

June 28th, 2023

E.B. 2023-08



Progress of the Dairy Farm Report

Selected Financial and Production Factors

Average of All Farms

Less Than 500 Cows

500 to 999 Cows

1,000 to 1,499 Cows

1,500 Cows and Greater

Dairy Farm Business Summary

New York State, 2022

133 Farms

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**Agricultural Finance and Management at Cornell
Cornell Dairy Farm Business Summary & Analysis Program
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Progress of the Dairy Farm Report
Selected Financial and Production Factors
Dairy Farm Business Summary
133 New York State Dairy Farms, 2022
June 2023

Jason Karszes and Lauren Augello¹

The objective of the Dairy Farm Business Summary & Analysis Program (DFBS) is to help farm managers improve the financial management of their dairy farm through appropriate use of historical farm data and the application of modern farm business analysis techniques. This information can also be used to track changes within the business, establish goals that will enable the business to better meet its objectives, compare the performance of the farm to other dairy producers, and establish a basis for financial projection and planned changes within the business. This is the final Progress of the Dairy Farm Report for the 2022 business year and represents the 67th year a summary of New York dairy financial and business performance has been published by Cornell.

Over 150 farms across New York participated in the DFBS for 2022. This report summarizes data for 133 conventional dairy farms that completed the summary for 2022 in which dairy is their main enterprise, with 85% or more of the farm revenue generated from milk sales, dairy cattle, and dairy calf sales. The Progress of the Dairy Farm Report provides averages of selected financial and production measures for 129 New York State Dairy Farms (pages 2-4) that participated in the program for both 2021 and 2022 that had submitted records by June 28th, 2023. The business chart on page 5 reports the data summarizing all 133 farms for 2022. The report is also broken down into four herd size categories to provide additional comparison reports by herd size.

| | |
|--|-------------|
| 1. Farms with Less Than 500 Cows | Pages 6-9 |
| 2. Farms with 500 Cows to 999 Cows | Pages 10-13 |
| 3. Farms with 1,000 Cows to 1,499 Cows | Pages 14-17 |
| 4. Farms with 1,500 and Greater | Pages 18-21 |

To utilize these reports, begin by comparing how your farm changed from 2021 to 2022 to the change in the average of all farms report. Then, determine which herd size group most closely represents your farm and compare your financial and production parameters and change to the averages of that group. This benchmarking tool can be helpful for farm owners and managers to find areas of opportunity and strengths within their businesses. If you are a DFBS participant, you can work with your extension educator to look at these comparisons for all farms and your farm business. For definitions of the different terms in the following tables, please refer to E.B. 2023-07, "Glossary of Terms Associated with the DFBS". This publication and other information for farms interested in participating can be found at: <https://cals.cornell.edu/pro-dairy/our-expertise/business/dfbs>

These benchmarks and comparisons are provided for comparison purposes only and represent the performance of those farms participating in the Dairy Farm Business Summary and Analysis Program in New York State. These numbers do not represent the average for all dairy farms across New York and are from farms that are generally considered above average dairy farms in New York. No analysis or interpretation of these benchmarks and ratios is provided.

The authors would like to thank the farms that continue to volunteer to participate in this project, the extension educators that work with farms utilizing the DFBS as part of their educational programs, and the financial consultants that work with farms participating in the DFBS.

¹ PRO-DAIRY Program, Department of Animal Science, Cornell University, Ithaca, NY



PROGRESS OF THE FARM BUSINESS

Same 130 New York Dairy Farms, Average of All Farms, 2021 & 2022, DFBS

| SELECTED FACTORS | Average of 130 Farms ¹ | | Percent Change |
|--|-----------------------------------|--------------|----------------|
| | 2021 | 2022 | |
| Size of Business | | | |
| Average number of cows | 1,211 | 1,242 | 3% |
| Percent heifers to cows, average for year | 75% | 73% | -2% |
| Milk sold, pounds | 32,909,396 | 33,836,557 | 3% |
| Worker equivalent | 22.7 | 23.2 | 2% |
| Total tillable acres | 2,111 | 2,153 | 2% |
| Rates of Production | | | |
| Milk sold per cow, pounds | 27,176 | 27,233 | 0.2% |
| Hay DM per acre, tons | 3.7 | 3.3 | -11% |
| Corn silage per acre, tons | 19.1 | 18.4 | -4% |
| Labor Efficiency | | | |
| Cows per worker | 53.4 | 53.7 | 0.4% |
| Milk sold per worker, pounds | 1,452,312 | 1,461,622 | 0.6% |
| Cost Control and Milk Price | | | |
| Grain & concentrate per cwt. milk | \$6.69 | \$7.86 | 17% |
| Net milk income over purchased grain & conc. per cow | \$2,937 | \$4,548 | 55% |
| Dairy feed & crop expense per cwt. milk | \$8.28 | \$9.85 | 19% |
| Labor and machinery costs per cow | \$1,822 | \$2,101 | 15% |
| Hired labor costs per cwt. milk | \$3.07 | \$3.25 | 6% |
| Hired labor costs per worker equivalent | \$50,782 | \$54,046 | 6.4% |
| Total farm operating costs per cwt. | \$18.97 | \$22.41 | 18% |
| Operating cost of producing milk per cwt. | \$16.23 | \$19.79 | 22% |
| Purchased input cost of producing milk per cwt. | \$17.71 | \$21.37 | 21% |
| Total cost of producing milk per cwt. | \$19.92 | \$23.75 | 19% |
| Net milk price per cwt. | \$18.49 | \$25.42 | 37% |
| Government receipts per cwt. | \$0.14 | \$0.15 | 10% |
| Capital Efficiency (average for year) | | | |
| Farm capital per cow | \$12,162 | \$13,193 | 8% |
| Machinery and equipment per cow | \$1,823 | \$2,028 | 11% |
| Asset turnover ratio | 0.53 | 0.65 | 23% |
| Profitability | | | |
| Net farm income without appreciation | \$698,487 | \$1,942,048 | 178% |
| Net farm income without appreciation per cow | \$577 | \$1,563 | 171% |
| Net farm income with appreciation | \$1,089,995 | \$2,493,557 | 129% |
| Net farm income with appreciation per cow | \$900 | \$2,007 | 123% |
| Labor & management income per operator/manager | \$80,407 | \$566,186 | 604% |
| Rate return on equity capital with appreciation | 8.6% | 19.9% | 131% |
| Rate return on equity capital without appreciation | 4.7% | 15.0% | 217% |
| Rate return on all capital with appreciation | 6.9% | 14.9% | 116% |
| Rate return on all capital without appreciation | 4.2% | 11.6% | 173% |
| Financial Summary (based on market value, excluding deferred taxes) | | | |
| Farm net worth, end year | \$10,377,901 | \$12,314,644 | 19% |
| Debt to asset ratio | 0.32 | 0.29 | -9% |
| Farm debt per cow | \$3,950 | \$4,052 | 3% |
| Debt coverage ratio | 1.4 | 3.16 | 126% |

¹Farm participating both years

DAIRY FARM BUSINESS SUMMARY SELECTED FACTORS

Same 130 New York Dairy Farms, Average of All Farms, 2021 & 2022, DFBS

| SELECTED FACTORS | Average of 130 Farms ¹ | | Percent Change |
|--|-----------------------------------|-------------|----------------|
| | 2021 | 2022 | |
| Income Generation | | | |
| % Butterfat | 4.01% | 4.06% | 1% |
| % Protein | 3.18% | 3.19% | 0% |
| Lbs. of butterfat and protein per cow | 1,955 | 1,975 | 1% |
| Component value per cwt. | \$18.62 | \$24.36 | 31% |
| Net marketing margin per cwt. gross milk price | -\$0.73 | \$1.08 | 248% |
| | \$19.83 | \$27.11 | 37% |
| Balance Sheet Analysis | | | |
| Working capital as % of operating expenses | 28% | 33% | 18% |
| Long term debt to asset ratio | 0.31 | 0.31 | 0% |
| Intermediate/current debt to asset ratio | 0.33 | 0.29 | -12% |
| Debt to asset ratio, total | 0.32 | 0.29 | -9% |
| Debt Analysis | | | |
| Accounts payable as percent of total debt | 3% | 3% | 0% |
| Long-term debt as percent of total debt | 43% | 43% | 0% |
| Current & intermediate debt as percent of total debt | 57% | 57% | 0% |
| Cost of term debt (weighted average) | 3.2% | 5.0% | 56% |
| Net Worth Change | | | |
| Retained earnings | \$312,500 | \$1,486,244 | 376% |
| Contributed capital | \$85,701 | \$64,461 | -25% |
| Valuation equity | \$220,802 | \$320,247 | 45% |
| Cash Flow | | | |
| Net provided by operating activities, per cow | \$1,178 | \$2,498 | 112% |
| Net provided by investing activities, per cow | -\$2,016 | -\$2,793 | -39% |
| Net provided by financing activities, per cow | \$896 | \$278 | -69% |
| Net provided by reserves, per cow | -\$52 | \$11 | 122% |
| Repayment Analysis⁶ | | | |
| Planned debt payments per cow | \$532 | \$564 | 6% |
| Planned debt payments per cwt. | \$1.96 | \$2.07 | 6% |
| Percent of total receipts | 9% | 7% | -18% |
| Percent of milk receipts | 10% | 8% | -20% |
| Cash flow coverage ratio | 1.01 | 1.97 | 94% |
| Debt coverage ratio | 1.40 | 3.16 | 125% |
| Crop Program Analysis | | | |
| Crop input costs per acre | \$165 | \$226 | 37% |
| Total tillable acres per cow | 1.78 | 1.77 | -1% |
| Total forages acres per cow | 1.55 | 1.56 | 1% |
| Harvested dry matter per cow, tons | 7.92 | 7.50 | -5% |
| Percent tillable land owned | 52% | 53% | 1% |
| Capital and Financial Efficiency | | | |
| Farm capital per cow | \$12,162 | \$13,193 | 8% |
| Real estate per cow | \$5,403 | \$5,629 | 4% |
| Machinery and equipment per cow | \$1,823 | \$2,028 | 11% |
| Asset turnover | 0.53 | 0.65 | 23% |
| Operating expense ratio | 0.82 | 0.74 | -10% |
| Interest expense ratio | 0.02 | 0.02 | 0% |
| Depreciation expense ratio | 0.07 | 0.05 | -29% |

¹ Farm participating both years



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT
Same 130 New York Dairy Farms, Average of All Farms, 2021 & 2022, DFBS

| Item | 2021 | | 2022 | | % Change Per Cwt. |
|-----------------------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| | Per Cow ¹ | Per Cwt. ¹ | Per Cow ¹ | Per Cwt. ¹ | |
| Average number of cows | 1,211 | | 1,242 | | 3% |
| Cwt. of milk sold | | 329,094 | | 338,366 | 3% |
| ACCRUAL OPERATING RECEIPTS | | | | | |
| Milk | \$5,390 | \$19.83 | \$7,384 | \$27.11 | 37% |
| Dairy cattle | \$276 | \$1.01 | \$347 | \$1.28 | 27% |
| Dairy calves | \$65 | \$0.24 | \$100 | \$0.37 | 54% |
| Other livestock | \$25 | \$0.09 | \$23 | \$0.08 | -11% |
| Crops | \$245 | \$0.90 | \$148 | \$0.54 | -40% |
| Miscellaneous receipts | <u>\$154</u> | <u>\$0.57</u> | <u>\$143</u> | <u>\$0.52</u> | -9% |
| Total Operating Receipts | \$6,155 | \$22.65 | \$8,145 | \$29.91 | 32% |
| ACCRUAL OPERATING EXPENSES | | | | | |
| Hired labor | \$834 | \$3.07 | \$886 | \$3.25 | 6% |
| Dairy grain & concentrate | \$1,818 | \$6.69 | \$2,140 | \$7.86 | 17% |
| Dairy roughage | \$132 | \$0.49 | \$138 | \$0.51 | 4% |
| Nondairy feed | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Professional nutritional services | \$1 | \$0.00 | \$1 | \$0.00 | NA |
| Machine hire, rent & lease | \$166 | \$0.61 | \$198 | \$0.73 | 20% |
| Machine repair & vehicle expense | \$276 | \$1.02 | \$328 | \$1.20 | 18% |
| Fuel, oil & grease | \$142 | \$0.52 | \$251 | \$0.92 | 77% |
| Replacement livestock | \$35 | \$0.13 | \$63 | \$0.23 | 77% |
| Breeding | \$55 | \$0.20 | \$64 | \$0.23 | 15% |
| Veterinary & medicine | \$151 | \$0.56 | \$159 | \$0.58 | 4% |
| Milk marketing | \$364 | \$1.34 | \$460 | \$1.69 | 26% |
| Bedding | \$95 | \$0.35 | \$107 | \$0.39 | 11% |
| Milking supplies | \$93 | \$0.34 | \$104 | \$0.38 | 12% |
| Cattle lease | \$2 | \$0.01 | \$5 | \$0.02 | 100% |
| Custom boarding | \$90 | \$0.33 | \$92 | \$0.34 | 3% |
| BST expense | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Livestock professional fees | \$20 | \$0.07 | \$19 | \$0.07 | 0% |
| Other livestock expense | \$28 | \$0.10 | \$38 | \$0.14 | 40% |
| Fertilizer & lime | \$124 | \$0.46 | \$201 | \$0.74 | 61% |
| Seeds & plants | \$110 | \$0.40 | \$121 | \$0.44 | 10% |
| Spray & other crop expense | \$60 | \$0.22 | \$77 | \$0.28 | 27% |
| Crop professional fees | \$7 | \$0.02 | \$7 | \$0.03 | 50% |
| Land, building & fence repair | \$78 | \$0.29 | \$105 | \$0.39 | 34% |
| Taxes | \$66 | \$0.24 | \$67 | \$0.24 | 0% |
| Real estate rent & lease | \$89 | \$0.33 | \$81 | \$0.30 | -9% |
| Insurance | \$47 | \$0.17 | \$59 | \$0.22 | 29% |
| Utilities | \$99 | \$0.37 | \$124 | \$0.45 | 22% |
| Interest paid | \$122 | \$0.45 | \$154 | \$0.56 | 24% |
| Other professional fees | \$24 | \$0.09 | \$29 | \$0.11 | 22% |
| Miscellaneous | <u>\$27</u> | <u>\$0.10</u> | <u>\$28</u> | <u>\$0.10</u> | 0% |
| Total Operating Expenses | \$5,155 | \$18.97 | \$6,103 | \$22.41 | 18% |
| Expansion livestock | \$22 | \$0.08 | \$48 | \$0.18 | 125% |
| Extraordinary expenses | \$2 | \$0.01 | \$1 | \$0.00 | -100% |
| Machinery depreciation | \$212 | \$0.78 | \$235 | \$0.86 | 10% |
| Real estate depreciation | <u>\$188</u> | <u>\$0.69</u> | <u>\$195</u> | <u>\$0.72</u> | 4% |
| Total Expenses | \$5,579 | \$20.53 | \$6,582 | \$24.17 | 18% |
| Net Farm Income w/o Appreciation | \$577 | \$2.12 | \$1,563 | \$5.74 | 171% |

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool that can assist in analyzing your business. The five numbers in each column represent the average of each quintile of farms included in the DFBS. You can compare your farm's data to others in the DFBS by drawing a line through or near the number in each column which most closely represents your current level of performance. Each column is sorted independently. Use this information to identify areas of opportunity in your business.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

133 New York Dairy Farms, Average of All Farms, 2022, DFBS

| Size of Business | | | Rates of Production | | | Labor Efficiency | |
|--------------------|-------------|---------------------|-----------------------------|--------------------------|------------------------------|------------------|--------------------------------|
| Worker Equivalents | No. of Cows | Pounds of Milk Sold | Pounds of Milk Sold Per Cow | Tons of Hay Crop DM/Acre | Tons of Corn Silage Per Acre | Cows Per Worker | Pounds of Milk Sold Per Worker |
| (14) ¹ | (12) | (12) | (12) | (11) | (11) | (14) | (14) |
| 53.5 | 2,897 | 80,167,768 | 29,941 | 4.8 | 22.3 | 73.1 | 1,970,725 |
| 26.9 | 1,465 | 40,661,595 | 28,205 | 3.7 | 19.8 | 57.0 | 1,531,212 |
| 19.8 | 1,062 | 28,776,087 | 27,185 | 3.2 | 18.4 | 50.7 | 1,351,016 |
| 11.8 | 610 | 15,367,434 | 25,602 | 2.5 | 16.9 | 46.1 | 1,196,775 |
| 4.6 | 199 | 4,791,156 | 20,939 | 1.4 | 11.8 | 35.4 | 869,775 |

| Cost Control | | | | | | | |
|----------------------|-----------------------|-----------------------------|-------------------------|---------------------------------|------------------------------|------------------------------------|--------------------------------------|
| Grain Bought Per Cow | Grain Bought Per Cwt. | % Grain is of Milk Receipts | Machinery Costs Per Cow | Labor & Machinery Costs Per Cow | Feed & Crop Expenses Per Cow | Feed & Crop Expenses Per Cwt. Milk | Hired Labor Cost Per Wkr. Equivalent |
| (12) | (12) | (12) | (14) | (14) | (12) | (12) | (14) |
| \$1,435 | \$6.08 | 23 | \$806 | \$1,630 | \$1,910 | \$8.14 | \$35,416 |
| \$1,933 | \$7.32 | 27 | \$1,026 | \$1,976 | \$2,433 | \$9.31 | \$48,223 |
| \$2,077 | \$7.83 | 29 | \$1,151 | \$2,185 | \$2,665 | \$10.00 | \$51,067 |
| \$2,296 | \$8.44 | 31 | \$1,295 | \$2,414 | \$2,888 | \$10.58 | \$55,124 |
| \$2,634 | \$9.69 | 35 | \$1,574 | \$2,858 | \$3,270 | \$12.06 | \$64,631 |

| Value of Production | | | Profitability | | | | |
|-----------------------|------------------------|------------------------------------|-------------------------------------|---|---------------------------------|--|----------------------------------|
| Milk Receipts Per Cow | Milk Receipts Per Cwt. | Opr. Cost Milk Production Per Cwt. | Total Cost Milk Production Per Cwt. | % Rate of Return on All Capital w/o Apprec. | Net Farm Income Without Apprec. | Labor & Management Income Per Operator | Change in Net Worth With Apprec. |
| (12) | (12) | (12) | (12) | (4) | (4) | (4) | (8) |
| \$8,155 | \$29.16 | \$16.88 | \$21.44 | 17.3 | \$5,068,968 | \$1,758,601 | \$5,051,953 |
| \$7,647 | \$27.65 | \$18.55 | \$23.27 | 11.9 | \$2,559,978 | \$767,420 | \$2,498,540 |
| \$7,277 | \$27.05 | \$20.18 | \$24.71 | 9.6 | \$1,320,932 | \$382,942 | \$1,283,497 |
| \$6,899 | \$26.52 | \$21.52 | \$26.17 | 7.0 | \$645,612 | \$174,903 | \$628,962 |
| \$5,808 | \$25.69 | \$24.08 | \$30.59 | 1.6 | \$174,845 | \$27,188 | -\$28,319 |

| Financial Efficiency | | | | | | | |
|----------------------|------------------------------|----------------------|-------------------------|---------------------|-------------------------------|----------------|--------------------------------------|
| Investment Per Cow | Machinery Investment Per Cow | Asset Turnover Ratio | Operating Expense Ratio | Debt Coverage Ratio | Planned Debt Payments Per Cow | Percent Equity | Working Capital as % of Opr. Expense |
| (14) | (14) | (14) | (14) | (10) | (10) | (7) | (7) |
| \$9,180 | \$989 | 0.97 | 0.65 | 19.95 | \$64 | 95 | 74 |
| \$11,816 | \$1,760 | 0.71 | 0.70 | 3.57 | \$385 | 81 | 38 |
| \$13,294 | \$2,282 | 0.62 | 0.75 | 2.38 | \$590 | 70 | 28 |
| \$15,175 | \$2,786 | 0.55 | 0.79 | 1.75 | \$767 | 62 | 21 |
| \$19,528 | \$4,314 | 0.43 | 0.86 | -0.27 | \$1,020 | 44 | 8 |

¹Page number of the participant's DFBS where the factor is located.



PROGRESS OF THE FARM BUSINESS

Same 32 New York Dairy Farms, Less Than 500 Cows, 2021 & 2022, DFBS

| SELECTED FACTORS | Average of 32 Farms ¹ | | Percent Change |
|--|----------------------------------|-------------|----------------|
| | 2021 | 2022 | |
| Size of Business | | | |
| Average number of cows | 255 | 252 | -1% |
| Percent heifers to cows, average for year | 79% | 75% | -5% |
| Milk sold, pounds | 6,304,044 | 6,288,203 | -0.3% |
| Worker equivalent | 6.1 | 6.0 | -1% |
| Total tillable acres | 600 | 608 | 1% |
| Rates of Production | | | |
| Milk sold per cow, pounds | 24,731 | 24,953 | 0.9% |
| Hay DM per acre, tons | 3.2 | 2.5 | -22% |
| Corn silage per acre, tons | 18.6 | 18.3 | -2% |
| Labor Efficiency | | | |
| Cows per worker | 42.1 | 42.0 | -0.2% |
| Milk sold per worker, pounds | 1,040,271 | 1,048,034 | 0.7% |
| Cost Control and Milk Price | | | |
| Grain & concentrate per cwt. milk | \$6.78 | \$8.01 | 18% |
| Net milk income over purchased grain & conc. per cow | \$2,937 | \$4,108 | 40% |
| Dairy feed & crop expense per cwt. milk | \$8.56 | \$10.33 | 21% |
| Labor and machinery costs per cow | \$2,081 | \$2,374 | 14% |
| Hired labor costs per cwt. milk | \$2.70 | \$2.84 | 5% |
| Hired labor costs per worker equivalent | \$45,886 | \$49,372 | 7.6% |
| Total farm operating costs per cwt. | \$19.93 | \$23.53 | 18% |
| Operating cost of producing milk per cwt. | \$16.99 | \$20.87 | 23% |
| Purchased input cost of producing milk per cwt. | \$18.74 | \$22.79 | 22% |
| Total cost of producing milk per cwt. | \$22.49 | \$26.86 | 19% |
| Net milk price per cwt. | \$19.04 | \$24.95 | 31% |
| Government receipts per cwt. | \$0.28 | \$0.25 | -11% |
| Capital Efficiency (average for year) | | | |
| Farm capital per cow | \$12,486 | \$13,543 | 8% |
| Machinery and equipment per cow | \$2,624 | \$2,865 | 9% |
| Asset turnover ratio | 0.49 | 0.58 | 18% |
| Profitability | | | |
| Net farm income without appreciation | \$116,412 | \$262,230 | 125% |
| Net farm income without appreciation per cow | \$457 | \$1,041 | 128% |
| Net farm income with appreciation | \$193,482 | \$383,248 | 98% |
| Net farm income with appreciation per cow | \$759 | \$1,521 | 100% |
| Labor & management income per operator/manager | \$393 | \$67,662 | 17117% |
| Rate return on equity capital with appreciation | 3.1% | 10.3% | 232% |
| Rate return on equity capital without appreciation | -0.3% | 5.3% | 1633% |
| Rate return on all capital with appreciation | 3.3% | 8.5% | 158% |
| Rate return on all capital without appreciation | 0.9% | 5.0% | 467% |
| Financial Summary (based on market value, excluding deferred taxes) | | | |
| Farm net worth, end year | \$2,298,865 | \$2,514,645 | 9% |
| Debt to asset ratio | 0.3 | 0.30 | 0% |
| Farm debt per cow | \$3,868 | \$4,143 | 7% |
| Debt coverage ratio | 1.15 | 1.9 | 65% |

¹Farm participating both years

DAIRY FARM BUSINESS SUMMARY SELECTED FACTORS

Same 32 New York Dairy Farms, Less Than 500 Cows, 2021 & 2022, DFBS

| SELECTED FACTORS | Average of 32 Farms ¹ | | Percent Change |
|--|----------------------------------|-----------|----------------|
| | 2021 | 2022 | |
| <i>Income Generation</i> | | | |
| % Butterfat | 4.03% | 4.01% | -1% |
| % Protein | 3.16% | 3.15% | 0% |
| Lbs. of butterfat and protein per cow | 1,787 | 1,782 | 0% |
| Component value per cwt. | \$18.62 | \$24.16 | 30% |
| Net marketing margin per cwt. gross milk price | -\$1.07 | \$0.55 | 152% |
| | \$20.59 | \$26.96 | 31% |
| <i>Balance Sheet Analysis</i> | | | |
| Working capital as % of operating expenses | 23% | 24% | 4% |
| Long term debt to asset ratio | 0.31 | 0.32 | 3% |
| Intermediate/current debt to asset ratio | 0.29 | 0.28 | -3% |
| Debt to asset ratio, total | 0.3 | 0.3 | 0% |
| <i>Debt Analysis</i> | | | |
| Accounts payable as percent of total debt | 3% | 4% | 33% |
| Long-term debt as percent of total debt | 46% | 47% | 2% |
| Current & intermediate debt as percent of total debt | 54% | 53% | -2% |
| Cost of term debt (weighted average) | 3.5% | 5.6% | 61% |
| <i>Net Worth Change</i> | | | |
| Retained earnings | \$26,735 | \$127,083 | 375% |
| Contributed capital | \$50,865 | \$26,613 | -48% |
| Valuation equity | \$38,292 | \$86,211 | 125% |
| <i>Cash Flow</i> | | | |
| Net provided by operating activities, per cow | \$1,178 | \$2,498 | 112% |
| Net provided by investing activities, per cow | -\$2,016 | -\$2,793 | -39% |
| Net provided by financing activities, per cow | \$896 | \$278 | -69% |
| Net provided by reserves, per cow | -\$52 | \$11 | 122% |
| <i>Repayment Analysis</i>⁶ | | | |
| Planned debt payments per cow | \$578 | \$609 | 5% |
| Planned debt payments per cwt. | \$2.34 | \$2.44 | 4% |
| Percent of total receipts | 10% | 8% | -17% |
| Percent of milk receipts | 11% | 9% | -20% |
| Cash flow coverage ratio | 1.11 | 1.44 | 30% |
| Debt coverage ratio | 1.15 | 1.90 | 65% |
| <i>Crop Program Analysis</i> | | | |
| Crop input costs per acre | \$144 | \$189 | 32% |
| Total tillable acres per cow | 2.35 | 2.41 | 3% |
| Total forages acres per cow | 2.09 | 2.06 | -1% |
| Harvested dry matter per cow, tons | 9.52 | 8.50 | -11% |
| Percent tillable land owned | 49% | 50% | 2% |
| <i>Capital and Financial Efficiency</i> | | | |
| Farm capital per cow | \$12,486 | \$13,543 | 8% |
| Real estate per cow | \$5,553 | \$6,012 | 8% |
| Machinery and equipment per cow | \$2,624 | \$2,865 | 9% |
| Asset turnover | 0.49 | 0.58 | 18% |
| Operating expense ratio | 0.82 | 0.77 | -6% |
| Interest expense ratio | 0.02 | 0.02 | 0% |
| Depreciation expense ratio | 0.07 | 0.06 | -14% |

¹ Farm participating both years



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT
Same 32 New York Dairy Farms, Less Than 500 Cows, 2021 & 2022, DFBS

| Item | 2021 | | 2022 | | % Change Per Cwt. |
|---|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| | Per Cow ¹ | Per Cwt. ¹ | Per Cow ¹ | Per Cwt. ¹ | |
| Average number of cows | 255 | | 252 | | -1% |
| Cwt. of milk sold | | 63,040 | | 62,882 | -0.3% |
| ACCRUAL OPERATING RECEIPTS | | | | | |
| Milk | \$5,092 | \$20.59 | \$6,727 | \$26.96 | 31% |
| Dairy cattle | \$197 | \$0.80 | \$242 | \$0.97 | 21% |
| Dairy calves | \$59 | \$0.24 | \$52 | \$0.21 | -13% |
| Other livestock | \$54 | \$0.22 | \$33 | \$0.13 | -41% |
| Crops | \$252 | \$1.02 | \$204 | \$0.82 | -20% |
| Miscellaneous receipts | <u>\$170</u> | <u>\$0.69</u> | <u>\$139</u> | <u>\$0.56</u> | -19% |
| Total Operating Receipts | \$5,825 | \$23.55 | \$7,397 | \$29.64 | 26% |
| ACCRUAL OPERATING EXPENSES | | | | | |
| Hired labor | \$667 | \$2.70 | \$710 | \$2.84 | 5% |
| Dairy grain & concentrate | \$1,676 | \$6.78 | \$1,999 | \$8.01 | 18% |
| Dairy roughage | \$97 | \$0.39 | \$97 | \$0.39 | 0% |
| Nondairy feed | \$3 | \$0.01 | \$3 | \$0.01 | 0% |
| Professional nutritional services | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Machine hire, rent & lease | \$204 | \$0.83 | \$218 | \$0.88 | 6% |
| Machine repair & vehicle expense | \$279 | \$1.13 | \$324 | \$1.30 | 15% |
| Fuel, oil & grease | \$145 | \$0.59 | \$264 | \$1.06 | 80% |
| Replacement livestock | \$19 | \$0.08 | \$14 | \$0.06 | -25% |
| Breeding | \$51 | \$0.21 | \$63 | \$0.25 | 19% |
| Veterinary & medicine | \$141 | \$0.57 | \$146 | \$0.59 | 4% |
| Milk marketing | \$382 | \$1.55 | \$502 | \$2.01 | 30% |
| Bedding | \$109 | \$0.44 | \$112 | \$0.45 | 2% |
| Milking supplies | \$92 | \$0.37 | \$87 | \$0.35 | -5% |
| Cattle lease | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Custom boarding | \$20 | \$0.08 | \$19 | \$0.07 | -13% |
| BST expense | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Livestock professional fees | \$25 | \$0.10 | \$31 | \$0.12 | 20% |
| Other livestock expense | \$52 | \$0.21 | \$82 | \$0.33 | 57% |
| Fertilizer & lime | \$170 | \$0.69 | \$267 | \$1.07 | 55% |
| Seeds & plants | \$117 | \$0.47 | \$124 | \$0.50 | 6% |
| Spray & other crop expense | \$50 | \$0.20 | \$69 | \$0.28 | 40% |
| Crop professional fees | \$7 | \$0.03 | \$21 | \$0.08 | 167% |
| Land, building & fence repair | \$71 | \$0.29 | \$89 | \$0.36 | 24% |
| Taxes | \$79 | \$0.32 | \$99 | \$0.39 | 22% |
| Real estate rent & lease | \$102 | \$0.41 | \$88 | \$0.35 | -15% |
| Insurance | \$74 | \$0.30 | \$94 | \$0.38 | 27% |
| Utilities | \$91 | \$0.37 | \$114 | \$0.46 | 24% |
| Interest paid | \$139 | \$0.56 | \$170 | \$0.68 | 21% |
| Other professional fees | \$34 | \$0.14 | \$32 | \$0.13 | -7% |
| Miscellaneous | <u>\$33</u> | <u>\$0.13</u> | <u>\$32</u> | <u>\$0.13</u> | 0% |
| Total Operating Expenses | \$4,928 | \$19.93 | \$5,871 | \$23.53 | 18% |
| Expansion livestock | \$6 | \$0.02 | \$6 | \$0.02 | 0% |
| Extraordinary expenses | \$0 | \$0.00 | \$5 | \$0.02 | NA |
| Machinery depreciation | \$255 | \$1.03 | \$284 | \$1.14 | 11% |
| Real estate depreciation | <u>\$179</u> | <u>\$0.72</u> | <u>\$190</u> | <u>\$0.76</u> | 6% |
| Total Expenses | \$5,368 | \$21.70 | \$6,356 | \$25.47 | 17% |
| Net Farm Income w/o Appreciation | \$457 | \$1.85 | \$1,041 | \$4.17 | 125% |

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool that can assist in analyzing your business. The five numbers in each column represent the average of each quintile of farms included in the DFBS. You can compare your farm's data to others in the DFBS by drawing a line through or near the number in each column which most closely represents your current level of performance. Each column is sorted independently. Use this information to identify areas of opportunity in your business.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

33 New York Dairy Farms, Less Than 500 Cows, 2022, DFBS

| Size of Business | | | Rates of Production | | | Labor Efficiency | |
|--------------------|-------------|---------------------|-----------------------------|--------------------------|------------------------------|------------------|--------------------------------|
| Worker Equivalents | No. of Cows | Pounds of Milk Sold | Pounds of Milk Sold Per Cow | Tons of Hay Crop DM/Acre | Tons of Corn Silage Per Acre | Cows Per Worker | Pounds of Milk Sold Per Worker |
| (14) ¹ | (12) | (12) | (12) | (11) | (11) | (14) | (14) |
| 11.8 | 464 | 12,048,774 | 29,938 | 4.0 | 22.5 | 59.8 | 1,381,057 |
| 6.9 | 322 | 8,074,111 | 27,984 | 3.5 | 19.8 | 47.8 | 1,171,576 |
| 5.3 | 239 | 5,997,469 | 24,830 | 3.0 | 18.9 | 41.0 | 1,063,224 |
| 4.2 | 159 | 3,724,546 | 22,693 | 2.0 | 16.6 | 37.0 | 909,012 |
| 2.7 | 93 | 2,044,479 | 17,331 | 1.3 | 9.5 | 26.4 | 568,692 |

| Cost Control | | | | | | | |
|----------------------|-----------------------|-----------------------------|-------------------------|---------------------------------|------------------------------|------------------------------------|--------------------------------------|
| Grain Bought Per Cow | Grain Bought Per Cwt. | % Grain is of Milk Receipts | Machinery Costs Per Cow | Labor & Machinery Costs Per Cow | Feed & Crop Expenses Per Cow | Feed & Crop Expenses Per Cwt. Milk | Hired Labor Cost Per Wkr. Equivalent |
| (12) | (12) | (12) | (14) | (14) | (12) | (12) | (14) |
| \$1,164 | \$5.94 | 22 | \$899 | \$1,872 | \$1,585 | \$8.21 | \$9,598 |
| \$1,691 | \$7.39 | 27 | \$1,164 | \$2,264 | \$2,193 | \$9.51 | \$42,168 |
| \$2,130 | \$8.20 | 30 | \$1,291 | \$2,503 | \$2,638 | \$10.49 | \$48,467 |
| \$2,354 | \$8.91 | 33 | \$1,438 | \$2,732 | \$2,951 | \$11.29 | \$51,283 |
| \$2,694 | \$10.40 | 38 | \$1,669 | \$3,251 | \$3,440 | \$12.87 | \$69,150 |

| Value of Production | | | Profitability | | | | |
|-----------------------|------------------------|------------------------------------|-------------------------------------|---|---------------------------------|--|----------------------------------|
| Milk Receipts Per Cow | Milk Receipts Per Cwt. | Opr. Cost Milk Production Per Cwt. | Total Cost Milk Production Per Cwt. | % Rate of Return on All Capital w/o Apprec. | Net Farm Income Without Apprec. | Labor & Management Income Per Operator | Change in Net Worth With Apprec. |
| (12) | (12) | (12) | (12) | (4) | (4) | (4) | (8) |
| \$7,947 | \$29.06 | \$17.77 | \$24.34 | 10.1 | \$540,336 | \$249,449 | \$637,523 |
| \$7,419 | \$28.02 | \$19.61 | \$26.12 | 7.2 | \$393,711 | \$125,747 | \$377,772 |
| \$6,687 | \$27.36 | \$21.07 | \$27.80 | 5.4 | \$235,688 | \$72,569 | \$207,770 |
| \$6,353 | \$26.61 | \$22.35 | \$30.02 | 1.9 | \$143,766 | \$22,051 | \$104,757 |
| \$4,836 | \$25.41 | \$25.13 | \$35.59 | -4.5 | \$39,566 | -\$31,997 | -\$77,045 |

| Financial Efficiency | | | | | | | |
|----------------------|------------------------------|----------------------|-------------------------|---------------------|-------------------------------|----------------|--------------------------------------|
| Investment Per Cow | Machinery Investment Per Cow | Asset Turnover Ratio | Operating Expense Ratio | Debt Coverage Ratio | Planned Debt Payments Per Cow | Percent Equity | Working Capital as % of Opr. Expense |
| (14) | (14) | (14) | (14) | (10) | (10) | (7) | (7) |
| \$9,398 | \$1,230 | 0.90 | 0.66 | 5.20 | \$65 | 97 | 54 |
| \$12,357 | \$2,380 | 0.65 | 0.73 | 2.59 | \$440 | 82 | 37 |
| \$14,090 | \$3,079 | 0.57 | 0.78 | 1.88 | \$640 | 71 | 26 |
| \$15,902 | \$3,806 | 0.51 | 0.81 | 1.03 | \$790 | 66 | 18 |
| \$22,036 | \$5,950 | 0.33 | 0.92 | -2.60 | \$1,033 | 48 | 9 |

¹Page number of the participant's DFBS where the factor is located.



PROGRESS OF THE FARM BUSINESS

Same 29 New York Dairy Farms, 500 to 999 Cows, 2021 & 2022, DFBS

| SELECTED FACTORS | Average of 29 Farms ¹ | | Percent Change |
|--|----------------------------------|-------------|----------------|
| | 2021 | 2022 | |
| Size of Business | | | |
| Average number of cows | 704 | 725 | 3% |
| Percent heifers to cows, average for year | 72% | 69% | -4% |
| Milk sold, pounds | 18,117,178 | 18,408,300 | 2% |
| Worker equivalent | 13.5 | 13.7 | 1% |
| Total tillable acres | 1,392 | 1,431 | 3% |
| Rates of Production | | | |
| Milk sold per cow, pounds | 25,740 | 25,403 | -1.3% |
| Hay DM per acre, tons | 3.5 | 3.2 | -9% |
| Corn silage per acre, tons | 18.5 | 17.5 | -5% |
| Labor Efficiency | | | |
| Cows per worker | 52.1 | 53.0 | 1.9% |
| Milk sold per worker, pounds | 1,340,028 | 1,346,620 | 0.5% |
| Cost Control and Milk Price | | | |
| Grain & concentrate per cwt. milk | \$6.58 | \$8.03 | 22% |
| Net milk income over purchased grain & conc. per cow | \$2,937 | \$4,461 | 52% |
| Dairy feed & crop expense per cwt. milk | \$8.28 | \$10.25 | 24% |
| Labor and machinery costs per cow | \$1,878 | \$2,108 | 12% |
| Hired labor costs per cwt. milk | \$2.94 | \$3.08 | 5% |
| Hired labor costs per worker equivalent | \$48,465 | \$51,030 | 5.3% |
| Total farm operating costs per cwt. | \$19.30 | \$23.36 | 21% |
| Operating cost of producing milk per cwt. | \$16.62 | \$20.65 | 24% |
| Purchased input cost of producing milk per cwt. | \$18.35 | \$22.45 | 22% |
| Total cost of producing milk per cwt. | \$21.09 | \$25.37 | 20% |
| Net milk price per cwt. | \$18.67 | \$25.59 | 37% |
| Government receipts per cwt. | \$0.26 | \$0.19 | -26% |
| Capital Efficiency (average for year) | | | |
| Farm capital per cow | \$13,031 | \$13,612 | 4% |
| Machinery and equipment per cow | \$2,296 | \$2,417 | 5% |
| Asset turnover ratio | 0.48 | 0.60 | 25% |
| Profitability | | | |
| Net farm income without appreciation | \$302,143 | \$912,055 | 202% |
| Net farm income without appreciation per cow | \$429 | \$1,259 | 193% |
| Net farm income with appreciation | \$567,394 | \$1,238,313 | 118% |
| Net farm income with appreciation per cow | \$806 | \$1,709 | 112% |
| Labor & management income per operator/manager | -\$6,888 | \$252,811 | 3770% |
| Rate return on equity capital with appreciation | 6.1% | 15.1% | 148% |
| Rate return on equity capital without appreciation | 1.9% | 10.4% | 442% |
| Rate return on all capital with appreciation | 5.2% | 11.9% | 129% |
| Rate return on all capital without appreciation | 2.3% | 8.6% | 271% |
| Financial Summary (based on market value, excluding deferred taxes) | | | |
| Farm net worth, end year | \$6,412,081 | \$7,407,751 | 16% |
| Debt to asset ratio | 0.32 | 0.28 | -13% |
| Farm debt per cow | \$4,148 | \$3,953 | -5% |
| Debt coverage ratio | 0.82 | 2.65 | 223% |

¹Farm participating both years

DAIRY FARM BUSINESS SUMMARY SELECTED FACTORS

Same 29 New York Dairy Farms, 500 to 999 Cows, 2021 & 2022, DFBS

| SELECTED FACTORS | Average of 29 Farms ¹ | | Percent Change |
|--|----------------------------------|-----------|----------------|
| | 2021 | 2022 | |
| Income Generation | | | |
| % Butterfat | 4.09% | 4.16% | 2% |
| % Protein | 3.19% | 3.20% | 0% |
| Lbs. of butterfat and protein per cow | 1,878 | 1,868 | -1% |
| Component value per cwt. | \$18.82 | \$24.71 | 31% |
| Net marketing margin per cwt. gross milk price | -\$0.92 | \$0.80 | 187% |
| | \$20.02 | \$27.41 | 37% |
| Balance Sheet Analysis | | | |
| Working capital as % of operating expenses | 24% | 30% | 25% |
| Long term debt to asset ratio | 0.36 | 0.31 | -14% |
| Intermediate/current debt to asset ratio | 0.28 | 0.25 | -11% |
| Debt to asset ratio, total | 0.32 | 0.28 | -13% |
| Debt Analysis | | | |
| Accounts payable as percent of total debt | 7% | 6% | -14% |
| Long-term debt as percent of total debt | 53% | 50% | -6% |
| Current & intermediate debt as percent of total debt | 47% | 50% | 6% |
| Cost of term debt (weighted average) | 3.2% | 4.8% | 50% |
| Net Worth Change | | | |
| Retained earnings | -\$61,824 | \$717,386 | 1260% |
| Contributed capital | \$84,045 | \$46,278 | -45% |
| Valuation equity | \$202,650 | \$214,669 | 6% |
| Cash Flow | | | |
| Net provided by operating activities, per cow | \$1,178 | \$2,498 | 112% |
| Net provided by investing activities, per cow | -\$2,016 | -\$2,793 | -39% |
| Net provided by financing activities, per cow | \$896 | \$278 | -69% |
| Net provided by reserves, per cow | -\$52 | \$11 | 122% |
| Repayment Analysis⁶ | | | |
| Planned debt payments per cow | \$509 | \$610 | 20% |
| Planned debt payments per cwt. | \$1.98 | \$2.40 | 21% |
| Percent of total receipts | 9% | 8% | -8% |
| Percent of milk receipts | 10% | 9% | -10% |
| Cash flow coverage ratio | 0.59 | 1.92 | 225% |
| Debt coverage ratio | 0.82 | 2.65 | 224% |
| Crop Program Analysis | | | |
| Crop input costs per acre | \$175 | \$241 | 38% |
| Total tillable acres per cow | 2.08 | 2.07 | 0% |
| Total forages acres per cow | 1.74 | 1.73 | -1% |
| Harvested dry matter per cow, tons | 8.21 | 7.71 | -6% |
| Percent tillable land owned | 57% | 56% | 0% |
| Capital and Financial Efficiency | | | |
| Farm capital per cow | \$13,031 | \$13,612 | 4% |
| Real estate per cow | \$6,089 | \$6,198 | 2% |
| Machinery and equipment per cow | \$2,296 | \$2,417 | 5% |
| Asset turnover | 0.48 | 0.60 | 25% |
| Operating expense ratio | 0.83 | 0.75 | -10% |
| Interest expense ratio | 0.02 | 0.02 | 0% |
| Depreciation expense ratio | 0.07 | 0.06 | -14% |

¹ Farm participating both years



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT
Same 29 New York Dairy Farms, 500 to 999 Cows, 2021 & 2022, DFBS

| Item | 2021 | | 2022 | | % Change Per Cwt. |
|-----------------------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| | Per Cow ¹ | Per Cwt. ¹ | Per Cow ¹ | Per Cwt. ¹ | |
| Average number of cows | 704 | | 725 | | 3% |
| Cwt. of milk sold | | 181,172 | | 184,083 | 2% |
| ACCRUAL OPERATING RECEIPTS | | | | | |
| Milk | \$5,153 | \$20.02 | \$6,962 | \$27.41 | 37% |
| Dairy cattle | \$284 | \$1.10 | \$327 | \$1.29 | 17% |
| Dairy calves | \$46 | \$0.18 | \$51 | \$0.20 | 11% |
| Other livestock | \$34 | \$0.13 | \$18 | \$0.07 | -46% |
| Crops | \$173 | \$0.67 | \$159 | \$0.63 | -6% |
| Miscellaneous receipts | <u>\$164</u> | <u>\$0.64</u> | <u>\$151</u> | <u>\$0.59</u> | -8% |
| Total Operating Receipts | \$5,854 | \$22.74 | \$7,669 | \$30.19 | 33% |
| ACCRUAL OPERATING EXPENSES | | | | | |
| Hired labor | \$756 | \$2.94 | \$781 | \$3.08 | 5% |
| Dairy grain & concentrate | \$1,695 | \$6.58 | \$2,041 | \$8.03 | 22% |
| Dairy roughage | \$85 | \$0.33 | \$87 | \$0.34 | 3% |
| Nondairy feed | \$0 | \$0.00 | \$1 | \$0.00 | NA |
| Professional nutritional services | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Machine hire, rent & lease | \$195 | \$0.76 | \$228 | \$0.90 | 18% |
| Machine repair & vehicle expense | \$265 | \$1.03 | \$308 | \$1.21 | 17% |
| Fuel, oil & grease | \$145 | \$0.56 | \$249 | \$0.98 | 75% |
| Replacement livestock | \$47 | \$0.18 | \$71 | \$0.28 | 56% |
| Breeding | \$54 | \$0.21 | \$56 | \$0.22 | 5% |
| Veterinary & medicine | \$143 | \$0.56 | \$152 | \$0.60 | 7% |
| Milk marketing | \$347 | \$1.35 | \$462 | \$1.82 | 35% |
| Bedding | \$105 | \$0.41 | \$116 | \$0.46 | 12% |
| Milking supplies | \$96 | \$0.37 | \$104 | \$0.41 | 11% |
| Cattle lease | \$0 | \$0.00 | \$1 | \$0.00 | NA |
| Custom boarding | \$55 | \$0.21 | \$56 | \$0.22 | 5% |
| BST expense | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Livestock professional fees | \$19 | \$0.07 | \$20 | \$0.08 | 14% |
| Other livestock expense | \$30 | \$0.12 | \$41 | \$0.16 | 33% |
| Fertilizer & lime | \$160 | \$0.62 | \$256 | \$1.01 | 63% |
| Seeds & plants | \$115 | \$0.45 | \$134 | \$0.53 | 18% |
| Spray & other crop expense | \$70 | \$0.27 | \$78 | \$0.31 | 15% |
| Crop professional fees | \$7 | \$0.03 | \$8 | \$0.03 | 0% |
| Land, building & fence repair | \$79 | \$0.31 | \$106 | \$0.42 | 35% |
| Taxes | \$79 | \$0.31 | \$77 | \$0.30 | -3% |
| Real estate rent & lease | \$64 | \$0.25 | \$65 | \$0.26 | 4% |
| Insurance | \$58 | \$0.23 | \$71 | \$0.28 | 22% |
| Utilities | \$107 | \$0.42 | \$131 | \$0.51 | 21% |
| Interest paid | \$130 | \$0.50 | \$172 | \$0.68 | 36% |
| Other professional fees | \$32 | \$0.13 | \$36 | \$0.14 | 8% |
| Miscellaneous | <u>\$28</u> | <u>\$0.11</u> | <u>\$28</u> | <u>\$0.11</u> | 0% |
| Total Operating Expenses | \$4,967 | \$19.30 | \$5,933 | \$23.36 | 21% |
| Expansion livestock | \$12 | \$0.05 | \$19 | \$0.08 | 60% |
| Extraordinary expenses | \$11 | \$0.04 | \$0 | \$0.00 | -100% |
| Machinery depreciation | \$245 | \$0.95 | \$259 | \$1.02 | 7% |
| Real estate depreciation | <u>\$191</u> | <u>\$0.74</u> | <u>\$198</u> | <u>\$0.78</u> | 5% |
| Total Expenses | \$5,426 | \$21.08 | \$6,409 | \$25.24 | 20% |
| Net Farm Income w/o Appreciation | \$429 | \$1.67 | \$1,259 | \$4.95 | 196% |

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool that can assist in analyzing your business. The five numbers in each column represent the average of each quintile of farms included in the DFBS. You can compare your farm's data to others in the DFBS by drawing a line through or near the number in each column which most closely represents your current level of performance. Each column is sorted independently. Use this information to identify areas of opportunity in your business.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

30 New York Dairy Farms, 500 to 999 Cows, 2022, DFBS

| Size of Business | | | Rates of Production | | | Labor Efficiency | |
|--------------------|-------------|---------------------|-----------------------------|--------------------------|------------------------------|------------------|--------------------------------|
| Worker Equivalents | No. of Cows | Pounds of Milk Sold | Pounds of Milk Sold Per Cow | Tons of Hay Crop DM/Acre | Tons of Corn Silage Per Acre | Cows Per Worker | Pounds of Milk Sold Per Worker |
| (14) ¹ | (12) | (12) | (12) | (11) | (11) | (14) | (14) |
| 19.6 | 953 | 25,380,513 | 29,179 | 5.1 | 22.0 | 81.5 | 2,112,788 |
| 16.5 | 819 | 21,086,816 | 27,206 | 3.5 | 19.7 | 59.2 | 1,464,306 |
| 13.7 | 711 | 18,366,352 | 26,220 | 3.0 | 18.0 | 51.5 | 1,305,455 |
| 11.3 | 626 | 15,482,479 | 24,962 | 2.3 | 16.0 | 46.3 | 1,174,917 |
| 8.4 | 553 | 12,748,844 | 19,713 | 1.4 | 11.5 | 40.5 | 987,494 |

| Cost Control | | | | | | | |
|----------------------|-----------------------|-----------------------------|-------------------------|---------------------------------|------------------------------|------------------------------------|--------------------------------------|
| Grain Bought Per Cow | Grain Bought Per Cwt. | % Grain is of Milk Receipts | Machinery Costs Per Cow | Labor & Machinery Costs Per Cow | Feed & Crop Expenses Per Cow | Feed & Crop Expenses Per Cwt. Milk | Hired Labor Cost Per Wkr. Equivalent |
| (12) | (12) | (12) | (14) | (14) | (12) | (12) | (14) |
| \$1,461 | \$6.24 | 23 | \$802 | \$1,552 | \$1,976 | \$8.34 | \$44,545 |
| \$1,961 | \$7.41 | 27 | \$997 | \$1,925 | \$2,425 | \$9.56 | \$47,128 |
| \$2,012 | \$7.78 | 29 | \$1,122 | \$2,083 | \$2,560 | \$10.13 | \$48,467 |
| \$2,120 | \$8.64 | 31 | \$1,271 | \$2,270 | \$2,797 | \$10.79 | \$53,059 |
| \$2,605 | \$10.08 | 36 | \$1,647 | \$2,741 | \$3,184 | \$12.56 | \$59,368 |

| Value of Production | | | Profitability | | | | |
|-----------------------|------------------------|------------------------------------|-------------------------------------|---|---------------------------------|--|----------------------------------|
| Milk Receipts Per Cow | Milk Receipts Per Cwt. | Opr. Cost Milk Production Per Cwt. | Total Cost Milk Production Per Cwt. | % Rate of Return on All Capital w/o Apprec. | Net Farm Income Without Apprec. | Labor & Management Income Per Operator | Change in Net Worth With Apprec. |
| (12) | (12) | (12) | (12) | (4) | (4) | (4) | (8) |
| \$7,915 | \$30.18 | \$17.02 | \$22.49 | 13.4 | \$1,509,089 | \$668,767 | \$1,627,527 |
| \$7,356 | \$27.61 | \$19.24 | \$24.56 | 9.9 | \$1,138,406 | \$309,039 | \$1,146,705 |
| \$7,086 | \$27.05 | \$20.71 | \$24.98 | 8.4 | \$857,257 | \$269,411 | \$979,995 |
| \$6,810 | \$26.45 | \$22.19 | \$26.13 | 6.8 | \$656,864 | \$159,619 | \$747,911 |
| \$5,641 | \$26.15 | \$24.94 | \$29.59 | 4.5 | \$360,812 | \$59,506 | \$326,951 |

| Financial Efficiency | | | | | | | |
|----------------------|------------------------------|----------------------|-------------------------|---------------------|-------------------------------|----------------|--------------------------------------|
| Investment Per Cow | Machinery Investment Per Cow | Asset Turnover Ratio | Operating Expense Ratio | Debt Coverage Ratio | Planned Debt Payments Per Cow | Percent Equity | Working Capital as % of Opr. Expense |
| (14) | (14) | (14) | (14) | (10) | (10) | (7) | (7) |
| \$8,974 | \$1,073 | 0.92 | 0.66 | 8.36 | \$77 | 97 | 68 |
| \$11,768 | \$1,816 | 0.65 | 0.73 | 4.01 | \$377 | 87 | 39 |
| \$13,291 | \$2,389 | 0.58 | 0.76 | 2.14 | \$565 | 74 | 26 |
| \$15,027 | \$2,770 | 0.54 | 0.80 | 1.72 | \$742 | 59 | 20 |
| \$18,217 | \$4,103 | 0.48 | 0.85 | 0.87 | \$1,090 | 41 | 2 |

¹Page number of the participant's DFBS where the factor is located.



PROGRESS OF THE FARM BUSINESS

Same 33 New York Dairy Farms, 1,000 to 1,499 Cows, 2021 & 2022, DFBS

| SELECTED FACTORS | Average of 33 Farms ¹ | | Percent Change |
|---|----------------------------------|--------------|-------------------|
| | 2021 | 2022 | |
| <i>Size of Business</i> | | | |
| Average number of cows | 1,204 | 1,240 | 3% |
| Percent heifers to cows, average for year | 77% | 75% | -3% |
| Milk sold, pounds | 33,541,965 | 34,557,179 | 3% |
| Worker equivalent | 23.0 | 23.4 | 2% |
| Total tillable acres | 2,138 | 2,165 | 1% |
| <i>Rates of Production</i> | | | |
| Milk sold per cow, pounds | 27,852 | 27,860 | 0.03% |
| Hay DM per acre, tons | 3.6 | 3.5 | -3% |
| Corn silage per acre, tons | 19.3 | 18.8 | -3% |
| <i>Labor Efficiency</i> | | | |
| Cows per worker | 52.4 | 53.1 | 1.2% |
| Milk sold per worker, pounds | 1,460,887 | 1,478,698 | 1.2% |
| <i>Cost Control and Milk Price</i> | | | |
| Grain & concentrate per cwt. milk | \$6.77 | \$7.70 | 14% |
| Net milk income over purchased grain & conc. per cow | \$2,937 | \$4,931 | 68% |
| Dairy feed & crop expense per cwt. milk | \$8.40 | \$9.83 | 17% |
| Labor and machinery costs per cow | \$1,858 | \$2,121 | 14% |
| Hired labor costs per cwt. milk | \$3.08 | \$3.26 | 6% |
| Hired labor costs per worker equivalent | \$50,898 | \$54,012 | 6.1% |
| Total farm operating costs per cwt. | \$19.25 | \$22.43 | 17% |
| Operating cost of producing milk per cwt. | \$16.47 | \$19.70 | 20% |
| Purchased input cost of producing milk per cwt. | \$17.95 | \$21.27 | 18% |
| Total cost of producing milk per cwt. | \$20.10 | \$23.55 | 17% |
| Net milk price per cwt. | \$18.58 | \$25.39 | 37% |
| Government receipts per cwt. | \$0.17 | \$0.15 | -11% |
| <i>Capital Efficiency (average for year)</i> | | | |
| Farm capital per cow | \$12,476 | \$13,517 | 8% |
| Machinery and equipment per cow | \$1,908 | \$2,138 | 12% |
| Asset turnover ratio | 0.54 | 0.65 | 20% |
| <i>Profitability</i> | | | |
| Net farm income without appreciation | \$665,047 | \$1,981,666 | 198% |
| Net farm income without appreciation per cow | \$552 | \$1,598 | 189% |
| Net farm income with appreciation | \$1,082,870 | \$2,450,506 | 126% |
| Net farm income with appreciation per cow | \$899 | \$1,976 | 120% |
| Labor & management income per operator/manager | \$68,760 | \$625,395 | 810% |
| Rate return on equity capital with appreciation | 8.6% | 19.7% | 129% |
| Rate return on equity capital without appreciation | 4.4% | 15.5% | 250% |
| Rate return on all capital with appreciation | 6.9% | 14.5% | 110% |
| Rate return on all capital without appreciation | 4.1% | 11.7% | 186% |
| <i>Financial Summary (based on market value, excluding deferred taxes)</i> | | | |
| Farm net worth, end year | \$10,353,974 | \$12,232,940 | 18% |
| Debt to asset ratio | 0.33 | 0.32 | -3% |
| Farm debt per cow | \$4,249 | \$4,416 | 4% |
| Debt coverage ratio | 1.4 | 3.07 | 119% |

¹Farm participating both years

DAIRY FARM BUSINESS SUMMARY SELECTED FACTORS

Same 33 New York Dairy Farms, 1,000 to 1,499 Cows, 2021 & 2022, DFBS

| SELECTED FACTORS | Average of 33 Farms ¹ | | Percent Change |
|--|----------------------------------|-------------|----------------|
| | 2021 | 2022 | |
| Income Generation | | | |
| % Butterfat | 4.00% | 4.06% | 2% |
| % Protein | 3.17% | 3.18% | 0% |
| Lbs. of butterfat and protein per cow | 1,998 | 2,018 | 1% |
| Component value per cwt. | \$18.59 | \$24.30 | 31% |
| Net marketing margin per cwt. gross milk price | -\$0.69 | \$1.18 | 271% |
| | \$19.93 | \$27.00 | 35% |
| Balance Sheet Analysis | | | |
| Working capital as % of operating expenses | 27% | 30% | 11% |
| Long term debt to asset ratio | 0.35 | 0.37 | 6% |
| Intermediate/current debt to asset ratio | 0.32 | 0.28 | -13% |
| Debt to asset ratio, total | 0.33 | 0.32 | -3% |
| Debt Analysis | | | |
| Accounts payable as percent of total debt | 3% | 3% | 0% |
| Long-term debt as percent of total debt | 46% | 49% | 7% |
| Current & intermediate debt as percent of total debt | 54% | 51% | -6% |
| Cost of term debt (weighted average) | 3.3% | 4.9% | 51% |
| Net Worth Change | | | |
| Retained earnings | \$335,665 | \$1,561,908 | 365% |
| Contributed capital | \$74,813 | \$51,332 | -31% |
| Valuation equity | \$224,641 | \$188,415 | -16% |
| Cash Flow | | | |
| Net provided by operating activities, per cow | \$1,178 | \$2,498 | 112% |
| Net provided by investing activities, per cow | -\$2,016 | -\$2,793 | -39% |
| Net provided by financing activities, per cow | \$896 | \$278 | -69% |
| Net provided by reserves, per cow | -\$52 | \$11 | 122% |
| Repayment Analysis⁶ | | | |
| Planned debt payments per cow | \$605 | \$605 | 0% |
| Planned debt payments per cwt. | \$2.17 | \$2.17 | 0% |
| Percent of total receipts | 10% | 8% | -23% |
| Percent of milk receipts | 11% | 8% | -24% |
| Cash flow coverage ratio | 1.03 | 2.03 | 97% |
| Debt coverage ratio | 1.40 | 3.07 | 120% |
| Crop Program Analysis | | | |
| Crop input costs per acre | \$176 | \$252 | 44% |
| Total tillable acres per cow | 1.88 | 1.84 | -2% |
| Total forages acres per cow | 1.64 | 1.62 | -1% |
| Harvested dry matter per cow, tons | 8.34 | 8.12 | -3% |
| Percent tillable land owned | 47% | 49% | 3% |
| Capital and Financial Efficiency | | | |
| Farm capital per cow | \$12,476 | \$13,517 | 8% |
| Real estate per cow | \$5,524 | \$5,743 | 4% |
| Machinery and equipment per cow | \$1,908 | \$2,138 | 12% |
| Asset turnover | 0.54 | 0.65 | 20% |
| Operating expense ratio | 0.83 | 0.74 | -11% |
| Interest expense ratio | 0.02 | 0.02 | 0% |
| Depreciation expense ratio | 0.06 | 0.05 | -17% |

¹ Farm participating both years



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT
Same 33 New York Dairy Farms, 1,000 to 1,499 Cows, 2021 & 2022, DFBS

| Item | 2021 | | 2022 | | % Change Per Cwt. |
|-----------------------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| | Per Cow ¹ | Per Cwt. ¹ | Per Cow ¹ | Per Cwt. ¹ | |
| Average number of cows | 1,204 | | 1,240 | | 3% |
| Cwt. of milk sold | | 335,420 | | 345,572 | 3% |
| ACCRUAL OPERATING RECEIPTS | | | | | |
| Milk | \$5,551 | \$19.93 | \$7,523 | \$27.00 | 35% |
| Dairy cattle | \$242 | \$0.87 | \$385 | \$1.38 | 59% |
| Dairy calves | \$71 | \$0.26 | \$106 | \$0.38 | 46% |
| Other livestock | \$40 | \$0.14 | \$34 | \$0.12 | -14% |
| Crops | \$244 | \$0.88 | \$164 | \$0.59 | -33% |
| Miscellaneous receipts | <u>\$183</u> | <u>\$0.66</u> | <u>\$166</u> | <u>\$0.60</u> | -9% |
| Total Operating Receipts | \$6,331 | \$22.73 | \$8,378 | \$30.07 | 32% |
| ACCRUAL OPERATING EXPENSES | | | | | |
| Hired labor | \$858 | \$3.08 | \$908 | \$3.26 | 6% |
| Dairy grain & concentrate | \$1,887 | \$6.77 | \$2,145 | \$7.70 | 14% |
| Dairy roughage | \$129 | \$0.46 | \$148 | \$0.53 | 15% |
| Nondairy feed | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Professional nutritional services | \$2 | \$0.01 | \$2 | \$0.01 | 0% |
| Machine hire, rent & lease | \$168 | \$0.60 | \$225 | \$0.81 | 35% |
| Machine repair & vehicle expense | \$281 | \$1.01 | \$311 | \$1.12 | 11% |
| Fuel, oil & grease | \$144 | \$0.52 | \$249 | \$0.90 | 73% |
| Replacement livestock | \$15 | \$0.05 | \$15 | \$0.05 | 0% |
| Breeding | \$52 | \$0.19 | \$56 | \$0.20 | 5% |
| Veterinary & medicine | \$158 | \$0.57 | \$168 | \$0.60 | 5% |
| Milk marketing | \$375 | \$1.35 | \$449 | \$1.61 | 19% |
| Bedding | \$96 | \$0.34 | \$109 | \$0.39 | 15% |
| Milking supplies | \$97 | \$0.35 | \$103 | \$0.37 | 6% |
| Cattle lease | \$4 | \$0.01 | \$10 | \$0.03 | 200% |
| Custom boarding | \$117 | \$0.42 | \$128 | \$0.46 | 10% |
| BST expense | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Livestock professional fees | \$21 | \$0.08 | \$15 | \$0.06 | -25% |
| Other livestock expense | \$24 | \$0.09 | \$45 | \$0.16 | 78% |
| Fertilizer & lime | \$130 | \$0.47 | \$209 | \$0.75 | 60% |
| Seeds & plants | \$121 | \$0.44 | \$126 | \$0.45 | 2% |
| Spray & other crop expense | \$62 | \$0.22 | \$104 | \$0.37 | 68% |
| Crop professional fees | \$12 | \$0.04 | \$8 | \$0.03 | -25% |
| Land, building & fence repair | \$82 | \$0.29 | \$117 | \$0.42 | 45% |
| Taxes | \$67 | \$0.24 | \$68 | \$0.24 | 0% |
| Real estate rent & lease | \$108 | \$0.39 | \$107 | \$0.38 | -3% |
| Insurance | \$53 | \$0.19 | \$64 | \$0.23 | 21% |
| Utilities | \$105 | \$0.38 | \$131 | \$0.47 | 24% |
| Interest paid | \$140 | \$0.50 | \$163 | \$0.59 | 18% |
| Other professional fees | \$24 | \$0.09 | \$32 | \$0.12 | 33% |
| Miscellaneous | <u>\$28</u> | <u>\$0.10</u> | <u>\$33</u> | <u>\$0.12</u> | 20% |
| Total Operating Expenses | \$5,363 | \$19.25 | \$6,249 | \$22.43 | 17% |
| Expansion livestock | \$5 | \$0.02 | \$94 | \$0.34 | 1600% |
| Extraordinary expenses | \$1 | \$0.00 | \$2 | \$0.01 | NA |
| Machinery depreciation | \$214 | \$0.77 | \$228 | \$0.82 | 6% |
| Real estate depreciation | <u>\$196</u> | <u>\$0.70</u> | <u>\$207</u> | <u>\$0.74</u> | 6% |
| Total Expenses | \$5,779 | \$20.74 | \$6,780 | \$24.34 | 17% |
| Net Farm Income w/o Appreciation | \$552 | \$1.98 | \$1,598 | \$5.73 | 189% |

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool that can assist in analyzing your business. The five numbers in each column represent the average of each quintile of farms included in the DFBS. You can compare your farm's data to others in the DFBS by drawing a line through or near the number in each column which most closely represents your current level of performance. Each column is sorted independently. Use this information to identify areas of opportunity in your business.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

34 New York Dairy Farms, 1,000 to 1,499 Cows, 2022, DFBS

| Size of Business | | | Rates of Production | | | Labor Efficiency | |
|--------------------|-------------|---------------------|-----------------------------|--------------------------|------------------------------|------------------|--------------------------------|
| Worker Equivalents | No. of Cows | Pounds of Milk Sold | Pounds of Milk Sold Per Cow | Tons of Hay Crop DM/Acre | Tons of Corn Silage Per Acre | Cows Per Worker | Pounds of Milk Sold Per Worker |
| (14) ¹ | (12) | (12) | (12) | (11) | (11) | (14) | (14) |
| 31.0 | 1,450 | 41,424,051 | 30,125 | 4.9 | 22.3 | 72.2 | 2,065,634 |
| 25.8 | 1,338 | 37,746,487 | 28,630 | 3.9 | 20.5 | 57.1 | 1,596,691 |
| 23.2 | 1,256 | 34,440,389 | 27,862 | 3.3 | 19.2 | 51.7 | 1,445,091 |
| 21.6 | 1,159 | 31,860,311 | 27,162 | 2.7 | 17.4 | 49.3 | 1,342,117 |
| 17.9 | 1,049 | 28,732,859 | 25,686 | 1.4 | 11.2 | 42.3 | 1,160,770 |

| Cost Control | | | | | | | |
|----------------------|-----------------------|-----------------------------|-------------------------|---------------------------------|------------------------------|------------------------------------|--------------------------------------|
| Grain Bought Per Cow | Grain Bought Per Cwt. | % Grain is of Milk Receipts | Machinery Costs Per Cow | Labor & Machinery Costs Per Cow | Feed & Crop Expenses Per Cow | Feed & Crop Expenses Per Cwt. Milk | Hired Labor Cost Per Wkr. Equivalent |
| (12) | (12) | (12) | (14) | (14) | (12) | (12) | (14) |
| \$1,727 | \$6.31 | 24 | \$779 | \$1,571 | \$2,256 | \$8.32 | \$47,217 |
| \$1,989 | \$7.24 | 26 | \$988 | \$1,958 | \$2,603 | \$9.28 | \$49,833 |
| \$2,146 | \$7.71 | 28 | \$1,108 | \$2,154 | \$2,723 | \$9.84 | \$52,550 |
| \$2,288 | \$8.18 | 30 | \$1,261 | \$2,355 | \$2,882 | \$10.36 | \$56,471 |
| \$2,544 | \$8.90 | 33 | \$1,506 | \$2,729 | \$3,246 | \$11.37 | \$64,689 |

| Value of Production | | | Profitability | | | | |
|-----------------------|------------------------|------------------------------------|-------------------------------------|---|---------------------------------|--|----------------------------------|
| Milk Receipts Per Cow | Milk Receipts Per Cwt. | Opr. Cost Milk Production Per Cwt. | Total Cost Milk Production Per Cwt. | % Rate of Return on All Capital w/o Apprec. | Net Farm Income Without Apprec. | Labor & Management Income Per Operator | Change in Net Worth With Apprec. |
| (12) | (12) | (12) | (12) | (4) | (4) | (4) | (8) |
| \$8,318 | \$28.85 | \$16.58 | \$20.67 | 21.1 | \$3,285,164 | \$1,941,796 | \$3,439,036 |
| \$7,772 | \$27.48 | \$18.16 | \$22.24 | 13.9 | \$2,615,677 | \$980,212 | \$2,608,535 |
| \$7,474 | \$27.01 | \$20.10 | \$23.72 | 11.6 | \$1,891,302 | \$691,623 | \$1,823,376 |
| \$7,248 | \$26.55 | \$21.24 | \$24.89 | 9.0 | \$1,387,996 | \$454,247 | \$1,324,533 |
| \$6,881 | \$25.46 | \$22.76 | \$26.81 | 6.1 | \$1,041,714 | \$191,176 | \$235,656 |

| Financial Efficiency | | | | | | | |
|----------------------|------------------------------|----------------------|-------------------------|---------------------|-------------------------------|----------------|--------------------------------------|
| Investment Per Cow | Machinery Investment Per Cow | Asset Turnover Ratio | Operating Expense Ratio | Debt Coverage Ratio | Planned Debt Payments Per Cow | Percent Equity | Working Capital as % of Opr. Expense |
| (14) | (14) | (14) | (14) | (10) | (10) | (7) | (7) |
| \$9,628 | \$693 | 0.98 | 0.65 | 33.85 | \$86 | 92 | 64 |
| \$12,163 | \$1,678 | 0.73 | 0.70 | 3.75 | \$468 | 75 | 38 |
| \$12,994 | \$2,266 | 0.65 | 0.74 | 2.70 | \$605 | 67 | 29 |
| \$15,703 | \$2,686 | 0.58 | 0.78 | 1.95 | \$834 | 60 | 22 |
| \$18,649 | \$3,640 | 0.49 | 0.83 | 0.74 | \$1,013 | 44 | 10 |

¹Page number of the participant's DFBS where the factor is located.



PROGRESS OF THE FARM BUSINESS

Same 36 New York Dairy Farms, 1,500 Cows and Greater, 2021 & 2022, DFBS

| SELECTED FACTORS | Average of 36 Farms ¹ | | Percent Change |
|--|----------------------------------|--------------|----------------|
| | 2021 | 2022 | |
| Size of Business | | | |
| Average number of cows | 2,475 | 2,542 | 3% |
| Percent heifers to cows, average for year | 74% | 73% | -1% |
| Milk sold, pounds | 67,894,699 | 70,091,731 | 3% |
| Worker equivalent | 44.5 | 45.8 | 3% |
| Total tillable acres | 4,009 | 4,097 | 2% |
| Rates of Production | | | |
| Milk sold per cow, pounds | 27,427 | 27,573 | 0.5% |
| Hay DM per acre, tons | 3.9 | 3.4 | -13% |
| Corn silage per acre, tons | 19.2 | 18.4 | -4% |
| Labor Efficiency | | | |
| Cows per worker | 55.6 | 55.5 | -0.3% |
| Milk sold per worker, pounds | 1,525,724 | 1,529,385 | 0.2% |
| Cost Control and Milk Price | | | |
| Grain & concentrate per cwt. milk | \$6.66 | \$7.88 | 18% |
| Net milk income over purchased grain & conc. per cow | \$2,937 | \$4,827 | 64% |
| Dairy feed & crop expense per cwt. milk | \$8.20 | \$9.74 | 19% |
| Labor and machinery costs per cow | \$1,769 | \$2,067 | 17% |
| Hired labor costs per cwt. milk | \$3.12 | \$3.32 | 6% |
| Hired labor costs per worker equivalent | \$51,624 | \$55,052 | 6.6% |
| Total farm operating costs per cwt. | \$18.69 | \$22.11 | 18% |
| Operating cost of producing milk per cwt. | \$15.98 | \$19.57 | 22% |
| Purchased input cost of producing milk per cwt. | \$17.38 | \$21.08 | 21% |
| Total cost of producing milk per cwt. | \$19.37 | \$23.25 | 20% |
| Net milk price per cwt. | \$18.37 | \$25.44 | 38% |
| Government receipts per cwt. | \$0.08 | \$0.13 | 63% |
| Capital Efficiency (average for year) | | | |
| Farm capital per cow | \$11,794 | \$12,921 | 10% |
| Machinery and equipment per cow | \$1,604 | \$1,816 | 13% |
| Asset turnover ratio | 0.55 | 0.67 | 22% |
| Profitability | | | |
| Net farm income without appreciation | \$1,565,816 | \$4,228,620 | 170% |
| Net farm income without appreciation per cow | \$633 | \$1,664 | 163% |
| Net farm income with appreciation | \$2,314,412 | \$5,420,021 | 134% |
| Net farm income with appreciation per cow | \$935 | \$2,132 | 128% |
| Labor & management income per operator/manager | \$187,374 | \$1,008,992 | 438% |
| Rate return on equity capital with appreciation | 9.8% | 22.0% | 124% |
| Rate return on equity capital without appreciation | 6.1% | 16.8% | 176% |
| Rate return on all capital with appreciation | 7.7% | 16.5% | 114% |
| Rate return on all capital without appreciation | 5.1% | 12.9% | 151% |
| Financial Summary (based on market value, excluding deferred taxes) | | | |
| Farm net worth, end year | \$20,775,887 | \$25,053,424 | 21% |
| Debt to asset ratio | 0.31 | 0.29 | -6% |
| Farm debt per cow | \$3,780 | \$3,900 | 3% |
| Debt coverage ratio | 1.57 | 3.46 | 120% |

¹Farm participating both years

DAIRY FARM BUSINESS SUMMARY SELECTED FACTORS

Same 36 New York Dairy Farms, 1,500 Cows and Greater, 2021 & 2022, DFBS

| SELECTED FACTORS | Average of 36 Farms ¹ | | Percent Change |
|--|----------------------------------|-------------|----------------|
| | 2021 | 2022 | |
| <i>Income Generation</i> | | | |
| % Butterfat | 4.00% | 4.05% | 1% |
| % Protein | 3.18% | 3.19% | 0% |
| Lbs. of butterfat and protein per cow | 1,968 | 1,996 | 1% |
| Component value per cwt. | \$18.60 | \$24.32 | 31% |
| Net marketing margin per cwt. gross milk price | -\$0.67 | \$1.13 | 267% |
| | \$19.69 | \$27.11 | 38% |
| <i>Balance Sheet Analysis</i> | | | |
| Working capital as % of operating expenses | 31% | 36% | 16% |
| Long term debt to asset ratio | 0.28 | 0.27 | -4% |
| Intermediate/current debt to asset ratio | 0.34 | 0.30 | -12% |
| Debt to asset ratio, total | 0.31 | 0.29 | -6% |
| <i>Debt Analysis</i> | | | |
| Accounts payable as percent of total debt | 3% | 3% | 0% |
| Long-term debt as percent of total debt | 38% | 38% | 0% |
| Current & intermediate debt as percent of total debt | 62% | 62% | 0% |
| Cost of term debt (weighted average) | 2.9% | 4.8% | 62% |
| <i>Net Worth Change</i> | | | |
| Retained earnings | \$846,818 | \$3,244,388 | 283% |
| Contributed capital | \$127,981 | \$124,787 | -2% |
| Valuation equity | \$394,136 | \$734,172 | 86% |
| <i>Cash Flow</i> | | | |
| Net provided by operating activities, per cow | \$1,178 | \$2,498 | 112% |
| Net provided by investing activities, per cow | -\$2,016 | -\$2,793 | -39% |
| Net provided by financing activities, per cow | \$896 | \$278 | -69% |
| Net provided by reserves, per cow | -\$52 | \$11 | 122% |
| <i>Repayment Analysis</i>⁶ | | | |
| Planned debt payments per cow | \$501 | \$531 | 6% |
| Planned debt payments per cwt. | \$1.83 | \$1.93 | 5% |
| Percent of total receipts | 9% | 7% | -19% |
| Percent of milk receipts | 9% | 8% | -20% |
| Cash flow coverage ratio | 1.10 | 2.00 | 82% |
| Debt coverage ratio | 1.57 | 3.46 | 120% |
| <i>Crop Program Analysis</i> | | | |
| Crop input costs per acre | \$167 | \$225 | 34% |
| Total tillable acres per cow | 1.62 | 1.61 | -1% |
| Total forages acres per cow | 1.42 | 1.44 | 1% |
| Harvested dry matter per cow, tons | 7.54 | 7.10 | -6% |
| Percent tillable land owned | 54% | 54% | 1% |
| <i>Capital and Financial Efficiency</i> | | | |
| Farm capital per cow | \$11,794 | \$12,921 | 10% |
| Real estate per cow | \$5,178 | \$5,414 | 5% |
| Machinery and equipment per cow | \$1,604 | \$1,816 | 13% |
| Asset turnover | 0.55 | 0.67 | 22% |
| Operating expense ratio | 0.82 | 0.73 | -11% |
| Interest expense ratio | 0.02 | 0.02 | 0% |
| Depreciation expense ratio | 0.06 | 0.05 | -17% |

¹ Farm participating both years



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT
Same 36 New York Dairy Farms, 1,500 Cows and Greater, 2021 & 2022, DFBS

| Item | 2021 | | 2022 | | % Change Per Cwt. |
|-----------------------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|
| | Per Cow ¹ | Per Cwt. ¹ | Per Cow ¹ | Per Cwt. ¹ | |
| Average number of cows | 2,475 | | 2,542 | | 3% |
| Cwt. of milk sold | | 678,947 | | 700,917 | 3% |
| ACCRUAL OPERATING RECEIPTS | | | | | |
| Milk | \$5,399 | \$19.69 | \$7,476 | \$27.11 | 38% |
| Dairy cattle | \$296 | \$1.08 | \$345 | \$1.25 | 16% |
| Dairy calves | \$66 | \$0.24 | \$113 | \$0.41 | 71% |
| Other livestock | \$13 | \$0.05 | \$18 | \$0.07 | 40% |
| Crops | \$262 | \$0.96 | \$134 | \$0.48 | -50% |
| Miscellaneous receipts | <u>\$138</u> | <u>\$0.50</u> | <u>\$131</u> | <u>\$0.47</u> | -6% |
| Total Operating Receipts | \$6,175 | \$22.52 | \$8,216 | \$29.80 | 32% |
| ACCRUAL OPERATING EXPENSES | | | | | |
| Hired labor | \$856 | \$3.12 | \$916 | \$3.32 | 6% |
| Dairy grain & concentrate | \$1,828 | \$6.66 | \$2,173 | \$7.88 | 18% |
| Dairy roughage | \$147 | \$0.54 | \$148 | \$0.54 | 0% |
| Nondairy feed | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Professional nutritional services | \$1 | \$0.00 | \$1 | \$0.00 | NA |
| Machine hire, rent & lease | \$155 | \$0.57 | \$177 | \$0.64 | 12% |
| Machine repair & vehicle expense | \$276 | \$1.01 | \$340 | \$1.23 | 22% |
| Fuel, oil & grease | \$140 | \$0.51 | \$251 | \$0.91 | 78% |
| Replacement livestock | \$42 | \$0.15 | \$87 | \$0.32 | 113% |
| Breeding | \$56 | \$0.21 | \$69 | \$0.25 | 19% |
| Veterinary & medicine | \$150 | \$0.55 | \$157 | \$0.57 | 4% |
| Milk marketing | \$362 | \$1.32 | \$461 | \$1.67 | 27% |
| Bedding | \$90 | \$0.33 | \$103 | \$0.37 | 12% |
| Milking supplies | \$90 | \$0.33 | \$106 | \$0.38 | 15% |
| Cattle lease | \$2 | \$0.01 | \$4 | \$0.01 | 0% |
| Custom boarding | \$92 | \$0.33 | \$90 | \$0.33 | 0% |
| BST expense | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Livestock professional fees | \$19 | \$0.07 | \$19 | \$0.07 | 0% |
| Other livestock expense | \$28 | \$0.10 | \$31 | \$0.11 | 10% |
| Fertilizer & lime | \$109 | \$0.40 | \$180 | \$0.65 | 63% |
| Seeds & plants | \$103 | \$0.38 | \$115 | \$0.42 | 11% |
| Spray & other crop expense | \$57 | \$0.21 | \$65 | \$0.23 | 10% |
| Crop professional fees | \$5 | \$0.02 | \$6 | \$0.02 | 0% |
| Land, building & fence repair | \$77 | \$0.28 | \$101 | \$0.37 | 32% |
| Taxes | \$61 | \$0.22 | \$61 | \$0.22 | 0% |
| Real estate rent & lease | \$84 | \$0.31 | \$72 | \$0.26 | -16% |
| Insurance | \$39 | \$0.14 | \$50 | \$0.18 | 29% |
| Utilities | \$96 | \$0.35 | \$120 | \$0.43 | 23% |
| Interest paid | \$111 | \$0.41 | \$144 | \$0.52 | 27% |
| Other professional fees | \$22 | \$0.08 | \$27 | \$0.10 | 25% |
| Miscellaneous | <u>\$26</u> | <u>\$0.10</u> | <u>\$25</u> | <u>\$0.09</u> | -10% |
| Total Operating Expenses | \$5,126 | \$18.69 | \$6,096 | \$22.11 | 18% |
| Expansion livestock | \$33 | \$0.12 | \$38 | \$0.14 | 17% |
| Extraordinary expenses | \$0 | \$0.00 | \$0 | \$0.00 | NA |
| Machinery depreciation | \$200 | \$0.73 | \$228 | \$0.83 | 14% |
| Real estate depreciation | <u>\$184</u> | <u>\$0.67</u> | <u>\$190</u> | <u>\$0.69</u> | 3% |
| Total Expenses | \$5,543 | \$20.21 | \$6,552 | \$23.77 | 18% |
| Net Farm Income w/o Appreciation | \$633 | \$2.31 | \$1,664 | \$6.03 | 161% |

¹ Farms participating both years

NA - Percent change could not be calculated

Farm Business Chart

The Farm Business Chart is a tool that can assist in analyzing your business. The five numbers in each column represent the average of each quintile of farms included in the DFBS. You can compare your farm's data to others in the DFBS by drawing a line through or near the number in each column which most closely represents your current level of performance. Each column is sorted independently. Use this information to identify areas of opportunity in your business.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

36 New York Dairy Farms, 1,500 Cows and Greater, 2022, DFBS

| Size of Business | | | Rates of Production | | | Labor Efficiency | |
|--------------------|-------------|---------------------|-----------------------------|--------------------------|------------------------------|------------------|--------------------------------|
| Worker Equivalents | No. of Cows | Pounds of Milk Sold | Pounds of Milk Sold Per Cow | Tons of Hay Crop DM/Acre | Tons of Corn Silage Per Acre | Cows Per Worker | Pounds of Milk Sold Per Worker |
| (14) ¹ | (12) | (12) | (12) | (11) | (11) | (14) | (14) |
| 81.6 | 4,302 | 120,113,593 | 29,997 | 5.0 | 22.3 | 72.9 | 2,035,353 |
| 52.0 | 2,973 | 82,269,289 | 28,836 | 4.0 | 19.3 | 62.4 | 1,689,510 |
| 41.1 | 2,151 | 58,969,146 | 27,689 | 3.5 | 17.9 | 56.4 | 1,557,385 |
| 31.8 | 1,820 | 49,969,465 | 26,729 | 2.9 | 17.0 | 50.4 | 1,396,153 |
| 25.5 | 1,599 | 43,006,482 | 24,789 | 2.2 | 15.9 | 46.4 | 1,249,661 |

| Cost Control | | | | | | | |
|----------------------|-----------------------|-----------------------------|-------------------------|---------------------------------|------------------------------|------------------------------------|--------------------------------------|
| Grain Bought Per Cow | Grain Bought Per Cwt. | % Grain is of Milk Receipts | Machinery Costs Per Cow | Labor & Machinery Costs Per Cow | Feed & Crop Expenses Per Cow | Feed & Crop Expenses Per Cwt. Milk | Hired Labor Cost Per Wkr. Equivalent |
| (12) | (12) | (12) | (14) | (14) | (12) | (12) | (14) |
| \$1,590 | \$6.04 | 23 | \$804 | \$1,659 | \$2,052 | \$7.93 | \$48,505 |
| \$1,973 | \$7.36 | 27 | \$1,020 | \$1,909 | \$2,460 | \$9.11 | \$51,344 |
| \$2,119 | \$7.81 | 29 | \$1,112 | \$2,063 | \$2,695 | \$9.81 | \$53,778 |
| \$2,405 | \$8.37 | 31 | \$1,201 | \$2,285 | \$2,942 | \$10.25 | \$58,025 |
| \$2,648 | \$9.24 | 34 | \$1,461 | \$2,556 | \$3,227 | \$11.22 | \$64,334 |

| Value of Production | | | Profitability | | | | |
|-----------------------|------------------------|------------------------------------|-------------------------------------|---|---------------------------------|--|----------------------------------|
| Milk Receipts Per Cow | Milk Receipts Per Cwt. | Opr. Cost Milk Production Per Cwt. | Total Cost Milk Production Per Cwt. | % Rate of Return on All Capital w/o Apprec. | Net Farm Income Without Apprec. | Labor & Management Income Per Operator | Change in Net Worth With Apprec. |
| (12) | (12) | (12) | (12) | (4) | (4) | (4) | (8) |
| \$8,207 | \$28.71 | \$16.73 | \$21.32 | 17.9 | \$7,683,617 | \$2,572,350 | \$7,364,414 |
| \$7,926 | \$27.61 | \$18.07 | \$22.25 | 15.1 | \$4,727,525 | \$1,378,587 | \$4,826,500 |
| \$7,592 | \$26.99 | \$18.87 | \$23.13 | 12.3 | \$3,961,990 | \$942,423 | \$3,987,945 |
| \$7,104 | \$26.56 | \$20.66 | \$24.11 | 10.7 | \$3,180,682 | \$666,303 | \$3,024,455 |
| \$6,619 | \$25.86 | \$23.16 | \$26.28 | 8.1 | \$1,919,203 | \$399,455 | \$1,683,476 |

| Financial Efficiency | | | | | | | |
|----------------------|------------------------------|----------------------|-------------------------|---------------------|-------------------------------|----------------|--------------------------------------|
| Investment Per Cow | Machinery Investment Per Cow | Asset Turnover Ratio | Operating Expense Ratio | Debt Coverage Ratio | Planned Debt Payments Per Cow | Percent Equity | Working Capital as % of Opr. Expense |
| (14) | (14) | (14) | (14) | (10) | (10) | (7) | (7) |
| \$9,040 | \$1,130 | 1.05 | 0.65 | 31.07 | \$60 | 95 | 105 |
| \$11,382 | \$1,588 | 0.78 | 0.68 | 5.29 | \$309 | 81 | 45 |
| \$12,990 | \$1,954 | 0.71 | 0.71 | 2.99 | \$560 | 70 | 31 |
| \$14,475 | \$2,203 | 0.61 | 0.76 | 2.21 | \$734 | 61 | 22 |
| \$19,477 | \$2,834 | 0.46 | 0.84 | 0.77 | \$956 | 47 | 14 |

¹Page number of the participant's DFBS where the factor is located.

OTHER A.E.M. EXTENSION BULLETINS

| EB No | Title | Fee (if applicable) | Author(s) |
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