre	24.83	24.87	18.12

TABLE 12 - 21
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SUGAR BEETS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	48	11	12
Number of farms	39	8	8
Acres	111.06	67.28	101.00
Yield per acre (ton)	20.94	17.20	26.24
Operators share of yield %	100.00	100.00	100.00
Value per ton	39.73	38.39	41.20
Crop product return per acre	832.03	660.40	1081.05
Miscellaneous income per acre	9.94	9.32	6.06
Gross return per acre	841.97	669.72	1087.11
Direct costs per acre			
Seed	34.55	31.31	38.01
Fertilizer	25.57	29.11	27.73
Crop chemicals	73.39	69.64	63.82
Crop insurance	16.50	19.38	16.14
Fuel & oil	27.53	43.10	31.05
Repairs	59.87	78.89	57.05
Custom hire	12.32	25.00	10.08
Hired labor	38.07	46.55	42.58
Machinery & bldg leases	0.89	1.64	0.00
Marketing	62.75	75.46	44.78
Operating interest	19.78	11.78	12.01
Miscellaneous	3.56	0.90	1.48
Total direct costs per acre	374.78	432.76	344.73
Return to overhead per acre	467.20	236.96	742.38
Overhead costs per acre			
Hired labor	28.47	20.14	38.64
Machinery & bldg leases	11.11	1.25	26.42
RE & pers. property taxes	14.32	9.17	12.87
Farm insurance	4.82	4.03	5.11
Utilities	7.25	8.76	7.14
Dues & professional fees	5.51	3.65	7.86
Interest	43.27	19.49	53.43
Mach & bldg depreciation	51.83	73.69	42.62
Miscellaneous	9.77	14.39	18.05
Total overhead costs per acre	176.35	154.57	212.12
Total listed costs per acre	551.13	587.33	556.85
Net return per acre	290.84	82.39	530.26
Total direct costs per ton	17.90	25.15	13.14
Total listed costs per ton	26.32	34.14	21.22
Net return per ton	13.89	4.79	20.21
Breakeven yield per acre	13.62	15.06	13.37

TABLE 12 - 22
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SUGAR BEETS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	132	38	28
Number of farms	90	18	18
Acres	143.98	180.45	85.07
Yield per acre (ton)	19.75	17.25	23.37
Operators share of yield %	100.00	100.00	100.00
Value per ton	39.17	37.30	40.97
Crop product return per acre	773.62	643.61	957.54
Miscellaneous income per acre	12.45	26.02	3.69
Gross return per acre	786.07	669.63	961.23
Direct costs per acre			
Seed	34.43	33.54	34.04
Fertilizer	26.35	28.48	22.17
Crop chemicals	73.51	73.50	64.05
Crop insurance	12.63	13.89	8.90
Fuel & oil	27.25	29.77	22.08
Repairs	52.82	50.83	46.51
Custom hire	17.86	24.23	14.72
Hired labor	40.95	44.72	26.45
Land rent	73.24	89.85	67.16
Machinery & bldg leases	1.95	4.76	0.00
Marketing	72.16	119.17	37.83
Operating interest	20.70	31.14	9.29
Miscellaneous	2.75	1.16	2.66
	1.55	0.00	0.00
Total direct costs per acre	458.12	545.04	355.85
Return to overhead per acre	327.95	124.59	605.38
Overhead costs per acre			
Hired labor	26.98	20.80	27.73
Machinery & bldg leases	13.47	11.11	26.43
RE & pers. property taxes	0.39	0.06	0.00
Farm insurance	3.83	3.31	4.14
Utilities	6.54	7.05	5.91
Dues & professional fees	5.29	3.79	3.80
Interest	19.92	28.47	11.84
Mach & bldg depreciation	36.19	28.91	38.93
Miscellaneous	12.27	9.70	9.83
Total overhead costs per acre	124.87	113.20	128.62
Total listed costs per acre	583.00	658.24	484.47
Net return per acre	203.08	11.39	476.77
Total direct costs per ton	23.20	31.59	15.22
Total listed costs per ton	29.52	38.15	20.73
Net return per ton	10.28	0.66	20.40
Breakeven yield per acre	14.57	16.95	11.74

TABLE 12 - 23
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SUNFLOWERS ON OWNED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	35	7	6
Number of farms	32	6	6
Acres	79.26	94.60	101.46
Yield per acre (cwt)	15.15	7.32	19.53
Operators share of yield %	100.00	100.00	100.00
Value per cwt	11.19	9.84	12.64
Crop product return per acre	169.57	72.07	246.82
Other product return per acre	0.11	0.00	0.00
Miscellaneous income per acre	11.37	27.55	3.52
Gross return per acre	180.94	99.62	250.34
Direct costs per acre			
Seed	13.17	13.35	12.07
Fertilizer	16.02	14.63	20.06
Crop chemicals	11.34	15.91	10.80
Crop insurance	6.56	4.23	8.94
Drying fuel	0.15	0.16	0.43
Fuel & oil	7.78	10.09	6.94
Repairs	13.25	15.96	12.46
Custom hire	3.21	4.70	5.24
Hired labor	1.71	4.28	3.27
Machinery & bldg leases	0.03	0.00	0.00
Operating interest	6.39	8.69	4.92
Miscellaneous	0.61	0.00	1.11
Total direct costs per acre	80.21	92.01	86.25
Return to overhead per acre	100.73	7.61	164.09
Overhead costs per acre			
Hired labor	3.09	3.02	3.52
Machinery & bldg leases	3.65	4.79	3.59
RE & pers. property taxes	8.69	6.47	11.27
Farm insurance	3.20	3.76	5.16
Utilities	2.00	2.46	1.70
Dues & professional fees	1.01	0.47	2.80
Interest	29.03	8.55	30.51
Mach & bldg depreciation	9.67	21.24	6.30
Miscellaneous	3.11	1.94	2.85
Total overhead costs per acre	63.47	52.71	67.70
Total listed costs per acre	143.68	144.72	153.94
Net return per acre	37.26	-45.10	96.40
Total direct costs per cwt	5.29	12.56	4.42
Total listed costs per cwt	9.48	19.76	7.88
Net return per cwt	2.46	-6.16	4.94
Breakeven yield per acre	11.81	11.91	11.90
Net return including govt. payments	40.01	-45.10	100.06

TABLE 12 - 24
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

SUNFLOWERS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	118	32	18
Number of farms	75	15	15
Acres	106.39	100.21	76.26
Yield per acre (cwt)	14.75	10.53	19.80
Operators share of yield %	100.00	100.00	100.00
Value per cwt	10.73	9.83	11.32
Crop product return per acre	158.20	103.49	224.11
Other product return per acre	0.29	0.00	1.48
Miscellaneous income per acre	13.68	11.53	14.06
Gross return per acre	171.88	115.01	238.17
Direct costs per acre			
Seed	13.26	13.93	13.35
Fertilizer	18.51	24.91	21.19
Crop chemicals	12.48	18.34	12.12
Crop insurance	6.41	6.77	7.00
Drying fuel	0.04	0.10	0.13
Fuel & oil	7.65	9.00	8.53
Repairs	12.76	12.87	14.50
Custom hire	3.18	7.64	2.30
Hired labor	0.20	1.26	0.05
Land rent	49.64	47.43	51.94
Machinery & bldg leases	1.60	0.00	0.00
Utilities	0.04	0.27	0.00
Marketing	0.00	0.02	0.00
Operating interest	5.64	3.95	4.31
Miscellaneous	0.22	1.00	0.04
Total direct costs per acre	131.64	147.49	135.45
Return to overhead per acre	40.25	-32.47	102.72
Overhead costs per acre			
Hired labor	4.79	4.62	3.37
Machinery & bldg leases	3.46	5.92	1.00
RE & pers. property taxes	0.00	0.03	0.00
Farm insurance	2.81	3.04	1.76
Utilities	2.14	2.44	1.84
Dues & professional fees	0.87	0.70	0.80
Interest	4.07	6.09	3.30
Mach. & bldg depreciation	17.48	74.23	11.52
Miscellaneous	3.81	5.12	4.06
Total overhead costs per acre	39.43	102.19	27.64
Total listed costs per acre	171.07	249.67	163.09
Net return per acre	0.82	-134.66	75.08
Total direct costs per cwt	8.93	14.01	6.84
Total listed costs per cwt	11.60	23.72	8.24
Net return per cwt	0.06	-12.79	3.79
Breakeven yield per acre	14.64	24.22	13.03
Net return including govt. payments	2.48	-132.07	76.57

TABLE 12 - 25
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)
SUNFLOWERS ON SHARE RENTED LAND

	Average For All Farms
Number of fields	29
Number of farms	19
Acres	95.86
Yield per acre (cwt)	16.67
Operators share of yield %	62.06
Value per cwt	11.33
Crop product return per acre	117.33
Miscellaneous income per acre	7.96
Gross return per acre	125.29
Direct costs per acre	
Seed	11.94
Fertilizer	15.13
Crop chemicals	9.37
Crop insurance	5.19
Drying fuel	0.21
Fuel & oil	9.81
Repairs	13.05
Custom hire	1.00
Hired labor	1.44
Operating interest	4.62
Miscellaneous	0.02
Total direct costs per acre	71.77
Return to overhead per acre	53.52
Overhead costs per acre	
Hired labor	3.56
Machinery & bldg leases	2.16
RE & pers. property taxes	0.02
Farm insurance	2.89
Utilities	2.68
Dues & professional fees	1.24
Interest	5.68
Mach & bldg depreciation	54.86
Miscellaneous	5.00
Total overhead costs per acre	78.09
Total listed costs per acre	149.86
Net return per acre	-24.57
Total direct costs per cwt	4.31
Total listed costs per cwt	8.99
Net return per cwt	-1.47
Breakeven yield per acre	20.18
Net return including govt. payments	-21.10

TABLE 12 - 26
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

CONFECTIONARY SUNFLOWERS ON OWNED LAND

	Average For All Farms
Number of fields	6
Number of farms	6
Acres	109.13
Yield per acre (cwt)	12.46
Operators share of yield %	100.00
Value per cwt	14.21
Crop product return per acre	177.07
Miscellaneous income per acre	15.48
Gross return per acre	192.55
Direct costs per acre	
Seed	17.91
Fertilizer	22.88
Crop chemicals	12.30
Crop insurance	6.56
Drying fuel	0.59
Fuel & oil	7.43
Repairs	13.18
Custom hire	6.61
Machinery & bldg leases	0.69
Operating interest	2.50
Miscellaneous	0.85
Total direct costs per acre	91.50
Return to overhead per acre	101.04
Overhead costs per acre	
Hired labor	10.77
Machinery & bldg leases	1.08
RE & pers. property taxes	16.21
Farm insurance	4.53
Utilities	1.22
Dues & professional fees	0.57
Interest	45.28
Mach & bldg depreciation	10.19
Miscellaneous	3.23
Total overhead costs per acre	93.07
Total listed costs per acre	184.58
Net return per acre	7.97
Total direct costs per cwt	7.34
Total listed costs per cwt	14.81
Net return per cwt	0.64
Breakeven yield per acre	11.90

TABLE 12 - 27
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms sorted according to Return to Overhead per Acre)

CONFECTIONARY SUNFLOWERS ON CASH RENTED LAND

	Average Of All Farms	Average Of Low 20%	Average Of High 20%
Number of fields	38	8	6
Number of farms	27	5	5
Acres	129.33	81.75	178.36
Yield per acre (cwt)	12.96	7.68	17.30
Operators share of yield %	100.00	100.00	100.00
Value per cwt	13.99	13.85	14.11
Crop product return per acre	181.32	106.30	244.06
Miscellaneous income per acre	14.10	8.74	7.17
Gross return per acre	195.42	115.04	251.23
Direct costs per acre			
Seed	17.86	16.54	15.09
Fertilizer	23.77	28.61	27.16
Crop chemicals	14.61	19.31	9.76
Crop insurance	7.37	9.86	4.17
Drying fuel	0.54	1.47	0.74
Fuel & oil	8.73	8.82	7.32
Repairs	14.80	19.75	11.89
Custom hire	3.34	3.45	1.61
Hired labor	0.63	0.00	2.01
Land rent	46.63	48.19	40.36
Machinery & bldg leases	0.27	0.00	0.88
Operating interest	3.95	9.13	2.51
Miscellaneous	0.29	0.00	0.12
Total direct costs per acre	142.79	165.13	123.61
Return to overhead per acre	52.63	-50.09	127.62
Overhead costs per acre			
Hired labor	7.17	7.43	9.59
Machinery & bldg leases	1.34	2.72	0.83
Farm insurance	3.94	3.06	2.50
Utilities	2.08	4.04	1.70
Dues & professional fees	1.09	1.45	0.98
Interest	3.42	2.83	1.53
Mach & bldg depreciation	9.62	13.48	2.76
Miscellaneous	2.75	3.71	3.08
Total overhead costs per acre	31.39	38.72	22.97
Total listed costs per acre	174.18	203.85	146.58
Net return per acre	21.24	-88.81	104.65
Total direct costs per cwt	11.02	21.51	7.15
Total listed costs per cwt	13.44	26.55	8.48
Net return per cwt	1.64	-11.57	6.05
Breakeven yield per acre	11.44	14.09	9.88
Net return including govt. payments	22.36	-88.81	108.50

TABLE 12 - 28
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

CONFECTIONARY SUNFLOWERS ON SHARE RENTED LAND

	Average For All Farms
Number of fields	5
Number of farms	5
Acres	187.92
Yield per acre (cwt)	7.65
Operators share of yield %	66.09
Value per cwt	13.26
Crop product return per acre	64.94
Miscellaneous income per acre	22.76
Gross return per acre	87.71
Direct costs per acre	
Seed	17.17
Fertilizer	22.92
Crop chemicals	15.70
Crop insurance	9.00
Fuel & oil	6.93
Repairs	19.18
Custom hire	2.62
Hired labor	2.01
Operating interest	3.49
Total direct costs per acre	99.01
Return to overhead per acre	-11.31
Overhead costs per acre	
Hired labor	3.15
Machinery & bldg leases	2.27
Farm insurance	1.19
Utilities	1.79
Dues & professional fees	1.44
Interest	4.38
Mach & bldg depreciation	4.20
Miscellaneous	2.46
Total overhead costs per acre	20.88
Total listed costs per acre	119.89
Net return per acre	-32.19
Total direct costs per cwt	12.95
Total listed costs per cwt	15.68
Net return per cwt	-4.21
Breakeven yield per acre	11.08

TABLE 12 - 29
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

ALFALFA HAY ON OWNED LAND

	Average For All Farms
Number of fields	11
Number of farms	11
Acres	48.46
Yield per acre (ton)	3.51
Operators share of yield %	100.00
Value per ton	50.16
Crop product return per acre	175.82
Miscellaneous income per acre	3.00
Gross return per acre	178.83
Direct costs per acre	
Seed	1.92
Fertilizer	11.64
Fuel & oil	8.05
Repairs	15.12
Custom hire	0.20
Operating interest	7.25
Total direct costs per acre	44.17
Return to overhead per acre	134.65
Overhead costs per acre	
Hired labor	1.64
Machinery & bldg leases	5.24
RE & pers. property taxes	6.66
Farm insurance	2.88
Utilities	2.79
Dues & professional fees	1.13
Interest	35.80
Mach & bldg depreciation	11.40
Miscellaneous	2.06
Total overhead costs per acre	69.59
Total listed costs per acre	113.77
Net return per acre	65.06
Total direct costs per ton	12.60
Total listed costs per ton	32.45
Net return per ton	18.56
Breakeven yield per acre	2.21

TABLE 12 - 30
 Crop Enterprise Analysis, 1994
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley
 (Average of all farms reporting)
 ALFALFA HAY ON CASH RENTED LAND

	Average For All Farms
Number of fields	15
Number of farms	15
Acres	76.17
Yield per acre (ton)	3.32
Operators share of yield %	100.00
Value per ton	55.33
Crop product return per acre	183.80
Miscellaneous income per acre	2.63
Gross return per acre	186.42
Direct costs per acre	
Seed	7.33
Fertilizer	11.09
Crop chemicals	1.31
Fuel & oil	9.36
Repairs	14.26
Custom hire	0.81
Land rent	48.56
Operating interest	4.05
Total direct costs per acre	96.77
Return to overhead per acre	89.66
Overhead costs per acre	
Hired labor	3.98
Machinery & bldg leases	4.11
Farm insurance	2.26
Utilities	1.64
Dues & professional fees	1.29
Interest	6.18
Mach & bldg depreciation	10.05
Miscellaneous	4.63
Total overhead costs per acre	34.14
Total listed costs per acre	130.91
Net return per acre	55.52
Total direct costs per ton	29.13
Total listed costs per ton	39.41
Net return per ton	16.71
Breakeven yield per acre	2.32

TABLE 12 - 31
Crop Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Average of all farms reporting)

FALLOW ON CASH RENTED LAND

	Average For All Farms
Number of fields	8
Number of farms	8
Acres	27.06
Yield per acre	0.00
Operators share of yield %	100.00
Value per unit	0.00
Crop product return per acre	0.00
Miscellaneous income per acre	0.00
Gross return per acre	0.00
Direct costs per acre	
Seed	0.45
Crop chemicals	4.40
Fuel & oil	2.84
Repairs	3.46
Hired labor	0.71
Land rent	49.72
Operating interest	1.28
Total direct costs per acre	62.86
Return to overhead per acre	-62.86
Overhead costs per acre	
Hired labor	1.46
Machinery & bldg leases	1.43
Farm insurance	1.95
Utilities	0.54
Dues & professional fees	0.73
Interest	1.64
Mach & bldg depreciation	4.86
Miscellaneous	1.95
Total overhead costs per acre	14.57
Total listed costs per acre	77.43
Net return per acre	-77.43
Total direct costs per unit	0.00
Total listed costs per unit	0.00
Net return per unit	0.00
Breakeven yield per acre	0.00
Net return including govt. payments	-72.64

EXPLANATORY NOTES FOR LIVESTOCK TABLES

The "Livestock Enterprise Analysis" table show the average physical production, gross returns, direct costs, overhead costs, and net returns per budget unit. All costs are actual costs; no opportunity costs are included. The "Net Return" to the enterprise is the "Total Return" minus the direct and overhead costs. The last section of each livestock table contains both economic and technical efficiency measures which are particularly useful to individual managers in assessing their performance as compared to their peers.

When there is a sufficient number (i.e., more than 24), farms are divided into low 20% and high 20% on the basis of returns to overhead costs. The classification is done separately for each livestock enterprise.

"Lbs. feed per lb. of gain" is the lbs. of total feed divided by "Gross production." The total feed is calculated by adding total pounds of feed. For grains, these pounds per unit are used: corn, 56; oats, 32; barley, 48; grain sorghum, 56; wheat, 60; and millet, 48. For these roughages, the pounds are calculated by these factors: alfalfa haylage, 0.5; corn silage, 0.33; oatlage, 0.5; and sorghum silage, 0.33; and small grain silage, 0.33.

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

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

TABLE 13 - 1
Livestock Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley

Beef Cow-Calf -- Average per Cow

Number of farms	Average For All Farms	
	10	
	Quantity	Value
Beef Calves sold (lb)	50.01	39.09
Transferred out (lb)	463.36	371.01
Cull sales		80.88
Butchered		0.81
Less purchased		-5.09
Less transferred in		-125.33
Inventory change		-22.37
Total production		339.00
Other income		0.00
Gross return		339.00
Direct costs		
Aftermath Grazing (aum)	0.34	3.39
Corn (bu.)	9.45	13.58
Corn Silage (lb.)	2917.23	19.66
Hay, Alfalfa (lb.)	1335.14	31.78
Hay, Grass & Other (lb.)	2463.50	40.53
Oats (bu.)	1.98	2.26
Pasture (aum)	6.10	63.10
Sorghum Silage (lb.)	610.58	3.66
Stover (lb.)	54.27	0.27
Creep / Starter (lb.)	73.68	4.97
Protein Vit Minerals (lb.)	73.07	13.96
Breeding fees		6.42
Veterinary		18.51
Livestock supplies		13.01
Fuel & oil		8.56
Repairs		12.24
Utilities		0.24
Marketing		1.40
Operating interest		7.83
Total direct costs		265.38
Return to overhead		73.62
Overhead costs		
Hired labor		6.08
Machinery & bldg leases		5.10
RE & pers. property taxes		1.63
Farm insurance		3.04
Utilities		3.69
Dues & professional fees		1.40
Interest		9.81
Mach & bldg depreciation		5.80
Miscellaneous		1.48
Total overhead costs		38.01
Total listed costs		303.40
Net return		35.61
Other Information		
Number of cows		73.7
Pregnancy percentage		96.4
Culling percentage		12.6
Calving percentage		96.9
Weaning percentage		88.9
Calves sold per cow		0.86
Calf death loss percent		2.5
Average weaning weight		584
Lbs weaned/exposed female		519
Feed cost per cow		197.19
Avg wgt/Beef Calf sold		670
Avg price / cwt		78.17

TABLE 13 - 2
Livestock Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley

Beef Cow-Calf -- Average per cwt produced

Number of farms	Average For All Farms	
	Quantity	Value
	10	
Beef Calves sold (lb)	10.16	7.94
Transferred out (lb)	94.16	75.39
Cull sales		16.44
Butchered		0.17
Less purchased		-1.03
Less transferred in		-25.47
Inventory change		-4.55
Total production		68.89
Other income		0.00
Gross return		68.89
Direct costs		
Aftermath Grazing (aum)	0.07	0.69
Corn (bu.)	1.92	2.76
Corn Silage (lb.)	592.83	4.00
Hay, Alfalfa (lb.)	271.32	6.46
Hay, Grass & Other (lb.)	500.62	8.24
Oats (bu.)	0.40	0.46
Pasture (aum)	1.24	12.82
Sorghum Silage (lb.)	124.08	0.74
Stover (lb.)	11.03	0.06
Creep / Starter (lb.)	14.97	1.01
Protein Vit Minerals (lb.)	14.85	2.84
Breeding fees		1.30
Veterinary		3.76
Livestock supplies		2.64
Fuel & oil		1.74
Repairs		2.49
Utilities		0.05
Marketing		0.28
Operating interest		1.59
Total direct costs		53.93
Return to overhead		14.96
Overhead costs		
Hired labor		1.24
Machinery & bldg leases		1.04
RE & pers. property taxes		0.33
Farm insurance		0.62
Utilities		0.75
Dues & professional fees		0.28
Interest		1.99
Mach & bldg depreciation		1.18
Miscellaneous		0.30
Total overhead costs		7.72
Total listed costs		61.65
Net return		7.24
Other Information		
Number of cows		73.7
Pregnancy percentage		96.4
Culling percentage		12.6
Calving percentage		96.9
Weaning percentage		88.9
Calves sold per cow		0.86
Calf death loss percent		2.5
Average weaning weight		584
Lbs weaned/exposed female		519
Feed cost per cow		197.19
Avg wgt/Beef Calf sold		670
Avg price / cwt		78.17

TABLE 13 - 3
Livestock Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley

Beef, Background Beef -- Average per cwt produced

	Average For All Farms	
Number of farms	11	
	Quantity	Value
Backgnd Beef sold (lb)	355.32	269.63
Transferred out (lb)	10.45	7.33
Less purchased (lb)	-204.50	-163.97
Less transferred in (lb)	-48.30	-38.17
Inventory change (lb)	-13.38	-25.36
Total production (lb)	100.00	49.45
Other income		0.00
Gross return		49.45
Direct costs		
Barley (bu.)	1.18	1.89
Corn (bu.)	11.37	23.05
Corn Silage (lb.)	592.14	5.57
Hay, Alfalfa (lb.)	269.75	7.51
Hay, Grass & Other (lb.)	114.17	2.19
Oats (bu.)	0.18	0.20
Pasture (aum)	0.06	0.67
Sorghum Silage (lb.)	12.87	0.09
Stover (lb.)	10.21	0.05
Wheat, Spring (bu.)	0.05	0.92
Complete Ration (lb.)	8.21	0.55
Creep / Starter (lb.)	7.99	0.56
Protein Vit Minerals (lb.)	29.11	4.49
Breeding fees		0.03
Veterinary		5.13
Livestock supplies		0.86
Fuel & oil		1.55
Repairs		2.89
Custom hire		0.03
Marketing		0.68
Operating interest		1.40
Total direct costs		60.31
Return to overhead		-10.86
Overhead costs		
Hired labor		1.34
Machinery & bldg leases		0.32
RE & pers. property taxes		0.10
Farm insurance		0.21
Utilities		0.38
Dues & professional fees		0.16
Interest		1.54
Mach & bldg depreciation		0.75
Miscellaneous		0.50
Total overhead costs		5.29
Total listed costs		65.60
Net return		-16.15
Other Information		
No. purchased or trans in		184
Number sold or trans out		187
Percentage death loss		0.5
Avg. daily gain (lbs)		1.96
Lbs of conc / lb of gain		7.48
Lbs of feed / lb of gain		13.41
Feed cost per cwt of gain		47.75
Feed cost/head sold+trans		104.40
Average purchase weight		562
Average sales weight		796
Avg purch price / cwt		80.18
Avg sales price / cwt		75.88

TABLE 13 - 4
Livestock Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley

Beef, Background Beef -- Average per head sold/trans

Number of farms	Average For All Farms	
	Quantity	Value
	11	
Backgnd Beef sold (lb)	776.79	589.45
Transferred out (lb)	22.85	16.03
Less purchased (lb)	-447.06	-358.47
Less transferred in (lb)	-105.58	-83.45
Inventory change (lb)	-29.26	-55.44
Total production (lb)	218.62	108.12
Other income		0.00
Gross return		108.12
Direct costs		
Barley (bu.)	2.59	4.14
Corn (bu.)	24.86	50.39
Corn Silage (lb.)	1294.52	12.18
Hay, Alfalfa (lb.)	589.71	16.43
Hay, Grass & Other (lb.)	249.59	4.79
Oats (bu.)	0.40	0.44
Pasture (aum)	0.13	1.47
Sorghum Silage (lb.)	28.14	0.20
Stover (lb.)	22.32	0.11
Wheat, Spring (bu.)	0.10	2.01
Complete Ration (lb.)	17.95	1.21
Creep / Starter (lb.)	17.47	1.22
Protein Vit Minerals (lb.)	63.64	9.82
Breeding fees		0.06
Veterinary		11.21
Livestock supplies		1.88
Fuel & oil		3.38
Repairs		6.31
Custom hire		0.07
Marketing		1.49
Operating interest		3.05
Total direct costs		131.85
Return to overhead		-23.73
Overhead costs		
Hired labor		2.92
Machinery & bldg leases		0.71
RE & pers. property taxes		0.21
Farm insurance		0.45
Utilities		0.84
Dues & professional fees		0.36
Interest		3.36
Mach & bldg depreciation		1.63
Miscellaneous		1.09
Total overhead costs		11.57
Total listed costs		143.42
Net return		-35.30
Other Information		
No. purchased or trans in		184
Number sold or trans out		187
Percentage death loss		0.5
Avg. daily gain (lbs)		1.96
Lbs of conc / lb of gain		7.48
Lbs of feed / lb of gain		13.41
Feed cost per cwt of gain		47.75
Feed cost/head sold+trans		104.40
Average purchase weight		562
Average sales weight		796
Avg purch price / cwt		80.18
Avg sales price / cwt		75.88

TABLE 13 - 5
 Livestock Enterprise Analysis, 1994
 Minnesota and North Dakota Farm Business Mgmt Education
 Red River Valley

Hogs, Farrow To Finish -- Average per cwt produced

Number of farms	Average For All Farms	
	Quantity	Value
	7	
Raised Hogs sold (lb)	94.42	40.29
Transferred out (lb)	0.05	0.02
Cull sales (lb)	2.84	0.74
Butchered (lb)	0.85	0.32
Less purchased (lb)	-0.66	-0.69
Inventory change (lb)	2.50	-4.56
Total production (lb)	100.00	36.12
Other income		0.00
Gross return		36.12
Direct costs		
Barley (bu.)	0.44	0.76
Corn (bu.)	3.00	7.15
Oats (bu.)	0.07	0.07
Complete Ration (lb.)	76.29	8.86
Protein Vit Minerals (lb.)	31.41	6.72
Veterinary		1.16
Livestock supplies		0.89
Fuel & oil		0.20
Repairs		0.69
Custom hire		0.24
Hired labor		1.49
Utilities		0.16
Marketing		0.01
Operating interest		0.48
Total direct costs		28.88
Return to overhead		7.24
Overhead costs		
Hired labor		0.85
Machinery & bldg leases		0.09
RE & pers. property taxes		0.12
Farm insurance		0.27
Utilities		1.14
Dues & professional fees		0.07
Interest		0.92
Mach & bldg depreciation		1.25
Miscellaneous		0.53
Total overhead costs		5.24
Total listed costs		34.12
Net return		2.00
Other Information		
Average number of sows		67.3
Litters farrowed		134
Litters per sow		1.99
Litters per crate		7.79
Pigs born per litter		9.59
Pigs weaned per litter		8.54
Pigs weaned per sow		17.12
Number sold per litter		7.32
Lbs of feed / lb of gain		2.90
Feed cost / cwt. of gain		23.55
Feed cost per litter		368.84
Avg wgt/Raised Hog sold		202
Avg price / cwt		42.68

TABLE 13 - 6
Livestock Enterprise Analysis, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley

Hogs, Farrow To Finish -- Average per litter

Number of farms	Average For All Farms	
	Quantity	Value
	7	
Raised Hogs sold (lb)	1478.84	631.12
Transferred out (lb)	0.80	0.28
Cull sales (lb)	44.43	11.60
Butchered (lb)	13.32	5.06
Less purchased (lb)	-10.31	-10.84
Inventory change (lb)	39.22	-71.43
Total production (lb)	1566.30	565.78
Other income		0.00
Gross return		565.78
Direct costs		
Barley (bu.)	6.95	11.83
Corn (bu.)	47.06	111.95
Oats (bu.)	1.07	1.07
Complete Ration (lb.)	1194.87	138.79
Protein Vit Minerals (lb.)	492.00	105.19
Veterinary		18.18
Livestock supplies		13.94
Fuel & oil		3.20
Repairs		10.82
Custom hire		3.75
Hired labor		23.38
Utilities		2.54
Marketing		0.21
Operating interest		7.54
Total direct costs		452.40
Return to overhead		113.38
Overhead costs		
Hired labor		13.28
Machinery & bldg leases		1.40
RE & pers. property taxes		1.91
Farm insurance		4.16
Utilities		17.85
Dues & professional fees		1.15
Interest		14.39
Mach & bldg depreciation		19.53
Miscellaneous		8.33
Total overhead costs		82.00
Total listed costs		534.41
Net return		31.37
Other Information		
Average number of sows		67.3
Litters farrowed		134
Litters per sow		1.99
Litters per crate		7.79
Pigs born per litter		9.59
Pigs weaned per litter		8.54
Pigs weaned per sow		17.12
Number sold per litter		7.32
Lbs of feed / lb of gain		2.90
Feed cost / cwt. of gain		23.55
Feed cost per litter		368.84
Avg wgt/Raised Hog sold		202
Avg price / cwt		42.68

TABLE 14 - 1
Size Of Farm Report, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley
(Farms Sorted By Gross Cash Farm Income)

	Average For All Farms	0 - 40,000	40,001 - 100,000	100,001 - 200,000	200,001 - 500,000	500,001 +
Number of farms	233	7	24	62	112	28
Income Statement						
Gross cash farm income	303992	34542	79877	153504	327615	802183
Total cash farm expense	252661	30912	68047	128555	270402	670179
Net cash farm income	51331	3631	11831	24949	57213	132003
Inventory change	17603	2168	15837	10127	26698	3145
Depreciation and capital adjustment	-12030	-1927	-4862	-4638	-15148	-24600
Net farm income	56903	3872	22806	30439	68763	110548
Profitability (cost)						
Labor and management earnings	37675	1610	17195	19616	48648	60344
Rate of return on assets	9 %	-3 %	7 %	6 %	11 %	8 %
Rate of return on equity	11 %	-20 %	6 %	6 %	14 %	9 %
Operating profit margin	18 %	-8 %	15 %	14 %	20 %	17 %
Asset turnover rate	51 %	42 %	47 %	47 %	54 %	47 %
Liquidity						
Term debt coverage ratio	152 %	106 %	119 %	102 %	182 %	141 %
Expense as a percent of income	79 %	85 %	71 %	79 %	76 %	83 %
Interest as a percent of income	7 %	11 %	9 %	7 %	6 %	6 %
Solvency (cost)						
Number of sole proprietors	194	7	23	58	95	11
Ending farm assets	462053	110670	216479	341299	564577	617678
Ending farm liabilities	242844	69278	126249	166585	294171	349728
Ending total assets	540626	143824	281875	414237	654422	686289
Ending total liabilities	256927	81835	144862	178042	310876	355635
Ending net worth	283699	61988	137014	236195	343547	330655
Net worth change	28983	9770	18474	19027	32816	49507
Ending farm debt to asset ratio	53 %	63 %	58 %	49 %	52 %	57 %
Beg total debt to asset ratio	46 %	49 %	48 %	41 %	46 %	53 %
End total debt to asset ratio	48 %	57 %	51 %	43 %	48 %	52 %
Nonfarm Information						
Farms reporting living expenses	50	-	-	14	28	-
Total family living expense	33780	-	-	25677	36817	-
Total living, invest, & capital purch	51552	-	-	38263	58678	-
Net nonfarm income	12210	20400	18672	10257	10261	16738
Crop Acres						
Total acres owned	319	69	155	254	302	738
Total crop acres	1255	247	455	870	1405	2445
Total crop acres owned	231	47	88	198	237	448
Total crop acres cash rented	891	156	290	529	991	1994
Total crop acres share rented	133	44	77	143	178	3

TABLE 14 - 2
Type Of Farm Report, 1994
Minnesota and North Dakota Farm Business Mgmt Education
Red River Valley

	Average For All Farms	Crop	Crop and Hog	Crop and Beef	Other
Number of farms	233	149	10	11	59
Income Statement					
Gross cash farm income	303992	314716	284916	461243	257935
Total cash farm expense	252661	260295	236190	428150	208878
Net cash farm income	51331	54421	48725	33093	49056
Inventory change	17603	28146	26204	-31700	-352
Depreciation and capital adjustment	-12030	-10941	-19502	-4868	-15344
Net farm income	56903	71626	55427	-3475	33361
Profitability (cost)					
Labor and management earnings	37675	50093	37637	-22901	18956
Rate of return on assets	9 %	11 %	9 %	-1 %	6 %
Rate of return on equity	11 %	14 %	12 %	-9 %	5 %
Operating profit margin	18 %	21 %	23 %	-2 %	12 %
Asset turnover rate	51 %	51 %	39 %	44 %	53 %
Liquidity					
Term debt coverage ratio	152 %	174 %	116 %	145 %	107 %
Expense as a percent of income	79 %	76 %	76 %	100 %	82 %
Interest as a percent of income	7 %	6 %	9 %	5 %	7 %
Solvency (cost)					
Number of sole proprietors	194	124	9	9	48
Ending farm assets	462053	519935	492170	392087	335320
Ending farm liabilities	242844	265374	287512	216316	188662
Ending total assets	540626	604460	566574	418245	411445
Ending total liabilities	256927	279366	299901	224281	204465
Ending net worth	283699	325094	266673	193963	206980
Net worth change	28983	38299	27530	6413	11323
Ending farm debt to asset ratio	53 %	51 %	58 %	55 %	56 %
Beg total debt to asset ratio	46 %	45 %	51 %	53 %	48 %
End total debt to asset ratio	48 %	46 %	53 %	54 %	50 %
Nonfarm Information					
Farms reporting living expenses	50	38	-	-	-
Total family living expense	33780	36539	-	-	-
Total living, invest, & capital purch	51552	57740	-	-	-
Net nonfarm income	12210	10452	4095	43708	12747
Crop Acres					
Total acres owned	319	309	369	649	286
Total crop acres	1255	1303	1083	1340	1197
Total crop acres owned	231	246	285	151	212
Total crop acres cash rented	891	919	746	1107	833
Total crop acres share rented	133	138	51	83	153

TABLE 14 - 3
Age Of Operator Report, 1994
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	219	23	100	69	22
Income Statement					
Gross cash farm income	302167	224584	279107	354405	259500
Total cash farm expense	249329	186897	230376	298711	201136
Net cash farm income	52838	37687	48731	55694	58364
Inventory change	18339	2153	23186	17430	14889
Depreciation and capital adjustment	-11554	-7086	-10464	-15176	-9611
Net farm income	59623	32755	61454	57948	63642
Profitability (cost)					
Labor and management earnings	40290	24427	44986	34633	35402
Rate of return on assets	10 %	9 %	11 %	8 %	8 %
Rate of return on equity	12 %	10 %	15 %	9 %	9 %
Operating profit margin	19 %	13 %	20 %	17 %	22 %
Asset turnover rate	51 %	63 %	55 %	47 %	36 %
Liquidity					
Term debt coverage ratio	160 %	130 %	167 %	161 %	151 %
Expense as a percent of income	78 %	83 %	76 %	80 %	73 %
Interest as a percent of income	6 %	6 %	6 %	7 %	7 %
Solvency (cost)					
Number of sole proprietors	186	20	88	57	18
Ending farm assets	472690	254192	451522	590438	466595
Ending farm liabilities	246707	157437	242669	317508	172629
Ending total assets	555265	289918	521729	689742	567965
Ending total liabilities	261268	174339	260190	331171	177413
Ending net worth	293997	115579	261539	358571	390552
Net worth change	31217	22270	27022	42355	25616
Ending farm debt to asset ratio	52 %	62 %	54 %	54 %	37 %
Beg total debt to asset ratio	46 %	55 %	48 %	48 %	32 %
End total debt to asset ratio	47 %	60 %	50 %	48 %	31 %
Nonfarm Information					
Farms reporting living expenses	48	-	26	17	-
Total family living expense	33632	-	31824	39617	-
Total living, invest, & capital purch	52087	-	47079	64613	-
Net nonfarm income	12565	10415	11394	15842	9841
Crop Acres					
Total acres owned	319	180	221	423	600
Total crop acres	1238	838	1190	1369	1290
Total crop acres owned	231	92	168	287	503
Total crop acres cash rented	877	651	896	961	583
Total crop acres share rented	130	95	126	122	204

