

# Executive Summary Edition

## 2016

## Farm

## Analysis

## Report of

## Moorhead

This is the 41st edition of this report published by the Northland College-Moorhead MN. Farm Business Management Department. The original numbers for this report came from records kept by each farm family enrolled in the farm management education program provided by Northland Community and Technical College, Thief River Falls, MN.

*In 2016, 68 farms (with an equivalent of 68 full-time operators), located mainly in western Clay and Norman counties, Minnesota, were included in the averages. The average farmer was 47.7 years old with 24.6 years of farming experience. Farms averaged 1836.1 acres per operator with 464 acres of that owned. Soybeans generated the largest gross dollar amount per farm (\$312,155). Sugarbeets (\$228,435) stayed in 2nd ahead of Corn (\$150,321). Wheat followed closely at (\$140,837). The largest single expense was land rent (\$185,722) per farm, down 6.3% from last year. Seed expense stayed in 2nd at (\$123,6529). Fertilizer (\$98,357), Chemicals (\$68,178) and Repairs (\$64,977) were the next three expenses.*

*Net Farm Income (\$158,418) was 7.02% lower than the five year average, but 49.7% higher than 2015. Much of the profit was due to excellent yields on the 2016 crops along with reduction in expense items. On average, producers generated (\$79,207) above what their financial commitments (accrual farm expenses, family living draws and scheduled principal payments) were for 2016.*

Information about our Farm Business Management program and other financial reports can be found at our website: **[www.NorthlandFBM-Moorhead.com](http://www.NorthlandFBM-Moorhead.com)**

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COMMUNITY & TECHNICAL COLLEGE

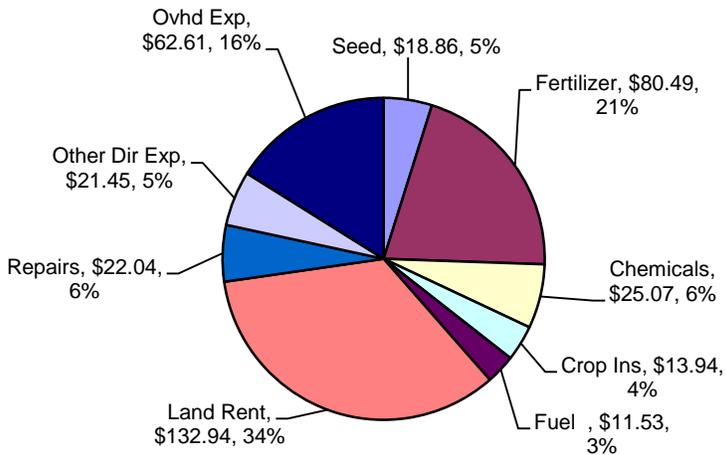
## Statement of Cash Flows - Total of 68 Farms in Analysis Report

Soybeans	\$21,226,540	
Sugarbeets	\$15,533,580	
Corn	\$10,221,828	
Wheat	\$9,576,916	
Other Crops	\$2,890,748	
Government Pymts	\$1,652,876	
Remaining Farm Income	\$7,674,820	
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Total Cash Farm Income		\$68,777,308
Fertilizer	\$6,688,276	
Land Rent	\$12,629,096	
Seed	\$8,408,336	
Chemicals	\$4,636,104	
Repairs	\$4,418,436	
Fuel	\$2,101,880	
Crop Insurance	\$2,271,880	
Remaining Farm Expenses	\$14,802,036	
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Total Farm Expense		(\$55,956,044)
Net Cash from Hedging		\$203,184
Net Nonfarm Income		\$2,050,336
Apparent Family Living Income & SS Tax Paid		(\$5,966,320) (\$1,206,048)
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<b>Cash From Operating Activities</b>		<b>\$7,902,416</b>
Sale of Machinery	\$588,404	
Sale of Farm Land		
Sale of Other Farm Assets	\$1,122,680	
Sale of Nonfarm Assets	\$375,700	
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Total Sales of Assets		\$2,086,784
Purchase of Machinery	(\$4,260,812)	
Purchase of Farm Land	(\$2,559,044)	
Pur of Farm Bldgs/Tiling	(\$798,864)	
Pur of Other Farm Assets	(\$1,074,876)	
Pur of Nonfarm Assets	(\$1,029,588)	
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Total Purchase of Assets		(\$9,723,184)
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<b>Cash From Investing Activities</b>		<b>(\$7,636,400)</b>
Money Borrowed		\$34,288,116
Principal Payments		(\$37,607,400)
Gifts & Inheritances		\$158,236
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<b>Cash From Financing Activities</b>		<b>(\$3,161,048)</b>
Net change in cash balance:		(\$2,895,032)
<b>Inventory Change:</b>	<b>\$3,159,756</b>	

## Farm Financial Scorecard

	This Year		5-Year Ave		Strong		Vulnerable	
<b>Liquidity</b>								
Current ratio	1.82	1.89	1.7	1.1				
Working capital	\$353,663	\$413,964						
Working cap to gross revenue	33.3%	36.7%	25%	10%				
<b>Solvency (market)</b>	Note: These solvency ratios include deferred liabilities							
Farm debt/asset ratio	42%	37%	30%	60%				
Farm equity/asset ratio	58%	63%	70%	40%				
Farm debt/equity ratio	0.72	0.62	0.43	1.50				
<b>Profitability (Cost)</b>								
Rate of return on farm assets	4.6%	5.0%	8%	4%				
Rate of return on farm equity	5.1%	5.7%	10%	3%				
Operating profit margin	11.6%	9.7%	25%	15%				
Net farm income	\$158,418	\$170,375						
EBITDA	\$281,090	\$287,666						
<b>Repayment Capacity (Accrual)</b>								
Capital debt repay capacity	\$178,718	\$165,469						
Capital debt repay margin	\$79,207	\$52,051						
Replacement margin	\$23,193	\$10,430						
Term-debt coverage ratio	1.80	1.54	1.50	1.20				
Replacement margin ratio	1.17	1.14	1.40	1.10				
<b>Financial Efficiency</b>								
Asset-turnover rate (market)	40.0%	40.8%	45%	30%				
Operating-expense ratio	73.5%	75.9%	60%	80%				
Depreciation-expense ratio	7.2%	7.2%	5%	15%				
Interest-expense ratio	4.3%	4.0%	5%	10%				
Net farm income ratio	14.9%	13.2%	20%	10%				

### Spring Wheat - Cash Rented (Ave of all Farms)



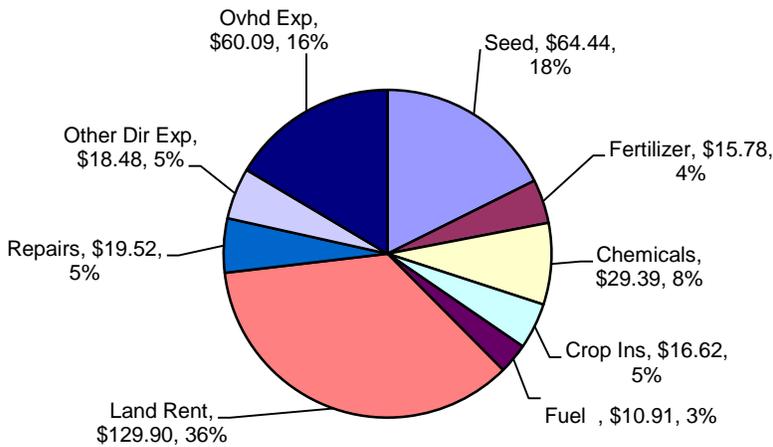
My Farm		
	\$/A.	%
Seed		
Fertilizer		
Chemicals		
Crop Ins		
Fuel		
Repairs		
Land Rent		
Other Dir		
Ovhd Exp		

	2012	2013	2014	2015	2016
Yield	63.79	66.31	70.73	75.50	69.20
**Total Costs/Acre	\$401.81	\$425.55	\$438.94	\$409.59	\$388.92
Total Costs/Bu	\$6.30	\$6.42	\$6.21	\$5.43	\$5.62

My Farm		
Yield		
Costs/A.		
Costs/bu.		

\*\*-does not include principal pymts or personal draw

### Soybeans - Cash Rented (Ave of all Farms)



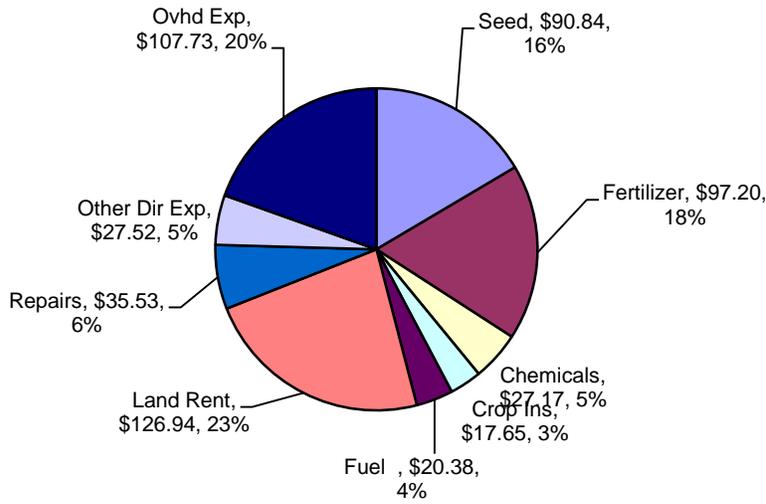
My Farm		
	\$/A.	%
Seed		
Fertilizer		
Chemicals		
Crop Ins		
Fuel		
Repairs		
Land Rent		
Other Dir		
Ovhd Exp		

	2012	2013	2014	2015	2016
Yield	39.28	35.34	40.27	44.61	46.00
**Total Costs/Acre	\$350.68	\$370.90	\$393.39	\$368.74	\$365.12
Total Costs/Bu	\$8.93	\$10.50	\$9.77	\$8.27	\$7.94

My Farm		
Yield		
Costs/A.		
Costs/Bu.		

\*\*-does not include principal pymts or personal draw

### Corn - Cash Rented (Ave of all Farms)



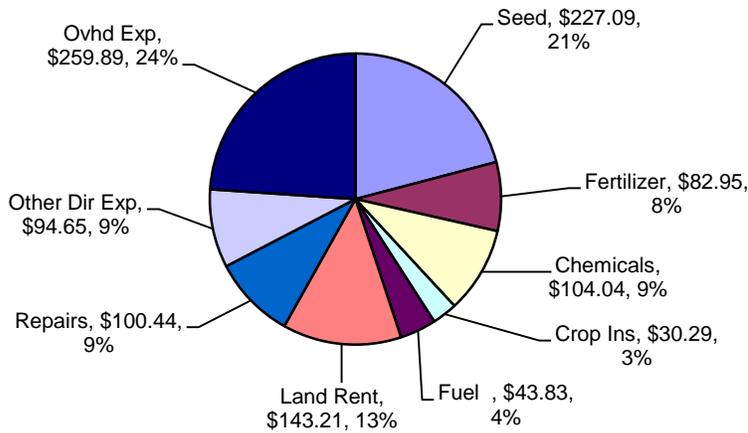
My Farm		
	\$/A.	%
Seed		
Fertilizer		
Chemicals		
Crop Ins		
Fuel		
Repairs		
Land Rent		
Other Dir		
Ovhd Exp		

	2012	2013	2014	2015	2016
Yield	134.29	129.13	139.78	158.54	182.04
**Total Costs/Acre	\$592.46	\$626.80	\$644.96	\$596.65	\$558.31
Total Costs/Bu	\$4.41	\$4.85	\$4.61	\$3.76	\$3.07

My Farm		
Yield		
Costs/A.		
Costs/Bu.		

\*\*-does not include principal pymts or personal draw

### Sugarbeets-Cash Rented excluding Joint Venture (Ave of all Farms)



My Farm		
	\$/A.	%
Seed		
Fertilizer		
Chemicals		
Crop Ins		
Fuel		
Repairs		
Land Rent		
Other Dir		
Ovhd Exp		

	2012	2013	2014	2015	2016
Yield	26.97	25.45	22.56	28.69	33.10
**Total Costs/Acre	\$1,063.64	\$1,087.71	\$1,073.95	\$1,066.98	\$1,086.40
Total Costs/Ton	\$39.44	\$42.74	\$47.60	\$37.19	\$32.82

My Farm		
Yield		
Costs/A.		
Costs/T.		

\*\*-does not include principal pymts or personal draw