

# Executive Summary Edition

## 2017

## Farm

## Analysis

## Report of

## Moorhead

This is the 42nd 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 2017, 74 farms (with an equivalent of 81 full-time operators), located mainly in western Clay and Norman counties, Minnesota, were included in the averages. The average farmer was 47.8 years old with 24.9 years of farming experience. Farms averaged 1857.7 acres per farm with 425.1 acres of that owned. Soybeans generated the largest gross dollar amount per farm (\$264,349). Sugarbeets (\$250,496) stayed in 2nd ahead of Wheat (\$204,847). Corn followed closely at (\$191,660). The largest single expense was land rent (\$195,301) per farm, up 5.2% from last year. Seed expense stayed in 2nd at (\$143,491). Fertilizer (\$102,696), Chemicals (\$92,508) and Hired Labor (\$75,993) were the next three expenses.*

*Net Farm Income (\$108,593) was 28.0% higher than the five year average, but 31.4% lower than 2016. Much of the profit was due to some better wheat yields and prices along with sugarbeet prices improving from 2016. On average, producers generated (\$28,879) above what their financial commitments (accrual farm expenses, family living draws and scheduled principal payments) were for 2017.*

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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**NORTHLAND**  
COMMUNITY & TECHNICAL COLLEGE

## Statement of Cash Flows - Total of 74 Farms in Analysis Report

|                       |              |
|-----------------------|--------------|
| Soybeans              | \$19,561,826 |
| Sugarbeets            | \$18,436,704 |
| Corn                  | \$14,182,840 |
| Wheat                 | \$15,158,678 |
| Other Crops           | \$4,599,988  |
| Government Pymts      | \$1,574,572  |
| Remaining Farm Income | \$8,422,014  |

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Total Cash Farm Income \$81,936,622

|                         |              |
|-------------------------|--------------|
| Fertilizer              | \$7,599,504  |
| Land Rent               | \$14,452,274 |
| Seed                    | \$10,618,334 |
| Chemicals               | \$6,845,592  |
| Repairs                 | \$5,479,256  |
| Fuel                    | \$2,767,600  |
| Crop Insurance          | \$2,757,388  |
| Remaining Farm Expenses | \$18,914,548 |

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Total Farm Expense (\$69,434,496)

Net Cash from Hedging \$66,526

Net Nonfarm Income \$2,019,460

Apparent Family Living (\$6,314,420)  
Income & SS Tax Paid (\$1,545,046)

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**Cash From Operating Activities \$6,728,646**

|                           |           |
|---------------------------|-----------|
| Sale of Machinery         | \$567,062 |
| Sale of Farm Land         | \$642,246 |
| Sale of Other Farm Assets | \$150,294 |
| Sale of Nonfarm Assets    | \$670,366 |

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Total Sales of Assets \$2,029,968

|                          |               |
|--------------------------|---------------|
| Purchase of Machinery    | (\$6,816,954) |
| Purchase of Farm Land    | (\$3,734,484) |
| Pur of Farm Bldgs/Tiling | (\$961,408)   |
| Pur of Other Farm Assets | (\$1,989,120) |
| Pur of Nonfarm Assets    | (\$1,902,836) |

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Total Purchase of Assets (\$15,404,802)

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**Cash From Investing Activities (\$13,374,834)**

|                      |                |
|----------------------|----------------|
| Money Borrowed       | \$41,527,172   |
| Principal Payments   | (\$36,079,070) |
| Gifts & Inheritances | \$264,994      |

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**Cash From Financing Activities \$5,713,096**

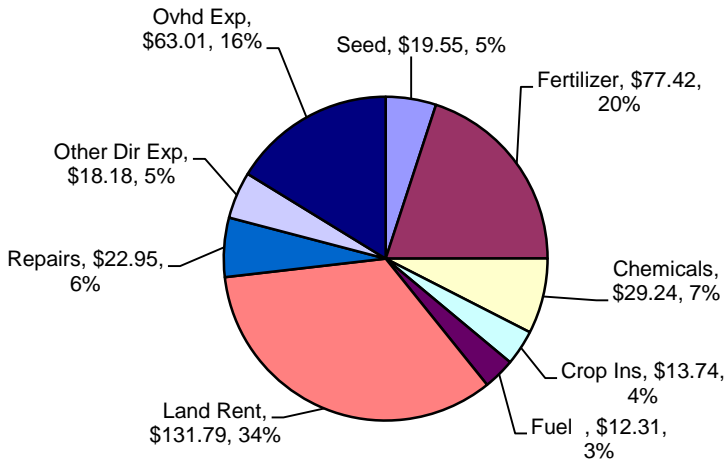
Net change in cash balance: (\$933,092)

**Inventory Change: \$1,125,096**

## Farm Financial Scorecard

|                                     | This Year  | 5-Year Ave | Strong | Vulnerable |  |  |
|-------------------------------------|--|------------|--------|------------|--|--|
| <b>Liquidity</b>                    |  |            |        |            |  |  |
| Current ratio                       | 1.51   | 1.73       | 1.7    | 1.1        |  |  |
| Working capital                     | \$272,718  | \$344,256  |        |            |  |  |
| Working cap to gross revenue        | 24.1%  | 33.2%      | 25%    | 10%        |  |  |
| <b>Solvency (market)</b>            | Note: These solvency ratios include deferred liabilities |            |        |            |  |  |
| Farm debt/asset ratio               | 41%  | 38%        | 30%    | 60%        |  |  |
| Farm equity/asset ratio             | 59%  | 62%        | 70%    | 40%        |  |  |
| Farm debt/equity ratio              | 0.69   | 0.63       | 0.43   | 1.50       |  |  |
| <b>Profitability (Cost)</b>         |  |            |        |            |  |  |
| Rate of return on farm assets       | 2.6%   | 1.8%       | 8%     | 4%         |  |  |
| Rate of return on farm equity       | 1.5%   | 0.5%       | 10%    | 3%         |  |  |
| Operating profit margin             | 6.4%   | 4.5%       | 25%    | 15%        |  |  |
| Net farm income                     | \$108,593  | \$84,810   |        |            |  |  |
| EBITDA                              | \$233,153  | \$207,104  |        |            |  |  |
| <b>Repayment Capacity (Accrual)</b> |  |            |        |            |  |  |
| Capital debt repay capacity         | \$136,321  | \$93,097   |        |            |  |  |
| Capital debt repay margin           | \$28,879   | -\$20,254  |        |            |  |  |
| Replacement margin                  | -\$25,379  | -\$66,651  |        |            |  |  |
| Term-debt coverage ratio            | 1.27   | 0.87       | 1.50   | 1.20       |  |  |
| Replacement margin ratio            | 0.84   | 0.58       | 1.40   | 1.10       |  |  |
| <b>Financial Efficiency</b>         |  |            |        |            |  |  |
| Asset-turnover rate (market)        | 40.2%  | 37.5%      | 45%    | 30%        |  |  |
| Operating-expense ratio             | 79.4%  | 80.3%      | 60%    | 80%        |  |  |
| Depreciation-expense ratio          | 6.8%   | 7.6%       | 5%     | 15%        |  |  |
| Interest-expense ratio              | 4.2%   | 4.3%       | 5%     | 10%        |  |  |
| Net farm income ratio               | 9.6%   | 7.9%       | 20%    | 10%        |  |  |

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



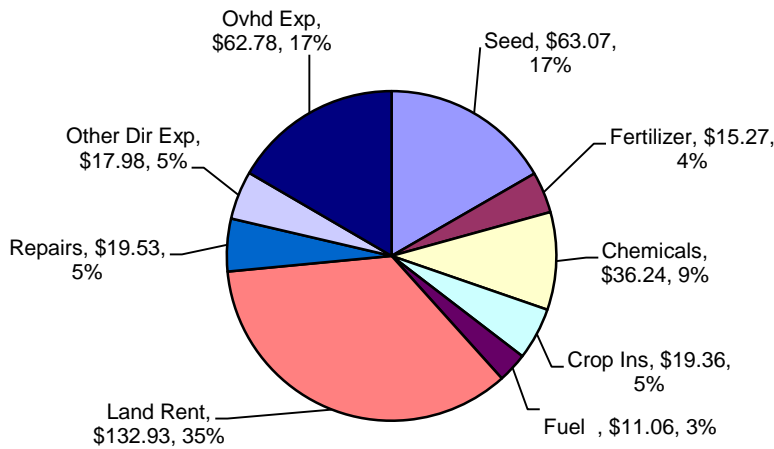
| My Farm    |       |   |
|------------|-------|---|
|            | \$/A. | % |
| Seed       |       |   |
| Fertilizer |       |   |
| Chemicals  |       |   |
| Crop Ins   |       |   |
| Fuel       |       |   |
| Repairs    |       |   |
| Land Rent  |       |   |
| Other Dir  |       |   |
| Ovhd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

|                    | 2013     | 2014     | 2015     | 2016     | 2017     |
|--------------------|----------|----------|----------|----------|----------|
| Yield              | 66.31    | 70.73    | 75.50    | 69.20    | 73.41    |
| **Total Costs/Acre | \$425.55 | \$438.94 | \$409.59 | \$388.92 | \$388.20 |
| Total Costs/Bu     | \$6.42   | \$6.21   | \$5.43   | \$5.62   | \$5.29   |

| My Farm   |  |  |
|-----------|--|--|
| Yield     |  |  |
| Costs/A.  |  |  |
| Costs/bu. |  |  |

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

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



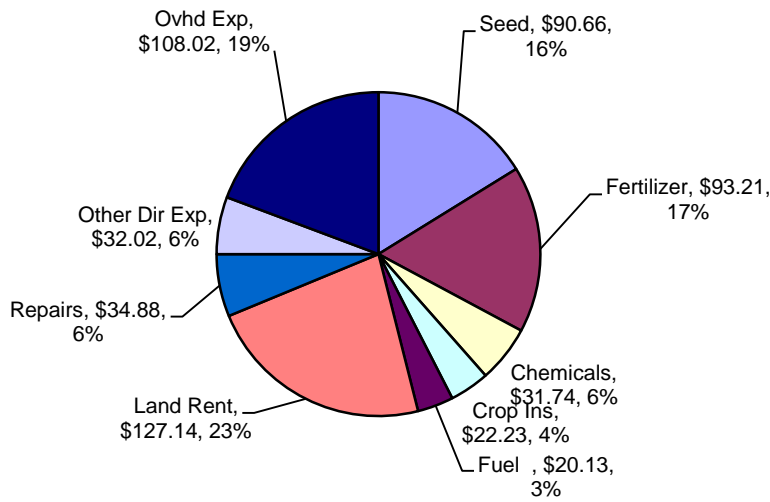
| My Farm    |       |   |
|------------|-------|---|
|            | \$/A. | % |
| Seed       |       |   |
| Fertilizer |       |   |
| Chemicals  |       |   |
| Crop Ins   |       |   |
| Fuel       |       |   |
| Repairs    |       |   |
| Land Rent  |       |   |
| Other Dir  |       |   |
| Ovhd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

|                    | 2013     | 2014     | 2015     | 2016     | 2017     |
|--------------------|----------|----------|----------|----------|----------|
| Yield              | 35.34    | 40.27    | 44.61    | 46.00    | 36.59    |
| **Total Costs/Acre | \$370.90 | \$393.39 | \$368.74 | \$365.12 | \$378.22 |
| Total Costs/Bu     | \$10.50  | \$9.77   | \$8.27   | \$7.94   | \$10.34  |

| My Farm   |  |  |
|-----------|--|--|
| Yield     |  |  |
| Costs/A.  |  |  |
| Costs/Bu. |  |  |

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

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



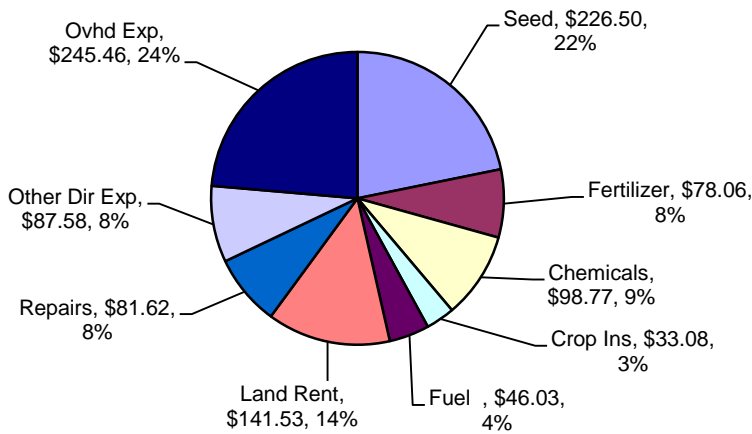
| My Farm    |       |   |
|------------|-------|---|
|            | \$/A. | % |
| Seed       |       |   |
| Fertilizer |       |   |
| Chemicals  |       |   |
| Crop Ins   |       |   |
| Fuel       |       |   |
| Repairs    |       |   |
| Land Rent  |       |   |
| Other Dir  |       |   |
| Ovhd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

|                    | 2013     | 2014     | 2015     | 2016     | 2017     |
|--------------------|----------|----------|----------|----------|----------|
| Yield              | 129.13   | 139.78   | 158.54   | 182.04   | 168.11   |
| **Total Costs/Acre | \$626.80 | \$644.96 | \$596.65 | \$558.31 | \$560.04 |
| Total Costs/Bu     | \$4.85   | \$4.61   | \$3.76   | \$3.07   | \$3.33   |

| 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   |       |   |

|                    | 2013       | 2014       | 2015       | 2016       | 2017       |
|--------------------|------------|------------|------------|------------|------------|
| Yield              | 25.45      | 22.56      | 28.69      | 33.10      | 31.47      |
| **Total Costs/Acre | \$1,087.71 | \$1,073.95 | \$1,066.98 | \$1,086.40 | \$1,038.63 |
| Total Costs/Ton    | \$42.74    | \$47.60    | \$37.19    | \$32.82    | \$33.00    |

| My Farm  |  |  |
|----------|--|--|
| Yield    |  |  |
| Costs/A. |  |  |
| Costs/T. |  |  |

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