

2020

FARM

ANALYSIS

REPORT OF

MOORHEAD

45th Edition



NORTHLAND
COMMUNITY & TECHNICAL COLLEGE

Farm Business Management Program

www.NorthlandFBM-Moorhead.com

March 17, 2021

INTRODUCTION

This is the 45th edition of this report published by the Northland College-Moorhead MN. Farm Business Management Department. The original numbers for this report came from pages of the account book and/or from computerized records kept by each farm family enrolled in the farm management education program provided by Northland Community and Technical College, Thief River Falls, MN. After a closeout procedure to check the accuracy of the records, the analysis is generated for each individual enrollee.

We use the FINPACK and RANKEM software system developed by the Center for Farm Financial Management, University of Minnesota Extension, to do our year-end analysis. This is an excellent farm financial computer package because it incorporates the year-end analysis with a farmer's beginning and ending Balance Sheet and with their projected Cash Flow.

Use your imagination and figure out ways to use the tables. There are many factors that can affect a farm operations' profitability. We encourage you to look and compare your numbers to the averages and see where you could fine-tune your farming operation. Please feel free to contact Ron or Josh to schedule a review meeting with them before spring planting.

Information about our Farm Business Management program and other financial reports can be found at our website: www.NorthlandFBM-Moorhead.com

We wish you a Successful and Prosperous year!

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Financial Guideline Measures

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

Liquidity

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

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

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

Working Capital to Gross Revenues: Measures operating capital available against the size of the business.

Solvency

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

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

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

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

Profitability

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

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

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

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

Financial Guideline Measures

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

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

EBITDA: This factor stands for: Earnings Before Interest, Taxes, Depreciation and Amortization. This represents a measure of earnings available for debt repayment.

Repayment Capacity

Repayment capacity shows the borrower's ability to repay term debts (longer than one year) on time. This includes non-farm income, and is therefore not a measure of business performance alone.

Capital Debt Repayment Capacity: Measures the amount generated from farm and non-farm sources, to cover debt repayment and capital replacement.

Capital Debt Repayment Margin: The amount of money remaining after all operating expenses, taxes, family living costs, and scheduled debt payments have been made. It is the money left, after paying all expenses, which is available for purchasing/financing new machinery, equipment, land or livestock.

Replacement Margin: The replacement margin is the amount of income remaining after paying principal and interest on term loans and unfunded (cash) capital purchases.

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

Replacement Margin Coverage Ratio: This represents the ability to term debt and unfunded capital purchases. A ratio under 1.0 indicated that you did not generate enough income to cover term debt payments and unfunded capital purchases.

Efficiency

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

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

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

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

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

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

Financial Standards Measures

Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Number of Farms	76.8	87	79	76	74	68
Liquidity						
Current Ratio	1.59	1.76	1.38	1.47	1.51	1.82
Working Capital	317,421	428,138	244,154	288,430	272,718	353,663
Working Cap/Gross Revenue	27.1%	32.5%	21.6%	24.0%	24.1%	33.3%
Solvency (market)						
Farm Debt to Asset	43%	45%	44%	45%	41%	42%
Farm Equity to Asset	57%	55%	56%	55%	59%	58%
Farm Debt to Equity	0.76	0.80	0.80	0.80	0.69	0.72
Profitability (cost)						
Rate of Return on Assets	3.4%	6.3%	-0.3%	3.6%	2.6%	4.6%
Rate of Return on Equity	2.8%	8.2%	-3.8%	3.1%	1.5%	5.1%
Operating Profit Margin	8.2%	15.0%	-0.8%	9.0%	6.4%	11.6%
Net Farm Income	136,148	237,943	31,286	144,499	108,593	158,418
EBIDTA	260,579	355,799	156,874	275,977	233,153	281,090
Repayment Capacity						
Capital Debt Repay Capacity	156,588	259,445	39,823	168,638	136,321	178,715
Capital Debt Repay Margin	51,999	153,868	-60,609	58,650	28,879	79,207
Replacement Margin	-601	107,225	-113,157	5,112	-25,379	23,193
Term Debt Coverage Ratio	1.49	2.46	0.40	1.53	1.27	1.80
Replacement Coverage Ratio	1.00	1.70	0.26	1.03	0.84	1.17
Efficiency						
Asset Turnover Rate	39.9%	41.6%	37.5%	40.4%	40.2%	40.0%
Operating Exp Ratio	77.9%	73.0%	86.1%	77.7%	79.4%	73.5%
Depreciation Exp Ratio	6.4%	5.1%	6.7%	6.3%	6.8%	7.2%
Interest Exp Ratio	4.5%	4.2%	4.9%	4.7%	4.2%	4.3%
Net Farm Inc Ratio	11.2%	17.0%	2.3%	12.0%	9.6%	14.9%

Farm Income Statement
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Cash Farm Income				
Barley	3,137	-	4,017	8,666
Beans, Edible	5,969	2,149	19,379	-
				-
Corn	203,699	71,558	113,941	480,523
Hay	4,179	3,155	-	6,274
Soybeans	280,152	196,397	169,378	484,953
Soybeans Seed	46,982	5,572	52,217	127,682
Sugar Beets	289,131	228,782	192,365	633,457
Sunflowers	1,518	1,824	1,279	-
Wheat, Spring	152,137	112,867	102,310	285,751
Miscellaneous crop income	5,822	5,049	311	19,496
Livestock income	6,195	3,850	98	-
Crop government payments	36,045	25,220	28,998	70,860
CRP payments	633	73	605	1,057
Other government payments	98,363	65,839	82,156	175,253
Conservation govt payment	3,440	-	2,457	3,825
Custom work income	8,592	11,376	3,806	11,499
Patronage dividends, cash	20,583	15,082	20,331	34,622
Crop insurance income	107,600	73,803	130,166	146,075
Property insurance income	152	-	736	-
Sale of resale items	716	2,824	-	-
Farm rental income	10,034	11,363	5,757	7,758
Other farm income	41,206	41,904	16,882	86,265
Gross Cash Farm Income	1,326,286	878,686	947,188	2,584,015

Farm Income Statement (continued)
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Cash Farm Expense				
Seed and plants	173,050	106,108	118,112	374,394
Fertilizer	134,644	96,347	97,763	264,467
Crop chemicals	107,410	57,692	72,404	228,447
Crop insurance	39,058	31,338	32,895	76,503
Drying expense	4,200	4,691	3,186	6,671
Storage	1,856	427	789	6,816
Crop miscellaneous	15,342	12,748	8,210	30,188
Consultants	7,185	5,239	6,683	13,625
Livestock expenses	2,749	1,307	822	32
Interest	57,838	34,016	42,450	139,225
Fuel & oil	41,750	32,962	35,161	72,542
Repairs	87,926	65,750	73,953	159,997
Custom hire	16,967	14,157	12,854	23,477
Hired labor	72,233	39,512	37,260	125,029
Land rent	225,861	181,191	141,143	434,914
Stock/quota lease	27,560	45,489	13,952	36,808
Machinery leases	12,972	12,292	12,122	25,850
Building leases	1,914	806	1,479	4,885
Real estate taxes	12,806	5,972	10,498	25,087
Farm insurance	17,039	13,567	14,337	28,454
Utilities	11,711	9,873	11,715	18,863
Hauling and trucking	7,207	11,879	5,764	7,189
Marketing	1,603	1,082	1,472	1,797
Dues & professional fees	9,442	8,081	6,505	15,392
Purchase of resale items	4,559	14,095	-	2,176
Miscellaneous	11,028	7,226	12,407	16,941
Total cash expense	1,105,874	813,848	773,936	2,139,770
Net cash farm income	220,412	64,838	173,252	444,245
Inventory Changes				
Prepays and supplies	49,918	25,858	10,275	157,483
Accounts receivable	-67,796	-74,433	-74,374	-114,356
Hedging accounts	13,393	-3,569	-454	71,941
Other current assets	157	206	90	3,149
Crops and feed	33,326	34,363	20,589	41,930
Livestock	1,429	-265	484	-
Other assets	12,261	-4,320	30,578	22,850
Accounts payable	34,863	21,930	53,480	56,944
Accrued interest	2,033	-3,721	-3,110	26,580
Total inventory change	79,582	-3,951	37,559	266,520
Net operating profit	299,994	60,887	210,811	710,765
Depreciation				
Machinery and equipment	-55,603	-44,194	-42,544	-99,575
Titled vehicles	-3,521	-1,756	-4,166	-6,516
Buildings and improvements	-8,407	-5,846	-8,784	-10,220
Total depreciation	-67,532	-51,797	-55,494	-116,311
Net farm income from operations	232,462	9,090	155,317	594,454
Gain or loss on capital sales	5,482	-1,271	-431	23,139
Net farm income	237,943	7,819	154,886	617,594

Inventory Changes
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Net cash farm income	220,412	64,838	173,252	444,245
Crops and Feed				
Ending inventory	585,519	342,336	467,392	1,182,422
Beginning inventory	552,193	307,974	446,803	1,140,492
Inventory change	33,326	34,363	20,589	41,930
Accts Receivable	94,954	69,678	66,004	153,926
Ending inventory	162,750	144,111	140,378	268,282
Beginning inventory	-67,796	-74,433	-74,374	-114,356
Inventory change				
Prepaid Expenses and Supplies	133,188	40,072	48,463	323,835
Ending inventory	83,270	14,214	38,188	166,352
Beginning inventory	49,918	25,858	10,275	157,483
Inventory change				
Hedging Activities	24,735	5,019	2,210	110,105
Ending inventory	3,545	2,941	-	14,355
Withdrawals	6,618	5,641	2,453	21,467
Beginning inventory	8,269	5,888	211	31,052
Deposits	13,393	-3,569	-454	71,941
Gain or loss				
Other Current Assets	12,004	4,035	1,104	5,414
Ending inventory	11,765	4,115	758	2,265
Beginning inventory	239	-80	346	3,149
Inventory change				
Other Capital Assets				
Ending inventory	420,043	291,853	294,470	822,674
Capital sales	8,669	13,406	24,067	68
Beginning inventory	406,433	299,725	287,119	783,359
Capital purchases	8,672	9,832	611	16,533
Depreciation, capital adjust	13,608	-4,299	30,806	22,850
Accounts Payable				
Beginning inventory	78,719	70,095	99,606	152,105
Ending inventory	43,856	48,165	46,126	95,160
Inventory change	34,863	21,930	53,480	56,944
Accrued Interest				
Beginning inventory	29,538	18,642	20,093	60,437
Ending inventory	27,506	22,363	23,203	33,858
Inventory change	2,033	-3,721	-3,110	26,580
Total inventory change	79,582	-3,951	37,559	266,520
Net operating profit	299,994	60,887	210,811	710,765

Depreciation
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Net operating profit	299,994	60,887	210,811	710,765
Machinery and Equipment				
Ending inventory	668,697	524,982	492,549	1,236,165
Capital sales	20,447	17,940	10,017	33,775
Beginning inventory	626,025	491,549	480,337	1,118,770
Capital purchases	118,723	95,568	64,773	250,745
Depreciation, capital adjust.	-55,603	-44,194	-42,544	-99,575
Titled Vehicles				
Ending inventory	38,234	15,838	42,513	81,310
Capital sales	958	471	471	2,903
Beginning inventory	34,024	18,065	39,391	71,810
Capital purchases	8,689	-	7,759	18,919
Depreciation, capital adjust.	-3,521	-1,756	-4,166	-6,516
Buildings and Improvements				
Ending inventory	269,252	152,603	155,405	416,135
Capital sales	984	-	-	4,758
Beginning inventory	247,883	154,675	134,004	384,227
Capital purchases	30,761	3,775	30,185	46,886
Depreciation, capital adjust.	-8,407	-5,846	-8,784	-10,220
Total depreciation, capital adj.	-67,532	-51,797	-55,494	-116,311
Net farm income from operations	232,462	9,090	155,317	594,454
Gain or loss on capital sales	5,482	-1,271	-431	23,139
Net farm income	237,943	7,819	154,886	617,594

Profitability Measures
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Profitability (assets valued at cost)				
Net farm income from operations	232,462	9,090	155,317	594,454
Rate of return on assets	6.3 %	-1.4 %	5.9 %	8.8 %
Rate of return on equity	8.2 %	-7.1 %	8.0 %	12.1 %
Operating profit margin	15.0 %	-3.1 %	14.7 %	21.0 %
Asset turnover rate	41.6 %	45.3 %	39.9 %	41.8 %
Farm interest expense	55,805	37,737	45,560	112,646
Value of operator lbr and mgmt.	90,929	72,438	64,687	159,311
Return on farm assets	197,338	-25,611	136,190	547,789
Average farm assets	3,152,194	1,799,672	2,312,818	6,226,288
Return on farm equity	141,532	-63,348	90,631	435,144
Average farm equity	1,718,412	895,918	1,134,120	3,586,108
Value of farm production	1,311,610	815,951	923,817	2,604,241
	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Profitability (assets valued at market)				
Net farm income from operations	258,902	33,606	252,988	508,507
Rate of return on assets	5.1 %	0.0 %	6.9 %	5.7 %
Rate of return on equity	7.0 %	-2.7 %	10.5 %	7.8 %
Operating profit margin	17.1 %	-0.1 %	25.3 %	17.7 %
Asset turnover rate	29.9 %	31.1 %	27.2 %	32.4 %
Farm interest expense	55,805	37,737	45,560	112,646
Value of operator lbr and mgmt.	90,929	72,438	64,687	159,311
Return on farm assets	223,778	-1,095	233,861	461,842
Average farm assets	4,384,527	2,625,745	3,399,136	8,032,976
Return on farm equity	167,973	-38,832	188,301	349,196
Average farm equity	2,414,498	1,419,254	1,799,445	4,466,604
Value of farm production	1,311,610	815,951	923,817	2,604,241

Liquidity & Repayment Capacity Measures
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Liquidity				
Current ratio	1.76	1.35	1.35	2.23
Working capital	428,138	144,443	160,698	1,206,999
Working capital to gross inc	32.5 %	17.4 %	17.4 %	46.3 %
Current assets	988,795	557,247	614,385	2,186,293
Current liabilities	560,657	412,804	453,687	979,293
Gross revenues (accrual)	1,318,411	830,668	924,102	2,606,417
Repayment capacity				
Net farm income from operations	232,462	9,090	155,317	594,454
Depreciation	67,532	51,797	55,494	116,311
Personal income	35,325	44,144	21,530	41,183
Family living/owner withdrawals	-84,497	-78,483	-72,992	-115,183
Cash discrepancy	-8	-136	105	23
Payments on personal debt	-7,527	-5,406	-5,533	-11,865
Income taxes paid	-19,277	-6,166	-19,595	-40,533
Interest on term debt	35,435	19,242	26,793	78,461
Capital debt repayment capacity	259,445	34,083	161,119	662,852
Scheduled term debt payments	-105,577	-73,750	-93,240	-185,663
Capital debt repayment margin	153,868	-39,667	67,878	477,189
Cash replacement allowance	-46,643	-30,666	-28,287	-95,799
Replacement margin	107,225	-70,333	39,591	381,391
Term debt coverage ratio	2.46	0.46	1.73	3.57
Replacement coverage ratio	1.70	0.33	1.33	2.36

Balance Sheet at Cost Values
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Assets				
Current Farm Assets				
Cash and checking balance	138,395	96,107	29,212	410,591
Prepaid expenses & supplies	133,188	40,072	48,463	323,835
Growing crops	644	-	-	3,111
Accounts receivable Hedging accounts	94,954 24,735	69,678 5,019	66,004 2,210	153,926 110,105
Crops held for sale or feed	585,519	342,336	467,392	1,182,422
Crops under government loan	-	-	-	-
Other current assets	929	4,035	1,104	2,303
Total current farm assets	988,795	557,247	614,385	2,186,293
Intermediate Farm Assets				
Machinery and equipment	668,697	524,982	492,549	1,236,165
Titled vehicles	38,234	15,838	42,513	81,310
Other intermediate assets	360,129	253,061	238,078	685,024
Total intermediate farm assets	1,067,059	793,881	773,139	2,002,499
Long Term Farm Assets				
Farm land	858,618	294,001	712,245	1,736,228
Buildings and improvements	269,252	152,603	155,405	416,135
Other long-term assets	59,914	38,792	56,393	137,650
Total long-term farm assets	1,187,784	485,396	924,043	2,290,013
Total Farm Assets	3,243,638	1,836,524	2,311,567	6,478,805
Total Nonfarm Assets	349,948	246,807	331,744	613,952
Total Assets	3,593,586	2,083,331	2,643,311	7,092,756
Liabilities				
Current Farm Liabilities				
Accrued interest	27,506	22,363	23,203	33,858
Accounts payable	43,856	48,165	46,126	95,160
Current notes	415,712	288,481	317,249	722,578
Government crop loans	-	-	-	-
Principal due on term debt	73,584	53,795	67,110	127,697
Total current farm liabilities	560,657	412,804	453,687	979,293
Total intermediate farm liabs	188,116	201,153	154,813	328,143
Total long term farm liabilities	698,027	347,677	533,206	1,351,694
Total farm liabilities	1,446,801	961,634	1,141,705	2,659,130
Total nonfarm liabilities	106,852	89,437	102,801	153,372
Total liabilities	1,553,653	1,051,072	1,244,507	2,812,502
Net worth (farm and nonfarm)	2,039,933	1,032,260	1,398,805	4,280,254
Net worth change	171,728	-49,525	99,785	495,502
Percent net worth change	9 %	-5 %	8 %	13 %
Ratio Analysis				
Current farm liabilities / assets	57 %	74 %	74 %	45 %
Intermediate farm liab. / assets	18 %	25 %	20 %	16 %
Long term farm liab. / assets	59 %	72 %	58 %	59 %
Total debt to asset ratio	43 %	50 %	47 %	40 %

Balance Sheet at Market Values
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Assets				
Current Farm Assets				
Cash and checking balance	138,395	96,107	29,212	410,591
Prepaid expenses & supplies	133,188	40,072	48,463	323,835
Growing crops	644	-	-	3,111
Accounts receivable	94,954	69,678	66,004	153,926
Hedging accounts	24,735	5,019	2,210	110,105
Crops held for sale or feed	585,519	342,336	467,392	1,182,422
Crops under government loan	-	-	-	-
Other current assets	11,360	4,035	1,104	-
Total current farm assets	988,795	557,247	614,385	2,186,293
Intermediate Farm Assets				
Machinery and equipment	857,484	686,377	627,152	1,550,684
Titled vehicles	51,101	26,823	57,131	98,008
Other intermediate assets	537,729	501,716	307,091	995,259
Total intermediate farm assets	1,446,313	1,214,916	991,374	2,643,952
Long Term Farm Assets				
Farm land	1,652,092	633,786	1,595,437	2,825,703
Buildings and improvements	334,053	222,632	187,592	449,997
Other long-term assets	95,800	49,779	63,042	199,776
Total long-term farm assets	2,081,946	906,198	1,846,071	3,475,476
Total Farm Assets	4,517,054	2,678,361	3,451,830	8,305,720
Total Nonfarm Assets	525,701	399,443	462,530	1,015,149
Total Assets	5,042,755	3,077,805	3,914,360	9,320,869
Liabilities				
Current Farm Liabilities				
Accrued interest	27,506	22,363	23,203	33,858
Accounts payable	43,856	48,165	46,126	95,160
Current notes	415,712	288,481	317,249	722,578
Government crop loans	-	-	-	-
Principal due on term debt	73,584	53,795	67,110	127,697
Total current farm liabilities	560,657	412,804	453,687	979,293
Total intermediate farm liab	188,116	201,153	154,813	328,143
Total long term farm liabilities	698,027	347,677	533,206	1,351,694
Total farm liabilities	1,446,801	961,634	1,141,705	2,659,130
Total nonfarm liabilities	106,852	89,437	102,801	153,372
Total liab excluding deferreds	1,553,653	1,051,072	1,244,507	2,812,502
Total deferred liabilities	599,032	339,697	451,079	1,072,956
Total liabilities	2,152,686	1,390,769	1,695,586	3,885,458
Retained earnings	2,039,933	1,032,260	1,398,805	4,280,254
Market valuation equity	850,137	654,776	819,969	1,155,157
Net worth (farm and nonfarm)	2,890,069	1,687,036	2,218,774	5,435,411
Net worth excluding deferreds	3,489,101	2,026,733	2,669,853	6,508,367
Net worth change	209,915	-13,056	203,834	434,674
Percent net worth change	8 %	-1 %	10 %	9 %
Ratio Analysis				
Current farm liabilities / assets	57 %	74 %	74 %	45 %
Intermediate farm liab. / assets	13 %	17 %	16 %	12 %
Long term farm liab. / assets	34 %	38 %	29 %	39 %
Total debt to asset ratio	43 %	45 %	43 %	42 %
Debt to assets excl deferreds	31 %	34 %	32 %	30 %

Statement Of Cash Flows
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Beginning cash (farm & nonfarm)	113,517	117,989	69,894	259,574
Cash Provided By Operating Activities				
Gross cash farm income	1,326,286	878,686	947,188	2,584,015
Total cash farm expense	-1,105,874	-813,848	-773,936	-2,139,770
Net cash from hedging transactions	-4,724	-2,947	-211	-16,697
Cash provided by operating	215,688	61,891	173,041	427,548
Cash Provided By Investing Activities				
Sale of machinery & equipment	22,788	16,669	9,586	41,725
Sale of titled vehicles	953	471	471	2,886
Sale of farm land	38,963	-	-	188,322
Sale of farm buildings	984	-	-	4,758
Sale of other farm assets	8,669	13,406	24,067	68
Sale of nonfarm assets	13,998	1,971	9,276	10,567
Purchase of machinery & equip.	-118,723	-95,568	-64,773	-250,745
Purchase of titled vehicles	-8,689	-	-7,759	-18,919
Purchase of farm land	-64,717	-77,353	-15,278	-144,444
Purchase of farm buildings	-30,761	-3,775	-30,185	-46,886
Purchase of other farm assets	-8,672	-9,832	-611	-16,533
Purchase of nonfarm assets	-17,715	-18,436	-11,181	-18,400
Cash provided by investing	-162,920	-172,447	-86,386	-247,601
Cash Provided By Financing Activities				
Money borrowed	983,251	880,946	350,823	2,010,433
Principal payments	-928,855	-738,807	-383,401	-1,908,667
Personal income	35,325	44,144	21,530	41,183
Family living/owner withdrawals	-84,497	-78,483	-72,992	-115,183
Income and social security tax	-19,126	-4,723	-24,315	-42,570
Capital contributions	1,106	-	-	-
Capital distributions	-	-	-	-
Dividends paid	-	-	-	-
Cash gifts and inheritances	943	1,190	556	1,870
Gifts given	-2,002	-3,687	-	-6,192
Other cash flows	-	-	-	-
Cash provided by financing	-13,853	100,581	-107,800	-19,126
Net change in cash balance	38,915	-9,975	-21,146	160,821
Ending cash (farm & nonfarm)	152,424	107,878	48,854	420,417
Discrepancy	8	136	-105	-23

Financial Standards Measures
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Liquidity				
Current ratio	1.76	1.35	1.35	2.23
Working capital	428,138	144,443	160,698	1,206,999
Working capital to gross inc	32.5 %	17.4 %	17.4 %	46.3 %
Solvency (market)				
Farm debt to asset ratio	45 %	47 %	45 %	44 %
Farm equity to asset ratio	55 %	53 %	55 %	56 %
Farm debt to equity ratio	0.80	0.90	0.83	0.78
Profitability (cost)				
Rate of return on farm assets	6.3 %	-1.4 %	5.9 %	8.8 %
Rate of return on farm equity	8.2 %	-7.1 %	8.0 %	12.1 %
Operating profit margin	15.0 %	-3.1 %	14.7 %	21.0 %
Net farm income	237,943	7,819	154,886	617,594
EBITDA	355,799	98,624	256,371	823,411
Repayment Capacity				
Capital debt repayment capacity	259,445	34,083	161,119	662,852
Capital debt repayment margin	153,868	-39,667	67,878	477,189
Replacement margin	107,225	-70,333	39,591	381,391
Term debt coverage ratio	2.46	0.46	1.73	3.57
Replacement coverage ratio	1.70	0.33	1.33	2.36
Efficiency				
Asset turnover rate (cost)	41.6 %	45.3 %	39.9 %	41.8 %
Operating expense ratio	73.0 %	88.1 %	72.3 %	68.4 %
Depreciation expense ratio	5.1 %	6.2 %	6.0 %	4.5 %
Interest expense ratio	4.2 %	4.5 %	4.9 %	4.3 %
Net farm income ratio	17.6 %	1.1 %	16.8 %	22.8 %

Crop Production and Marketing Summary
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Acreage Summary				
Total acres owned	484	250	453	641
Total crop acres	2,145	1,549	1,581	3,790
Crop acres owned	404	221	322	529
Crop acres cash rented	1,690	1,305	1,165	3,203
Crop acres share rented	51	23	94	58
Percent crop acres owned	19 %	14 %	20 %	14 %
Mach invest/crop acre cost	319	339	334	331
Mach invest/crop acre market	410	446	422	418
Average Price Received (Cash Sales Only)				
Wheat, Spring per bushel	4.88	4.90	4.73	4.73
Soybeans per bushel	8.77	8.90	8.67	9.01
Corn per bushel	3.08	3.01	3.30	3.03
Soybeans Seed per bushel	9.57	-	-	9.93
Hay, Alfalfa per ton	96.33	-	-	-
Soybeans, Food per bushel	13.49	-	-	-
Average Yield Per Acre				
Sugar Beets (ton)	26.60	25.50	25.97	27.01
Soybeans (bushel)	37.25	32.61	34.47	41.48
Wheat, Spring (bushel)	63.53	59.29	62.21	66.13
Corn (bushel)	165.03	166.35	163.26	163.60
Soybeans Seed (bushel)	39.75	45.67	41.29	39.14
Soybeans, Food (bushel)	38.11	46.01	-	-
Barley (bushel)	72.43	-	-	-
Hay, Alfalfa (ton)	4.55	-	-	-
Beans, Black Turtle (cwt)	14.74	-	-	-

Household and Personal Expenses
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>40 - 60%</u>
Number of farms	27	10
Average family size	2.6	2.9
Family Living Expenses		
Food and meals expense	9,196	8,890
Medical care	4,831	4,399
Health insurance	5,289	7,094
Cash donations	1,832	2,821
Household supplies	3,780	3,379
Clothing	1,996	1,786
Personal care	2,570	1,888
Child / Dependent care	307	696
Alimony and child support	187	-
Gifts	1,771	2,333
Education	2,397	4,773
Recreation	4,555	4,540
Utilities (household share)	3,715	3,331
Personal vehicle operating exp	3,649	2,995
Household real estate taxes	1,292	1,242
Dwelling rent	-	-
Household repairs	3,561	2,596
Personal interest	3,662	3,901
Disability / Long term care ins	108	14
Life insurance payments	3,767	3,253
Personal property insurance	625	677
Miscellaneous	4,242	6,722
Total cash family living expense	63,333	67,330
Family living from the farm	-	-
Total family living	63,333	67,330
Other Nonfarm Expenditures		
Income taxes	20,282	34,941
Furnishing & appliance purchases	-	-
Nonfarm vehicle purchases	8,049	11,979
Nonfarm real estate purchases	-7,863	2,540
Other nonfarm capital purchases	-3,654	-517
Nonfarm savings & investments	370	-3,281
Total other nonfarm expenditures	17,184	45,663
Total cash family living investment & nonfarm capital purch	80,516	112,993

Statement Of Owner's Equity
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Beginning net worth	2,680,154	1,700,091	2,014,940	5,000,737
Net farm income	226,785	-10,057	151,407	608,392
Personal income	35,325	44,144	21,530	41,183
Family living/owner withdrawals	-73,339	-60,607	-69,513	-105,981
Cash discrepancy	-8	-136	105	23
Dividends paid	-	-	-	-
Income taxes (accrued)	-19,277	-6,166	-19,595	-40,533
Change in personal assets	2,194	-14,211	15,194	-3,428
Change in nonfarm accounts payable	-19	4	101	81
Total change in retained earnings	171,662	-47,028	99,229	499,738
Capital contributions	1,106	-	-	-
Gifts and inheritances received	943	1,190	556	1,870
Debts forgiven	-	-	-	-
Gifts given	-2,002	-3,687	-	-6,192
Capital distributions	-	-	-	-
Total change in contributed capital	48	-2,496	556	-4,322
Chg in mkt value of capital assets	98,027	48,040	115,518	76,627
Change in deferred liabilities (-)	-59,840	-11,571	-11,469	-137,455
Total change in market valuation	38,187	36,469	104,049	-60,828
Total change in net worth	209,897	-13,056	203,834	434,588
Ending net worth calculated	2,890,059	1,687,172	2,218,669	5,435,302
Ending net worth reported	2,890,069	1,687,036	2,218,774	5,435,411
Discrepancy	-10	136	-105	-109

Operator and Labor Information
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Operator Information				
Average number of operators	1.1	1.0	1.0	1.3
Average age of operators	47.6	47.5	49.5	48.5
Average number of years farming	24.9	26.0	26.6	28.1
Results Per Operator				
Working capital	377,004	152,046	158,932	905,249
Total assets (market)	4,440,482	3,239,794	3,871,345	6,990,652
Total liabilities	1,895,583	1,463,967	1,676,953	2,914,093
Net worth (market)	2,544,899	1,775,827	2,194,392	4,076,558
Net worth excl deferred liabs	3,072,387	2,133,403	2,640,514	4,881,275
Gross farm income	1,160,949	874,387	913,947	1,954,813
Total farm expense	956,251	864,819	760,336	1,508,972
Net farm income from operations	204,698	9,568	153,610	445,841
Net nonfarm income	31,106	46,468	21,293	30,888
Family living & tax withdrawals	91,386	89,247	91,465	116,769
Total acres owned	426.1	262.5	447.8	481.0
Total crop acres	1,888.7	1,630.8	1,563.3	2,842.5
Crop acres owned	356.0	233.1	318.3	396.7
Crop acres cash rented	1,487.9	1,373.5	1,152.4	2,402.6
Crop acres share rented	44.8	24.2	92.6	43.3
Labor Analysis				
Number of farms	87	17	18	18
Total unpaid labor hours	2,088	1,606	1,686	3,000
Total hired labor hours	3,075	1,773	1,935	4,480
Total labor hours per farm	5,163	3,379	3,621	7,480
Unpaid hours per operator	1,839	1,690	1,668	2,250
Value of farm production / hour	254.03	241.48	255.11	348.16
Net farm income / unpaid hour	111.34	5.66	92.12	198.15
Average hourly hired labor wage	26.69	32.07	21.05	29.96
Partnerships & LLCs				
Number of farms	8	1	-	4
Number of operators	2.3	-	-	-
Owner withdrawals per farm	-	-	-	-
Withdrawals per operator	-	-	-	-
Corporations				
Number of farms	8	2	1	2
Number of operators	1.4	-	-	-

Nonfarm Summary
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Nonfarm Income				
Personal wages & salary	19,051	30,370	17,875	6,783
Net nonfarm business income	5,776	7,180	45	7,594
Personal rental income	2,274	-	-	10,544
Personal interest income	196	396	5	161
Personal cash dividends	427	-	35	2,031
Tax refunds	744	1,110	1,057	777
Other nonfarm income	6,857	5,089	2,513	13,294
Total nonfarm income	35,325	44,144	21,530	41,183
Gifts and inheritances	943	1,190	556	1,870
Nonfarm Assets (market)				
Checking & savings	14,029	11,771	19,641	9,827
Stocks & bonds	53,222	2,619	9,219	212,171
Other current assets	9,846	588	89	38,360
Furniture & appliances	11,904	13,423	11,801	14,583
Nonfarm vehicles	25,119	27,059	28,003	26,003
Cash value of life ins.	17,007	12,851	23,294	15,887
Retirement accounts	137,528	158,590	156,498	184,349
Other intermediate assets	2,939	377	5,379	2,286
Nonfarm real estate	207,298	154,577	207,978	410,290
Personal bus. investment	17,272	-	-	83,480
Other long term assets	29,537	17,588	628	17,912
Total nonfarm assets	525,701	399,443	462,530	1,015,149
Nonfarm Liabilities				
Accrued interest	369	229	355	467
Accounts payable	320	631	949	-
Current notes	1,074	965	-	806
Princ due on term debt	6,948	6,279	5,175	10,758
Total current liabilities	23,800	12,382	20,340	45,160
Intermediate liabilities	5,623	9,854	4,126	6,775
Long term liabilities	77,429	67,202	78,336	101,437
Total nonfarm liabilities	106,852	89,437	102,801	153,372
Nonfarm net worth	418,848	310,006	359,728	861,777
Nonfarm debt to asset ratio	20 %	22 %	22 %	15 %

Financial Summary
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Income Statement				
Gross cash farm income	1,326,286	878,686	947,188	2,584,015
Total cash farm expense	1,105,874	813,848	773,936	2,139,770
Net cash farm income	220,412	64,838	173,252	444,245
Inventory change	79,582	-3,951	37,559	266,520
Depreciation	-67,532	-51,797	-55,494	-116,311
Net farm income from operations	232,462	9,090	155,317	594,454
Gain or loss on capital sales	5,482	-1,271	-431	23,139
Average net farm income	237,943	7,819	154,886	617,594
Median net farm income	167,139	17,766	150,775	538,593
Profitability (cost)				
Rate of return on assets	6.3 %	-1.4 %	5.9 %	8.8 %
Rate of return on equity	8.2 %	-7.1 %	8.0 %	12.1 %
Operating profit margin	15.0 %	-3.1 %	14.7 %	21.0 %
Asset turnover rate	41.6 %	45.3 %	39.9 %	41.8 %
Profitability (market)				
Rate of return on assets	5.1 %	0.0 %	6.9 %	5.7 %
Rate of return on equity	7.0 %	-2.7 %	10.5 %	7.8 %
Operating profit margin	17.1 %	-0.1 %	25.3 %	17.7 %
Asset turnover rate	29.9 %	31.1 %	27.2 %	32.4 %
Liquidity & Repayment (end of year)				
Current assets	988,795	557,247	614,385	2,186,293
Current liabilities	560,657	412,804	453,687	979,293
Current ratio	1.76	1.35	1.35	2.23
Working capital	428,138	144,443	160,698	1,206,999
Change in working capital	179,994	39,764	42,325	500,642
Working capital to gross inc	32.5 %	17.4 %	17.4 %	46.3 %
Term debt coverage ratio	2.46	0.46	1.73	3.57
Replacement coverage ratio	1.70	0.33	1.33	2.36
Term debt to EBITDA	2.11	3.74	2.57	1.79
Solvency (end of year at cost)				
Number of farms	87	17	18	18
Total assets	3,593,586	2,083,331	2,643,311	7,092,756
Total liabilities	1,553,653	1,051,072	1,244,507	2,812,502
Net worth	2,039,933	1,032,260	1,398,805	4,280,254
Net worth change	171,728	-49,525	99,785	495,502
Farm debt to asset ratio	45 %	52 %	49 %	41 %
Total debt to asset ratio	43 %	50 %	47 %	40 %
Change in earned net worth %	9 %	-5 %	8 %	13 %
Solvency (end of year at market)				
Number of farms	87	17	18	18
Total assets	5,042,755	3,077,805	3,914,360	9,320,869
Total liabilities	2,152,686	1,390,769	1,695,586	3,885,458
Net worth	2,890,069	1,687,036	2,218,774	5,435,411
Total net worth change	209,915	-13,056	203,834	434,674
Farm debt to asset ratio	45 %	47 %	45 %	44 %
Total debt to asset ratio	43 %	45 %	43 %	42 %
Change in total net worth %	8 %	-1 %	10 %	9 %
Nonfarm Information				
Net nonfarm income	35,325	44,144	21,530	41,183
Farms reporting living expenses	27	4	10	3
Total family living expense	63,333	-	67,330	-
Total living, invest, cap. purch	80,516	-	112,993	-
Crop Acres				
Total crop acres	2,145	1,549	1,581	3,790
Total crop acres owned	404	221	322	529
Total crop acres cash rented	1,690	1,305	1,165	3,203
Total crop acres share rented	51	23	94	58
Machinery value per crop acre	410	446	422	418

Summary Farm Income Statement
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	87	17	18	18
Crop sales	992,727	627,353	655,197	2,046,802
Crop inventory change	33,326	34,363	20,589	41,930
Gross crop income	1,026,053	661,716	675,786	2,088,731
Government payments	135,118	91,132	111,759	247,170
Other cash farm income	192,541	156,469	180,232	290,043
Change in accounts receivable	-67,796	-74,433	-74,374	-114,356
Gain or loss on hedging accounts	13,393	-3,569	-454	71,941
Change in other assets	11,774	-4,114	30,668	22,888
Livestock Income	7,329	3,467	484	-
Gross farm income	1,318,411	830,668	924,102	2,606,417
Cash operating expenses Change in prepaids and supplies Change in growing crops Change in accounts payable Depreciation Total operating expense	1,048,036 -49,918 -644 -34,863 67,532 1,030,144	779,832 -25,858 - -21,930 51,797 783,841	731,487 -10,275 - -53,480 55,494 723,225	2,000,545 -157,483 -3,111 -56,944 116,311 1,899,317
Interest paid Change in accrued interest Total interest expense	57,838 -2,033 55,805	34,016 3,721 37,737	42,450 3,110 45,560	139,225 -26,580 112,646
Total expenses	1,085,949	821,578	768,784	2,011,963
Net farm income from operations				
Gain or loss on capital sales	232,462 5,482	9,090 -1,271	155,317 -431	594,454 23,139
Net farm income	237,943	7,819	154,886	617,594

Per Operator Information

Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Number of Farms	76.8	87	79	76	74	68
Operator Information						
Ave Age of Operator	47.4	47.6	47.2	46.7	47.8	47.7
Ave Years Farming	24.5	24.9	24.4	23.7	24.9	24.6
Net Farm Income / Op	124,692	204,698	22,624	135,779	102,601	157,760
Net Non-farm Income	29,275	31,106	24,939	31,624	28,669	30,037
Family Living + Income Taxes	100,259	91,386	99,626	103,499	99,198	107,588
Crop Acres per Operator						
Total Crop Acres	1,859.9	1,888.7	1,807.1	1,909.9	1,857.7	1,836.1
Crop Acres Owned	414.3	426.1	363.9	450.9	425.1	405.5
Crop Acres Cash Rented	1,435.4	1,487.9	1,405.5	1,488.3	1,402.7	1,392.8
Crop Acres Share Rented	35.6	44.8	37.6	27.7	30.0	37.8
Labor Analysis						
Total labor Hours per farm	4,971	5,163	5,271	5,118	5,285	4,016
Value of farm prod/hour	235.29	254.03	213.62	233.58	212.51	262.69
Net farm Income / unpaid hour	75.57	111.34	12.78	86.12	68.48	99.13

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Return to Overhead)

Barley on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	6
Acres	180.40
Yield per acre (bu.)	73.79
Operators share of yield %	100.00
Value per bu.	4.34
Total product return per acre	319.95
Crop insurance per acre	1.28
Other crop income per acre	39.50
Gross return per acre	360.72
Direct Expenses	
Seed and plants	20.56
Fertilizer	63.06
Crop chemicals	29.14
Crop insurance	14.13
Storage	0.79
Fuel & oil	15.04
Repairs	33.53
Custom hire	6.14
Land rent	125.43
Machinery leases	2.55
Marketing	0.52
Operating interest	4.77
Miscellaneous	5.47
Total direct expenses per acre	321.12
Return over direct exp per acre	39.61
Overhead Expenses	
Hired labor	22.69
Building leases	0.60
Farm insurance	6.74
Utilities	4.87
Dues & professional fees	3.31
Interest	2.08
Mach & bldg depreciation	20.29
Miscellaneous	4.47
Total overhead expenses per acre	65.05
Total dir & ovhd expenses per acre	386.17
Net return per acre	-25.45
Government payments	26.64
Net return with govt pmts	1.19
Labor & management charge	26.26
Net return over lbr & mgt	-25.07
Cost of Production	
Total direct expense per bu.	4.35
Total dir & ovhd exp per bu.	5.23
Less govt & other income	4.32
With labor & management	4.68
Net value per unit	4.34
Machinery cost per acre	76.60
Est. labor hours per acre	1.89

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Return to Overhead)

Corn on Owned Land

	<u>Avg. Of</u> <u>All Farms</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	22	5	5
Acres	194.74	248.52	149.67
Yield per acre (bu.)	166.61	175.15	189.90
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.94	3.72	4.61
Total product return per acre	656.25	651.28	874.56
Hedging gains/losses per acre	8.25	28.45	-
Crop insurance per acre	15.39	11.15	10.36
Other crop income per acre	44.62	48.07	51.41
Gross return per acre	724.51	738.95	936.34
Direct Expenses			
Seed and plants	89.04	74.16	93.90
Fertilizer	109.48	106.77	123.20
Crop chemicals	29.55	30.23	30.04
Crop insurance	18.38	20.83	20.23
Drying expense	11.20	11.14	19.03
Storage	1.39	4.40	-
Fuel & oil	25.63	31.50	24.08
Repairs	57.20	70.87	57.43
Custom hire	2.63	2.87	1.08
Machinery leases	1.21	2.02	-
Marketing	0.71	2.09	-
Operating interest	12.02	7.47	13.65
Miscellaneous	9.98	5.76	0.72
Total direct expenses per acre	368.41	370.11	383.36
Return over direct exp per acre	356.10	368.84	552.98
Overhead Expenses			
Hired labor	43.83	63.45	29.18
Machinery leases	4.66	0.71	11.15
Building leases	0.36	0.19	0.09
RE & pers. property taxes	26.99	28.66	32.79
Farm insurance	9.62	8.72	11.99
Utilities	7.73	9.53	7.76
Dues & professional fees	4.73	4.58	5.68
Interest	44.24	39.20	53.81
Mach & bldg depreciation	49.54	61.72	57.09
Miscellaneous	6.46	7.65	3.32
Total overhead expenses per acre	198.16	224.41	212.87
Total dir & ovhd expenses per acre	566.57	594.52	596.23
Net return per acre	157.94	144.43	340.11
Government payments	30.88	30.03	30.64
Net return with govt pmts	188.82	174.46	370.75
Labor & management charge	52.94	73.32	46.96
Net return over lbr & mgt	135.88	101.14	323.79
Cost of Production			
Total direct expense per bu.	2.21	2.11	2.02
Total dir & ovhd exp per bu.	3.40	3.39	3.14
Less govt & other income	2.81	2.72	2.65
With labor & management	3.12	3.14	2.90
Net value per unit	3.99	3.88	4.61
Machinery cost per acre	135.73	158.45	152.36
Est. labor hours per acre	3.38	3.59	3.04

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Return to Overhead)

Corn on Cash Rent

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	39	7	8	8
Acres	483.42	1,096.86	304.61	509.19
Yield per acre (bu.)	164.58	151.13	180.15	177.53
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	4.08	3.96	3.89	4.48
Total product return per acre	671.89	597.73	701.35	796.04
Hedging gains/losses per acre	1.03	-	12.90	-
Crop insurance per acre	8.02	9.91	8.15	0.39
Other crop income per acre	42.90	41.11	32.95	48.95
Gross return per acre	723.84	648.75	755.36	845.38
Direct Expenses				
Seed and plants	88.37	98.26	79.80	73.17
Fertilizer	118.45	128.93	116.03	117.97
Crop chemicals	30.88	33.73	21.52	34.81
Cover crop expense	0.29	0.70	-	-
Crop insurance	23.77	29.35	17.89	18.42
Drying expense	7.20	4.43	10.87	10.37
Storage	0.79	-	0.49	0.90
Fuel & oil	24.89	24.16	36.86	21.15
Repairs	47.51	43.77	66.19	38.18
Custom hire	7.31	11.16	3.16	4.22
Land rent	122.87	122.28	126.55	124.46
Machinery leases	2.29	-	4.63	-
Marketing	0.59	-	2.92	-
Operating interest	14.36	21.61	4.19	6.46
Miscellaneous	4.95	7.41	4.79	2.94
Total direct expenses per acre	494.51	525.80	495.89	453.04
Return over direct exp per acre	229.33	122.95	259.47	392.34
Overhead Expenses				
Hired labor	29.02	25.79	48.60	32.28
Machinery leases	3.71	2.69	2.60	4.41
Building leases	0.45	0.15	0.24	1.19
Farm insurance	7.01	4.24	10.80	7.07
Utilities	6.03	4.24	7.42	5.28
Dues & professional fees	3.07	1.78	5.16	3.84
Interest	3.79	1.15	2.18	4.06
Mach & bldg depreciation	37.21	25.34	39.91	43.95
Miscellaneous	6.50	8.63	8.52	1.13
Total overhead expenses per acre	96.81	74.02	125.43	103.19
Total dir & ovhd expenses per acre	591.32	599.81	621.32	556.23
Net return per acre	132.52	48.93	134.04	289.15
Government payments	30.92	25.94	30.93	32.97
Net return with govt pmts	163.44	74.87	164.96	322.12
Labor & management charge	49.97	39.14	73.79	43.86
Net return over lbr & mgt	113.47	35.73	91.18	278.26
Cost of Production				
Total direct expense per bu.	3.00	3.48	2.75	2.55
Total dir & ovhd exp per bu.	3.59	3.97	3.45	3.13
Less govt & other income	3.09	3.46	2.98	2.67
With labor & management	3.39	3.72	3.39	2.92
Net value per unit	4.09	3.96	3.96	4.48
Machinery cost per acre	122.81	105.34	146.85	113.07
Est. labor hours per acre	2.67	2.19	3.89	2.68

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Return to Overhead)

Soybeans on Owned Land

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	35	7	7	7
Acres	264.20	343.48	277.72	244.53
Yield per acre (bu.)	37.32	28.86	41.21	45.14
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	9.88	9.37	9.39	10.71
Total product return per acre	368.55	270.54	386.92	483.47
Hedging gains/losses per acre	1.63	-	-	8.81
Crop insurance per acre	10.83	16.69	8.20	10.65
Other crop income per acre	25.93	18.25	27.63	32.94
Gross return per acre	406.94	305.49	422.75	535.87
Direct Expenses				
Seed and plants	61.14	59.64	63.39	60.15
Fertilizer	7.65	9.61	10.94	3.39
Crop chemicals	33.40	35.05	34.06	29.50
Crop insurance	19.22	20.29	18.65	18.01
Storage	0.62	-	1.37	-
Fuel & oil	13.38	13.28	15.30	13.21
Repairs	29.60	29.35	26.84	35.76
Custom hire	2.22	1.91	1.62	2.78
Machinery leases	1.42	1.26	5.19	-
Marketing	0.50	0.06	0.35	0.61
Operating interest	5.71	4.04	8.18	6.17
Miscellaneous	1.98	2.25	1.56	2.04
Total direct expenses per acre	176.83	176.75	187.45	171.62
Return over direct exp per acre	230.11	128.74	235.30	364.24
Overhead Expenses				
Hired labor	14.75	14.29	8.22	13.69
Machinery leases	2.05	0.00	-	7.75
RE & pers. property taxes	24.52	20.37	29.48	28.44
Farm insurance	7.39	8.63	8.25	7.46
Utilities	5.41	8.48	4.51	2.96
Dues & professional fees	4.95	6.18	7.53	3.87
Interest	45.39	14.15	40.72	73.74
Mach & bldg depreciation	28.85	30.48	27.25	18.71
Miscellaneous	3.19	3.18	4.30	1.82
Total overhead expenses per acre	136.49	105.76	130.27	158.46
Total dir & ovhd expenses per acre	313.32	282.51	317.72	330.08
Net return per acre	93.61	22.98	105.03	205.78
Government payments	28.93	28.10	27.80	27.93
Net return with govt pmts	122.55	51.08	132.83	233.71
Labor & management charge	31.64	36.86	28.40	31.68
Net return over lbr & mgt	90.91	14.21	104.43	202.03
Cost of Production				
Total direct expense per bu.	4.74	6.12	4.55	3.80
Total dir & ovhd exp per bu.	8.40	9.79	7.71	7.31
Less govt & other income	6.59	7.60	6.17	5.53
With labor & management	7.44	8.88	6.86	6.23
Net value per unit	9.92	9.37	9.39	10.91
Machinery cost per acre	76.93	72.21	77.11	80.51
Est. labor hours per acre	1.74	2.28	1.69	1.40

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Return to Overhead)

Soybeans on Cash Rent

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	58	11	11	12
Acres	694.96	906.73	682.45	434.28
Yield per acre (bu.)	37.30	29.07	36.70	44.69
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	10.08	9.09	9.91	10.84
Total product return per acre	375.82	264.14	363.92	484.23
Hedging gains/losses per acre	0.49	-	-	-1.91
Crop insurance per acre	15.94	37.55	10.54	5.71
Other crop income per acre	25.70	20.32	25.36	26.34
Gross return per acre	417.96	322.01	399.81	514.36
Direct Expenses				
Seed and plants	58.42	58.50	60.95	57.16
Fertilizer	8.23	7.35	12.12	4.07
Crop chemicals	30.93	31.70	30.18	28.01
Crop insurance	18.19	17.30	15.38	18.70
Storage	0.77	-	0.52	-
Fuel & oil	12.92	12.49	12.46	10.08
Repairs	27.59	26.71	22.83	23.29
Custom hire	2.87	2.61	3.06	5.98
Land rent	134.96	145.63	117.26	117.80
Machinery leases	2.28	6.64	2.04	-
Marketing	0.59	0.90	0.39	0.14
Operating interest	6.48	10.72	6.31	4.49
Miscellaneous	2.60	3.65	1.97	0.91
Total direct expenses per acre	306.83	324.20	285.46	270.63
Return over direct exp per acre	111.13	-2.19	114.36	243.73
Overhead Expenses				
Hired labor	15.55	11.83	12.07	19.95
Machinery leases	3.68	1.43	-	0.96
Building leases	0.63	0.58	0.50	0.10
Farm insurance	5.92	6.47	5.29	4.58
Utilities	3.66	4.10	2.96	3.02
Dues & professional fees	3.49	4.52	2.15	3.86
Interest	3.09	4.60	2.90	2.74
Mach & bldg depreciation	22.84	27.97	23.67	17.21
Miscellaneous	2.97	3.74	3.04	1.93
Total overhead expenses per acre	61.83	65.22	52.58	54.35
Total dir & ovhd expenses per acre	368.66	389.42	338.04	324.98
Net return per acre	49.30	-67.42	61.77	189.38
Government payments	27.83	25.89	28.20	23.60
Net return with govt pmts	77.14	-41.53	89.98	212.99
Labor & management charge	31.15	27.73	25.36	31.25
Net return over lbr & mgt	45.99	-69.26	64.62	181.73
Cost of Production				
Total direct expense per bu.	8.23	11.15	7.78	6.06
Total dir & ovhd exp per bu.	9.88	13.40	9.21	7.27
Less govt & other income	8.01	10.52	7.46	6.07
With labor & management	8.84	11.47	8.15	6.77
Net value per unit	10.09	9.09	9.91	10.79
Machinery cost per acre	72.77	78.98	65.55	57.74
Est. labor hours per acre	1.50	1.29	1.40	1.40

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Return to Overhead)

Soybeans Seed on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	7
Acres	336.47
Yield per acre (bu.)	41.02
Operators share of yield %	100.00
Value per bu.	10.53
Total product return per acre	431.90
Crop insurance per acre	27.08
Other crop income per acre	24.12
Gross return per acre	483.10
Direct Expenses	
Seed and plants	57.57
Fertilizer	5.46
Crop chemicals	36.42
Crop insurance	22.92
Storage	0.32
Fuel & oil	12.72
Repairs	29.92
Custom hire	4.19
Machinery leases	2.14
Marketing	0.42
Operating interest	9.67
Miscellaneous	4.76
Total direct expenses per acre	186.52
Return over direct exp per acre	296.58
Overhead Expenses	
Hired labor	30.07
Machinery leases	2.51
Building leases	0.33
RE & pers. property taxes	20.52
Farm insurance	7.57
Utilities	2.82
Dues & professional fees	4.62
Interest	42.83
Mach & bldg depreciation	15.03
Miscellaneous	4.09
Total overhead expenses per acre	130.39
Total dir & ovhd expenses per acre	316.90
Net return per acre	166.20
Government payments	29.69
Net return with govt pmts	195.89
Labor & management charge	19.01
Net return over lbr & mgt	176.87
Cost of Production	
Total direct expense per bu.	4.55
Total dir & ovhd exp per bu.	7.73
Less govt & other income	5.75
With labor & management	6.22
Net value per unit	10.53
Machinery cost per acre	62.92
Est. labor hours per acre	2.10

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Return to Overhead)

Soybeans Seed on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	18
Acres	886.95
Yield per acre (bu.)	39.57
Operators share of yield %	100.00
Value per bu.	10.81
Total product return per acre	427.71
Crop insurance per acre	22.61
Other crop income per acre	23.70
Gross return per acre	474.02
Direct Expenses	
Seed and plants	59.61
Fertilizer	9.83
Crop chemicals	37.50
Crop insurance	21.13
Storage	0.50
Fuel & oil	12.83
Repairs	28.36
Custom hire	7.20
Land rent	132.01
Machinery leases	1.37
Hauling and trucking	0.20
Marketing	0.50
Operating interest	8.14
Miscellaneous	3.49
Total direct expenses per acre	322.68
Return over direct exp per acre	151.34
Overhead Expenses	
Hired labor	18.58
Machinery leases	1.35
Farm insurance	5.74
Utilities	2.95
Dues & professional fees	2.95
Interest	1.27
Mach & bldg depreciation	17.59
Miscellaneous	3.68
Total overhead expenses per acre	54.11
Total dir & ovhd expenses per acre	376.79
Net return per acre	97.23
Government payments	28.68
Net return with govt pmts	125.91
Labor & management charge	28.31
Net return over lbr & mgt	97.59
Cost of Production	
Total direct expense per bu.	8.16
Total dir & ovhd exp per bu.	9.52
Less govt & other income	7.63
With labor & management	8.34
Net value per unit	10.81
Machinery cost per acre	67.23
Est. labor hours per acre	1.58

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Return to Overhead)

Wheat, Spring on Owned Land

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	33	6	6	7
Acres	277.48	213.08	268.07	313.01
Yield per acre (bu.)	63.67	56.01	56.26	71.97
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.56	5.24	5.75	5.66
Total product return per acre	354.05	293.33	323.51	407.18
Hedging gains/losses per acre	0.49	-	-	2.06
Crop insurance per acre	11.33	6.07	13.46	17.52
Other crop income per acre	33.41	30.22	34.27	34.69
Gross return per acre	399.28	329.62	371.23	461.45
Direct Expenses				
Seed and plants	24.57	22.26	22.04	24.97
Fertilizer	80.56	76.75	78.55	76.28
Crop chemicals	33.03	31.42	30.19	34.90
Crop insurance	14.77	10.93	10.89	17.78
Drying expense	0.63	0.26	0.33	0.26
Fuel & oil	13.01	12.09	11.48	13.07
Repairs	26.94	29.19	24.23	25.16
Custom hire	6.87	3.88	2.02	3.45
Machinery leases	1.28	6.90	-	-
Marketing	3.14	9.19	-	0.10
Operating interest	6.49	9.58	8.10	4.75
Miscellaneous	3.29	10.52	3.42	1.63
Total direct expenses per acre	214.59	222.97	191.24	202.34
Return over direct exp per acre	184.69	106.66	179.99	259.11
Overhead Expenses				
Hired labor	17.13	22.61	21.87	14.98
Machinery leases	3.03	0.12	1.67	10.31
Building leases	1.14	0.25	4.17	0.77
RE & pers. property taxes	23.88	21.32	20.99	32.44
Farm insurance	7.61	6.32	6.69	6.96
Utilities	5.20	7.14	2.41	4.32
Dues & professional fees	5.43	4.89	4.77	3.50
Interest	44.92	61.28	31.29	65.35
Mach & bldg depreciation	24.52	24.93	13.43	25.05
Miscellaneous	3.64	2.90	2.13	1.24
Total overhead expenses per acre	136.50	151.77	109.42	164.92
Total dir & ovhd expenses per acre	351.09	374.74	300.65	367.26
Net return per acre	48.19	-45.12	70.57	94.19
Government payments	27.21	26.33	28.44	28.14
Net return with govt pmts	75.40	-18.79	99.01	122.33
Labor & management charge	28.23	32.52	21.82	29.75
Net return over lbr & mgt	47.17	-51.30	77.19	92.58
Cost of Production				
Total direct expense per bu.	3.37	3.98	3.40	2.81
Total dir & ovhd exp per bu.	5.51	6.69	5.34	5.10
Less govt & other income	4.38	5.57	3.99	3.96
With labor & management	4.82	6.15	4.38	4.37
Net value per unit	5.57	5.24	5.75	5.69
Machinery cost per acre	74.44	73.99	51.11	78.61
Est. labor hours per acre	1.74	2.26	1.75	1.43

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Return to Overhead)

Wheat, Spring on Cash Rent

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	57	11	12	12
Acres	543.31	550.68	442.46	651.52
Yield per acre (bu.)	63.47	53.04	61.21	71.80
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	5.59	5.45	5.50	5.73
Total product return per acre	355.02	288.96	336.43	411.08
Hedging gains/losses per acre	0.34	-	-	1.34
Crop insurance per acre	6.05	13.24	4.81	-
Other crop income per acre	33.49	27.71	35.21	40.09
Gross return per acre	394.90	329.91	376.45	452.51
Direct Expenses				
Seed and plants	24.13	20.92	22.64	22.56
Fertilizer	80.48	79.80	75.85	82.21
Crop chemicals	34.75	30.46	34.73	32.39
Crop insurance	14.25	15.43	11.92	12.62
Drying expense	0.93	0.62	0.62	1.75
Fuel & oil	13.15	12.95	14.91	12.92
Repairs	27.59	31.63	26.89	28.28
Custom hire	6.38	6.57	5.29	3.65
Land rent	138.44	149.63	130.75	131.29
Machinery leases	1.93	7.86	0.48	-
Marketing	0.59	0.79	0.89	0.48
Operating interest	6.28	11.55	6.05	3.98
Miscellaneous	4.21	6.93	2.64	3.42
Total direct expenses per acre	353.10	375.16	333.65	335.55
Return over direct exp per acre	41.81	-45.25	42.80	116.96
Overhead Expenses				
Hired labor	15.47	13.10	18.15	13.86
Machinery leases	3.29	0.14	0.61	6.39
Building leases	1.40	0.40	2.93	0.29
Farm insurance	7.91	6.88	6.40	7.01
Utilities	3.71	3.69	2.86	3.54
Dues & professional fees	3.96	5.08	3.83	2.90
Interest	2.97	4.10	1.19	1.95
Mach & bldg depreciation	20.92	18.61	16.82	22.32
Miscellaneous	2.90	3.51	2.12	2.82
Total overhead expenses per acre	62.53	55.51	54.91	61.07
Total dir & ovhd expenses per acre	415.63	430.66	388.56	396.62
Net return per acre	-20.72	-100.75	-12.11	55.89
Government payments	27.44	25.96	23.30	31.44
Net return with govt pmts	6.72	-74.79	11.19	87.33
Labor & management charge	29.67	27.81	25.20	34.04
Net return over lbr & mgt	-22.95	-102.59	-14.01	53.28
Cost of Production				
Total direct expense per bu.	5.56	7.07	5.45	4.67
Total dir & ovhd exp per bu.	6.55	8.12	6.35	5.52
Less govt & other income	5.49	6.86	5.31	4.51
With labor & management	5.96	7.38	5.73	4.98
Net value per unit	5.60	5.45	5.50	5.74
Machinery cost per acre	73.93	78.56	62.88	73.19
Est. labor hours per acre	1.44	1.39	1.41	1.53

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
(Farms Sorted By Return to Overhead)

Soybeans, Food on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	449.70
Yield per acre (bu.)	39.01
Operators share of yield %	100.00
Value per bu.	13.86
Total product return per acre	540.53
Crop insurance per acre	19.50
Other crop income per acre	26.02
Gross return per acre	586.04
Direct Expenses	
Seed and plants	47.73
Fertilizer	10.68
Crop chemicals	42.05
Crop insurance	21.37
Fuel & oil	13.07
Repairs	35.22
Custom hire	6.76
Land rent	148.75
Utilities	0.73
Operating interest	6.70
Miscellaneous	4.93
Total direct expenses per acre	337.99
Return over direct exp per acre	248.05
Overhead Expenses	
Hired labor	20.24
Machinery leases	0.04
Farm insurance	6.76
Utilities	4.64
Dues & professional fees	2.96
Interest	1.98
Mach & bldg depreciation	11.30
Miscellaneous	6.32
Total overhead expenses per acre	54.24
Total dir & ovhd expenses per acre	392.23
Net return per acre	193.81
Government payments	25.17
Net return with govt pmts	218.98
Labor & management charge	28.26
Net return over lbr & mgt	190.72
Cost of Production	
Total direct expense per bu.	8.67
Total dir & ovhd exp per bu.	10.06
Less govt & other income	8.24
With labor & management	8.97
Net value per unit	13.86
Machinery cost per acre	66.70
Est. labor hours per acre	1.41

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
Sugarbeets Excluding Joint Ventue
(Farms Sorted By Return to Overhead)

Sugar Beets on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	20
Acres	143.09
Yield per acre (ton)	26.64
Operators share of yield %	100.00
Value per ton	42.48
Total product return per acre	1,131.91
Crop insurance per acre	5.24
Other crop income per acre	21.95
Gross return per acre	1,159.10
Direct Expenses	
Seed and plants	230.37
Fertilizer	79.00
Crop chemicals	128.43
Crop insurance	27.57
Fuel & oil	49.50
Repairs	100.92
Custom hire	26.74
Hired labor	22.01
Machinery leases	2.74
Hauling and trucking	16.07
Operating interest	26.07
Miscellaneous	5.48
Total direct expenses per acre	714.91
Return over direct exp per acre	444.20
Overhead Expenses	
Hired labor	64.11
Machinery leases	4.28
Building leases	5.20
RE & pers. property taxes	29.80
Farm insurance	15.05
Utilities	13.13
Dues & professional fees	8.58
Interest	75.42
Mach & bldg depreciation	93.68
Miscellaneous	11.78
Total overhead expenses per acre	321.03
Total dir & ovhd expenses per acre	1,035.93
Net return per acre	123.17
Government payments	21.50
Net return with govt pmts	144.67
Labor & management charge	98.08
Net return over lbr & mgt	46.59
Cost of Production	
Total direct expense per ton	26.83
Total dir & ovhd exp per ton	38.88
Less govt & other income	37.05
With labor & management	40.74
Net value per unit	42.48
Machinery cost per acre	283.35
Est. labor hours per acre	4.77

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
Sugarbeets Excluding Joint Ventue
(Farms Sorted By Return to Overhead)

Sugar Beets on Cash Rent

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	27	5	6	6
Acres	276.46	556.88	180.68	229.90
Yield per acre (ton)	25.49	23.06	25.82	31.32
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	37.76	30.78	41.34	45.89
Total product return per acre	962.27	709.59	1,067.43	1,437.29
Crop insurance per acre	11.89	3.29	4.36	-
Other crop income per acre	26.56	25.94	27.69	17.64
Gross return per acre	1,000.72	738.82	1,099.48	1,454.93
Direct Expenses				
Seed and plants	225.78	233.29	227.28	221.50
Fertilizer	75.49	73.66	60.87	81.47
Crop chemicals	119.92	108.89	129.34	128.98
Crop insurance	32.01	31.06	38.03	32.25
Fuel & oil	47.55	49.92	61.63	37.33
Repairs	112.08	127.68	159.41	81.76
Custom hire	14.94	8.08	11.31	21.89
Hired labor	33.84	41.67	25.60	40.45
Land rent	145.27	151.30	137.67	146.50
Machinery leases	3.94	1.03	3.06	16.82
Hauling and trucking	33.65	44.30	43.39	30.57
Operating interest	19.14	26.89	15.85	11.17
Miscellaneous	6.73	8.53	6.23	5.51
Total direct expenses per acre	870.34	906.29	919.67	856.21
Return over direct exp per acre	130.38	-167.47	179.81	598.73
Overhead Expenses				
Hired labor	82.31	112.51	79.46	83.57
Machinery leases	9.62	7.18	1.60	0.03
Building leases	1.94	2.61	0.46	3.20
Farm insurance	16.33	17.72	15.86	19.96
Utilities	12.27	10.31	17.65	15.04
Dues & professional fees	7.36	4.97	7.81	11.24
Interest	8.59	5.98	11.34	13.78
Mach & bldg depreciation	73.76	76.09	89.39	96.51
Miscellaneous	10.35	9.88	9.80	20.20
Total overhead expenses per acre	222.53	247.24	233.38	263.53
Total dir & ovhd expenses per acre	1,092.87	1,153.53	1,153.05	1,119.74
Net return per acre	-92.15	-414.71	-53.57	335.19
Government payments	19.86	17.00	24.95	21.29
Net return with govt pmts	-72.29	-397.71	-28.62	356.48
Labor & management charge	109.55	93.90	125.22	154.09
Net return over lbr & mgt	-181.84	-491.61	-153.84	202.40
Cost of Production				
Total direct expense per ton	34.15	39.31	35.62	27.34
Total dir & ovhd exp per ton	42.88	50.03	44.66	35.75
Less govt & other income	40.59	48.03	42.45	34.51
With labor & management	44.89	52.10	47.30	39.43
Net value per unit	37.76	30.78	41.34	45.89
Machinery cost per acre	261.52	264.06	326.53	262.98
Est. labor hours per acre	6.36	7.43	6.04	6.68

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
Sugarbeets - Joint Ventures
(Farms Sorted By Return to Overhead)

Sugar Beets on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	8
Acres	164.14
Yield per acre (ton)	28.27
Operators share of yield %	100.00
Value per ton	40.44
Total product return per acre	1,143.23
Other crop income per acre	26.43
Gross return per acre	1,169.65
Direct Expenses	
Seed and plants	234.66
Fertilizer	76.80
Crop chemicals	149.99
Crop insurance	30.43
Fuel & oil	53.06
Repairs	124.64
Custom hire	1.18
Hired labor	31.25
Stock/quota lease	170.45
Hauling and trucking	7.77
Operating interest	36.20
Miscellaneous	3.36
Total direct expenses per acre	919.79
Return over direct exp per acre	249.86
Overhead Expenses	
Hired labor	39.99
Machinery leases	18.02
Building leases	0.99
RE & pers. property taxes	33.60
Farm insurance	13.05
Utilities	16.75
Dues & professional fees	9.67
Interest	89.07
Mach & bldg depreciation	84.55
Miscellaneous	15.21
Total overhead expenses per acre	320.90
Total dir & ovhd expenses per acre	1,240.69
Net return per acre	-71.04
Government payments	19.32
Net return with govt pmts	-51.72
Labor & management charge	100.06
Net return over lbr & mgt	-151.78
Cost of Production	
Total direct expense per ton	32.53
Total dir & ovhd exp per ton	43.89
Less govt & other income	42.27
With labor & management	45.81
Net value per unit	40.44
Machinery cost per acre	287.53
Est. labor hours per acre	5.08

Crop Enterprise Analysis
2020 Moorhead Farm Business Management Annual Report
Sugarbeets - Joint Ventures
(Farms Sorted By Return to Overhead)

Sugar Beets on Cash Rent

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	29	5	6	6
Acres	327.38	459.72	270.25	194.57
Yield per acre (ton)	27.22	25.98	27.22	30.67
Operators share of yield %	100.00	100.00	100.00	100.00
Value per ton	41.23	40.74	40.65	47.10
Total product return per acre	1,122.25	1,058.42	1,106.44	1,444.65
Crop insurance per acre	17.22	27.91	-	29.21
Other crop income per acre	23.18	18.78	18.33	23.61
Gross return per acre	1,162.65	1,105.11	1,124.77	1,497.47
Direct Expenses				
Seed and plants	233.62	242.23	234.27	237.84
Fertilizer	80.67	69.14	102.59	95.11
Crop chemicals	122.19	113.92	117.63	111.13
Cover crop expense	0.17	-	-	1.38
Crop insurance	29.68	29.30	22.60	28.84
Fuel & oil	45.25	43.74	49.62	41.00
Repairs	90.18	75.24	84.50	87.70
Custom hire	22.28	56.12	23.14	4.93
Hired labor	26.10	32.81	13.35	17.60
Land rent	150.60	168.19	134.45	123.63
Stock/quota lease	208.81	285.74	200.85	224.70
Machinery leases	2.32	8.09	0.11	1.67
Hauling and trucking	27.21	73.46	9.71	26.98
Operating interest	28.32	41.36	27.46	10.71
Miscellaneous	5.41	11.81	2.23	2.23
Total direct expenses per acre	1,072.82	1,251.14	1,022.51	1,015.44
Return over direct exp per acre	89.84	-146.04	102.26	482.03
Overhead Expenses				
Hired labor	54.84	39.64	55.67	93.33
Machinery leases	14.41	0.00	2.77	21.43
Building leases	2.83	2.45	1.68	2.00
Farm insurance	12.13	5.44	15.08	9.96
Utilities	11.53	7.33	9.86	14.40
Dues & professional fees	8.10	5.11	10.77	10.02
Interest	10.60	13.60	8.44	2.27
Mach & bldg depreciation	57.51	49.52	90.87	37.06
Miscellaneous	10.82	12.09	4.25	8.51
Total overhead expenses per acre	182.77	135.19	199.39	198.98
Total dir & ovhd expenses per acre	1,255.59	1,386.33	1,221.90	1,214.42
Net return per acre	-92.93	-281.22	-97.13	283.05
Government payments	19.96	15.72	18.92	11.61
Net return with govt pmts	-72.97	-265.50	-78.21	294.66
Labor & management charge	96.64	90.55	91.49	138.83
Net return over lbr & mgt	-169.61	-356.05	-169.70	155.83
Cost of Production				
Total direct expense per ton	39.41	48.15	37.56	33.11
Total dir & ovhd exp per ton	46.13	53.36	44.89	39.59
Less govt & other income	43.91	50.96	43.52	37.49
With labor & management	47.46	54.44	46.88	42.02
Net value per unit	41.23	40.74	40.65	47.10
Machinery cost per acre	235.59	238.32	249.58	187.78
Est. labor hours per acre	4.18	3.67	4.18	5.26

Corn on Cash Rented Land

Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Number of Fields	41	39	46	41	40	37
Acres	477.71	483.42	483.07	485.92	460.64	475.51
Yield per Acre	172.15	164.58	161.57	184.43	168.11	182.04
** Value per Unit	3.36	4.08	3.40	3.29	2.99	3.06
Product Value	577.38	671.89	548.58	606.27	502.20	557.95
Other Income	37.87	51.95	71.01	19.69	14.18	32.53
Gross Return	615.25	723.84	619.59	625.96	516.38	590.48
Direct Costs						
Seed	90.11	88.37	88.45	92.22	90.66	90.84
Fertilizer	103.05	118.45	105.36	101.04	93.21	97.20
Chemicals	28.53	30.88	28.08	24.80	31.74	27.17
Crop Insurance	20.37	23.77	20.48	17.72	22.23	17.65
Fuel & Oil	23.16	24.89	24.81	25.59	20.13	20.38
Repairs	39.59	47.51	44.52	35.53	34.88	35.53
Custom Hire	5.82	7.31	5.05	5.91	5.76	5.08
Land Rent	128.43	122.87	129.64	135.58	127.14	126.94
Other Direct Exp	31.22	30.47	40.49	36.46	26.26	22.44
Total Direct	471.76	494.51	486.88	474.82	452.02	450.58
Return over Direct	143.49	229.33	132.71	151.15	64.36	139.90
Overhead Costs						
Other Labor	24.57	29.02	26.14	23.20	23.11	21.36
Intermediate Interest	4.77	3.79	4.55	5.15	4.42	5.95
Depreciation	44.18	37.21	43.94	41.92	46.75	51.09
Other Overhead Exp	30.65	26.79	32.15	31.23	33.74	29.33
Total Ovhd Expenses	104.17	96.81	106.79	101.50	108.02	107.73
<u>Total Direct/Ovhd Expenses</u>	<u>575.93</u>	<u>591.32</u>	<u>593.68</u>	<u>576.32</u>	<u>560.04</u>	<u>558.31</u>
*** Net Return	39.32	132.52	25.91	49.65	-43.66	32.17

** - Value per Unit is a combination of actual Fall selling price and/or value on Dec 31st of that crop year.

*** - Net Return does **not** include direct government income or principal payment expenses or personal draw expenses

Soybeans on Cash Rented Land

Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Number of Fields	58	58	54	58	61	57
Acres	656.06	694.96	549.93	655.42	721.63	658.37
Yield per Acre	40.79	37.30	38.72	45.36	36.59	46.00
** Value per Unit	8.91	10.08	8.21	8.09	8.99	9.19
Product Value	362.57	375.82	317.93	367.09	329.10	422.91
Other Income	46.99	42.13	63.77	90.31	19.74	18.99
Gross Return	409.56	417.96	381.69	457.40	348.84	441.89
Direct Costs						
Seed	62.24	58.42	63.35	61.92	63.07	64.44
Fertilizer	12.17	8.23	12.47	9.09	15.27	15.78
Chemicals	32.17	30.93	32.42	31.88	36.24	29.39
Crop Insurance	18.25	18.19	18.41	18.68	19.36	16.62
Fuel & Oil	12.54	12.92	14.03	13.80	11.06	10.91
Repairs	22.55	27.59	25.58	20.52	19.53	19.52
Custom Hire	4.62	2.87	4.90	5.49	5.34	4.49
Land Rent	132.22	134.96	129.01	134.28	132.93	129.90
Other Direct Exp	13.94	12.72	11.79	18.55	12.64	13.99
Total Direct	310.70	306.83	311.96	314.23	315.45	305.04
Return over Direct	98.85	111.13	69.73	143.16	33.39	136.86
Overhead Costs						
Other Labor	12.57	15.55	10.43	12.19	13.62	11.08
Intermediate Interest	2.88	3.09	3.18	2.64	2.32	3.19
Depreciation	24.45	22.84	24.55	23.95	24.76	26.16
Other Overhead Exp	20.48	20.35	21.23	19.09	22.08	19.66
Total Ovhd Expenses	60.39	61.83	59.39	57.87	62.78	60.09
<u>Total Direct/Ovhd Expenses</u>	<u>371.09</u>	<u>368.66</u>	<u>371.35</u>	<u>372.10</u>	<u>378.22</u>	<u>365.12</u>
*** Net Return	38.46	49.30	10.34	85.30	-29.39	76.77

** - Value per Unit is a combination of actual Fall selling price and/or value on Dec 31st of that crop year.

*** - Net Return does **not** include direct government income or principal payment expenses or personal draw expenses

Spring Wheat on Cash Rented Land

Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Number of Fields	56	57	62	61	51	48
Acres	508.86	543.31	576.82	547.54	431.66	444.99
Yield per Acre	66.09	63.47	61.25	63.11	73.41	69.20
** Value per Unit	5.39	5.59	4.77	5.55	6.01	5.03
Product Value	357.45	355.02	292.08	350.24	441.53	348.36
Other Income	39.63	39.88	115.20	24.69	3.26	15.10
Gross Return	397.07	394.90	407.28	374.93	444.79	363.46
Direct Costs						
Seed	20.95	24.13	22.33	19.87	19.55	18.86
Fertilizer	81.66	80.48	89.66	80.23	77.42	80.49
Chemicals	30.19	34.75	32.82	29.05	29.24	25.07
Crop Insurance	13.79	14.25	14.81	12.23	13.74	13.94
Fuel & Oil	13.14	13.15	13.83	14.86	12.31	11.53
Repairs	24.48	27.59	26.69	23.14	22.95	22.04
Custom Hire	6.01	6.38	5.79	6.54	5.29	6.05
Land Rent	133.66	138.44	133.26	131.87	131.79	132.94
Other Direct Exp	14.75	13.94	15.76	15.74	12.89	15.40
Total Direct	338.62	353.10	354.95	333.53	325.19	326.31
Return over Direct	58.46	41.81	52.33	41.40	119.60	37.15
Overhead Costs						
Other Labor	13.88	15.47	12.55	12.53	15.46	13.41
Intermediate Interest	2.71	2.97	2.81	3.05	2.02	2.71
Depreciation	24.35	20.92	24.40	25.00	24.50	26.95
Other Overhead Exp	21.16	23.17	22.71	19.34	21.03	19.54
Total Ovhd Expenses	62.11	62.53	62.47	59.92	63.01	62.61
<u>Total Direct/Ovhd Expenses</u>	<u>400.72</u>	<u>415.63</u>	<u>417.42</u>	<u>393.45</u>	<u>388.20</u>	<u>388.92</u>
*** Net Return	-3.65	-20.72	-10.14	-18.52	56.59	-25.46

** - Value per Unit is a combination of actual Fall selling price and/or value on Dec 31st of that crop year.

*** - Net Return does **not** include direct government income or principal payment expenses or personal draw expenses

Sugarbeets on Cash Rented Land (excluding joint venture)

Moorhead Farm Business Management Program - Northland College

	<u>5-yr Average</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Number of Fields	24	27	31	24	20	17
Acres	255.67	276.46	272.91	258.36	259.34	211.26
Yield per Acre	27.86	25.49	19.57	29.66	31.47	33.10
** Value per Unit	36.42	37.76	30.87	37.60	39.78	36.08
Product Value	1,025.57	962.27	604.33	1,115.26	1,251.65	1,194.32
Other Income	67.97	38.45	274.31	15.63	6.82	4.64
Gross Return	1,093.54	1,000.72	878.65	1,130.89	1,258.47	1,198.97
Direct Costs						
Seed	224.27	225.78	225.18	216.81	226.50	227.09
Fertilizer	78.81	75.49	84.11	73.43	78.06	82.95
Chemicals	110.69	119.92	118.08	112.63	98.77	104.04
Crop Insurance	31.21	32.01	29.91	30.74	33.08	30.29
Fuel & Oil	49.39	47.55	53.74	55.81	46.03	43.83
Repairs	98.66	112.08	103.36	95.82	81.62	100.44
Direct Labor	35.81	33.84	20.93	46.51	36.83	40.92
Custom Hire	13.14	14.94	10.55	15.55	10.67	14.01
Land Rent	139.87	145.27	131.42	137.94	141.53	143.21
Other Direct Exp	57.62	59.52	90.25	58.55	40.08	39.72
Total Direct	840.27	870.34	867.53	843.79	793.17	826.51
Return over Direct	253.27	130.38	11.12	287.10	465.31	372.46
Overhead Costs						
Other Labor	77.30	82.31	66.64	69.43	85.73	82.37
Intermediate Interest	8.72	8.59	8.74	10.15	7.30	8.81
Depreciation	95.91	73.76	95.34	96.40	99.89	114.15
Other Overhead Exp	54.60	57.87	68.97	39.06	52.54	54.56
Total Ovhd Expenses	236.52	222.53	239.69	215.04	245.46	259.89
<u>Total Direct/Ovhd Expenses</u>	<u>1,076.79</u>	<u>1,092.87</u>	<u>1,107.22</u>	<u>1,058.83</u>	<u>1,038.63</u>	<u>1,086.40</u>
*** Net Return	16.75	-92.15	-228.58	72.06	219.84	112.57

** - Value per Unit is a combination of actual Fall selling price and/or value on Dec 31st of that crop year.

*** - Net Return does **not** include direct government income or principal payment expenses or personal draw expenses

MyFarm Financial Scorecard

Year: _____

Name: _____

	This Year	5-Year Ave		
Liquidity			Strong	Vulnerable
Current ratio			2.0	1.3
Working capital				
Working cap to gross revenue			30%	10%
Solvency (market)				
			Note: These solvency ratios include deferred liabilities	
Farm debt/asset ratio			30%	60%
Farm equity/asset ratio			70%	40%
Farm debt/equity ratio			0.43	1.50
Profitability (Cost)				
Rate of return on farm assets			8%	4%
Rate of return on farm equity			10%	3%
Operating profit margin			25%	15%
Net farm income				
EBITDA				
Repayment Capacity (Accrual)				
Capital debt repay capacity				
Capital debt repay margin				
Replacement margin				
Term-debt coverage ratio			1.75	1.25
Replacement margin ratio			1.50	1.10
Financial Efficiency				
Asset-turnover rate (market)			45%	30%
Operating-expense ratio			60%	80%
Depreciation-expense ratio			5%	10%
Interest-expense ratio			5%	10%
Net farm income ratio			20%	10%