

June 17th, 2020

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Revised



# **Progress of the Dairy Farm Report**

## **Selected Financial and Production Factors**

**Average All Farms**

**Less Than 250 Cows**

**250 Cows to 649 Cows**

**650 Cows to 999 Cows**

**1,000 Cows to 1,449**

**Greater Than 1,450 Cows**

## **Dairy Farm Business Summary**

**New York State, 2019**

**153 Farms**

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**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  
153 New York State Dairy Farms, 2018 & 2019  
June 2020

Jason Karszes<sup>1</sup>, Lauren Hill<sup>1</sup>, and Wayne Knoblauch<sup>2</sup>

The objective of the Dairy Farm Business Summary & Analysis Program 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 2019 business year.

The Progress of the Dairy Farm Report provides averages of selected financial and production measures from 153 New York State Dairy Farms (pages 4-6) that participated in the program for both 2018 and 2019 that had submitted records by June 17th, 2020. The report is also broken down into five herd size categories to provide additional comparison reports for across different herd sizes.

- |   |             |
|---|-------------|
| 1. Farms with Less Than 250 Cows                        | Pages 7-9   |
| 2. Farms with Greater Than 250 Cows, Less Than 649 Cows | Pages 10-12 |
| 3. Farms with Greater Than 650 Cows, Less Than 999 Cows | Pages 13-15 |
| 4. Farms with Greater than 1,000 Cows, Less Than 1,449  | Pages 16-18 |
| 5. Farms with Greater Than 1,450 Cows                   | Pages 19-21 |

To utilize these reports, begin by comparing how your farm changed from 2018 to 2019 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.

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.

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**PROGRESS OF THE FARM BUSINESS**  
Same 147 New York Dairy Farms, 2018 & 2019, DFBS

SELECTED FACTORS	Average of 147 Farms		Percent Change
	2018	2019	
<b><i>Size of Business</i></b>			
Average number of cows	969	1,023	6%
Average number of heifers	824	830	1%
Milk sold, pounds	25,064,792	26,913,530	7%
Worker equivalent	20.0	20.4	2%
Total tillable acres	1,789	1,835	3%
<b><i>Rates of Production</i></b>			
Milk sold per cow, pounds	25,872	26,298	2%
Hay DM per acre, tons	3.2	3.2	0%
Corn silage per acre, tons	19	18.6	-2%
<b><i>Labor Efficiency</i></b>			
Cows per worker	48.6	50.2	3%
Milk sold per worker, pounds	1,256,381	1,321,234	5%
<b><i>Cost Control and Milk Price</i></b>			
Grain & concentrate per cwt. milk	\$5.80	\$5.67	-2%
Net milk income over purchased grain & conc. per cow	\$2,512	\$3,123	24%
Dairy feed & crop expense per cwt. milk	\$7.20	\$7.02	-3%
Labor and machinery costs per cow	\$1,696	\$1,733	2%
Hired labor costs per cwt. milk	\$2.96	\$2.96	0%
Hired labor costs per worker equivalent	\$43,340	\$45,414	5%
Operating cost of producing milk per cwt.	\$15.09	\$15.44	2%
Purchased input cost of producing milk per cwt.	\$16.72	\$17.02	2%
Total cost of producing milk per cwt.	\$18.95	\$19.16	1%
Net milk price	\$16.08	\$18.26	14%
<b><i>Capital Efficiency (average for year)</i></b>			
Farm capital per cow	\$11,684	\$11,402	-2%
Machinery and equipment per cow	\$1,800	\$1,745	-3%
Asset turnover ratio	0.43	0.52	21%
<b><i>Profitability</i></b>			
Net farm income without appreciation	\$133,645	\$645,554	383%
Net farm income without appreciation per cow	\$138	\$631	357%
Net farm income with appreciation	\$7,639	\$942,235	12235%
Net farm income with appreciation per cow	\$8	\$921	11413%
Labor & management income per operator/manager	-\$100,187	\$109,549	209%
Rate return on equity capital with appreciation	-2.4%	9.8%	508%
Rate return on equity capital without appreciation	-0.7%	5.9%	910%
Rate return on all capital with appreciation	0.0%	8.2%	NA
Rate return on all capital without appreciation	1.1%	5.6%	397%
<b><i>Financial Summary (based on market value, excluding deferred taxes)</i></b>			
Farm net worth, end year	\$7,306,096	\$7,938,361	9%
Debt to asset ratio	0.36	0.34	-6%
Farm debt per cow	\$4,075	\$3,858	-5%
Debt coverage ratio	0.92	1.71	86%

\*Farm participating both years



## RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 147 New York Dairy Farms, 2018 & 2019, DFBS

Item	2018		2019		% Change Per Cwt.
	Per Cow	Per Cwt.	Per Cow	Per Cwt.	
Average number of cows	969		1,023		6%
Cwt. of milk sold		250,648		269,135	7%
<b>ACCRUAL OPERATING RECEIPTS</b>					
Milk	\$4,463	\$17.25	\$5,106	\$19.42	13%
Dairy cattle	\$316	\$1.22	\$292	\$1.11	-9%
Dairy calves	\$23	\$0.09	\$21	\$0.08	-11%
Other livestock	\$22	\$0.09	\$10	\$0.04	-56%
Crops	\$115	\$0.45	\$49	\$0.19	-58%
Miscellaneous receipts	<u>\$169</u>	<u>\$0.65</u>	<u>\$191</u>	<u>\$0.73</u>	12%
Total Operating Receipts	\$5,110	\$19.75	\$5,669	\$21.56	9%
<b>ACCRUAL OPERATING EXPENSES</b>					
Hired labor	\$765	\$2.96	\$780	\$2.96	0%
Dairy grain & concentrate	\$1,500	\$5.80	\$1,492	\$5.67	-2%
Dairy roughage	\$91	\$0.35	\$97	\$0.37	6%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.00	\$2	\$0.01	NA
Machine hire, rent & lease	\$127	\$0.49	\$148	\$0.56	14%
Machine repair & vehicle expense	\$220	\$0.85	\$244	\$0.93	9%
Fuel, oil & grease	\$154	\$0.60	\$144	\$0.55	-8%
Replacement livestock	\$6	\$0.02	\$19	\$0.07	250%
Breeding	\$53	\$0.20	\$47	\$0.18	-10%
Veterinary & medicine	\$151	\$0.59	\$152	\$0.58	-2%
Milk marketing	\$304	\$1.18	\$305	\$1.16	-2%
Bedding	\$85	\$0.33	\$91	\$0.35	6%
Milking supplies	\$84	\$0.32	\$90	\$0.34	6%
Cattle lease	\$2	\$0.01	\$4	\$0.02	100%
Custom boarding	\$79	\$0.30	\$84	\$0.32	7%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$15	\$0.06	\$16	\$0.06	0%
Other livestock expense	\$21	\$0.08	\$24	\$0.09	13%
Fertilizer & lime	\$98	\$0.38	\$93	\$0.35	-8%
Seeds & plants	\$110	\$0.43	\$104	\$0.40	-7%
Spray & other crop expense	\$55	\$0.21	\$53	\$0.20	-5%
Crop professional fees	\$8	\$0.03	\$5	\$0.02	-33%
Land, building & fence repair	\$62	\$0.24	\$75	\$0.28	17%
Taxes	\$63	\$0.24	\$63	\$0.24	0%
Real estate rent & lease	\$84	\$0.32	\$81	\$0.31	-3%
Insurance	\$44	\$0.17	\$45	\$0.17	0%
Utilities	\$95	\$0.37	\$85	\$0.32	-14%
Interest paid	\$188	\$0.73	\$199	\$0.76	4%
Other professional fees	\$26	\$0.10	-\$1	\$0.11	10%
Miscellaneous	<u>\$24</u>	<u>\$0.09</u>	<u>\$28</u>	<u>\$0.11</u>	22%
Total Operating Expenses	\$4,516	\$17.46	\$4,597	\$17.48	0%
Expansion livestock	\$35	\$0.13	\$28	\$0.10	-23%
Extraordinary expenses	\$3	\$0.01	\$2	\$0.01	0%
Machinery depreciation	\$228	\$0.88	\$224	\$0.85	-3%
Real estate depreciation	<u>\$190</u>	<u>\$0.74</u>	<u>\$189</u>	<u>\$0.72</u>	-3%
Total Expenses	\$4,972	\$19.22	\$5,040	\$19.16	0%
Net Farm Income w/o Appreciation	\$138	\$0.53	\$631	\$2.40	353%

NA - Percent change could not be calculated

## Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

### FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

153 New York Dairy Farms, 2019, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14)*	(12)	(12)	(12)	(11)	(11)	(14)	(14)
45.3	2,374	63,362,756	28,406	4.6	22.3	64.8	1,670,798
24.7	1,240	33,650,380	27,117	3.7	20.0	52.4	1,370,771
17.4	842	21,504,570	26,035	3.1	18.7	47.3	1,218,702
9.6	458	11,145,003	24,728	2.5	17.2	41.8	1,052,037
3.8	139	3,116,684	19,773	1.7	11.4	30.8	696,072

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/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)
\$1,057	\$4.64	24	\$600	\$1,376	\$1,369	\$5.88	\$24,182
\$1,338	\$5.31	27	\$788	\$1,681	\$1,635	\$6.71	\$39,397
\$1,466	\$5.83	30	\$889	\$1,836	\$1,824	\$7.19	\$42,415
\$1,612	\$6.22	32	\$1,007	\$2,004	\$1,994	\$7.73	\$45,635
\$1,829	\$7.05	36	\$1,345	\$2,552	\$2,260	\$8.69	\$52,525

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)
\$5,606	\$21.05	\$13.28	\$17.64	9.3	\$1,989,484	\$535,465	\$1,911,635
\$5,263	\$19.70	\$14.85	\$18.94	6.1	\$741,765	\$141,619	\$771,576
\$5,030	\$19.36	\$15.62	\$19.91	4.2	\$371,723	\$41,251	\$407,179
\$4,734	\$19.04	\$16.57	\$21.25	2.1	\$154,399	-\$9,829	\$126,110
\$3,930	\$18.53	\$18.72	\$26.70	-3.9	-\$58,130	-\$128,350	-\$50,491

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)	(12)	(7)	(7)
\$8,060	\$878	0.77	0.70	10.41	\$61	95	59
\$10,383	\$1,527	0.57	0.75	1.93	\$363	77	30
\$11,850	\$1,980	0.50	0.78	1.35	\$591	65	20
\$13,498	\$2,597	0.42	0.82	0.95	\$775	57	12
\$18,839	\$4,152	0.29	0.91	0.22	\$1,015	39	-9

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

## PROGRESS OF THE FARM BUSINESS

Same 29 New York Dairy Farms, Less Than 250 Cows, 2018 & 2019, DFBS

SELECTED FACTORS	Average of 29 Farms		Percent Change
	2018	2019	
<b><i>Size of Business</i></b>			
Average number of cows	132	134	2%
Average number of heifers	115	117	2%
Milk sold, pounds	3,055,072	3,127,478	2%
Worker equivalent	4.2	4.0	-5%
Total tillable acres	372	376	1%
<b><i>Rates of Production</i></b>			
Milk sold per cow, pounds	23,223	23,388	1%
Hay DM per acre, tons	2.6	2.6	0%
Corn silage per acre, tons	19	17.7	-7%
<b><i>Labor Efficiency</i></b>			
Cows per worker	31.1	33.3	7%
Milk sold per worker, pounds	720,536	777,980	8%
<b><i>Cost Control and Milk Price</i></b>			
Grain & concentrate per cwt. milk	\$6.08	\$6.26	3%
Net milk income over purchased grain & conc. per cow	\$2,118	\$2,611	23%
Dairy feed & crop expense per cwt. milk	\$7.50	\$7.67	2%
Labor and machinery costs per cow	\$2,358	\$2,261	-4%
Hired labor costs per cwt. milk	\$1.85	\$1.69	-9%
Hired labor costs per worker equivalent	\$38,777	\$37,939	-2%
Operating cost of producing milk per cwt.	\$15.49	\$15.67	1%
Purchased input cost of producing milk per cwt.	\$17.72	\$17.80	0%
Total cost of producing milk per cwt.	\$23.54	\$23.51	0%
Net milk price	\$16.07	\$18.29	14%
<b><i>Capital Efficiency (average for year)</i></b>			
Farm capital per cow	\$15,226	\$15,326	1%
Machinery and equipment per cow	\$3,432	\$3,338	-3%
Asset turnover ratio	0.29	0.35	21%
<b><i>Profitability</i></b>			
Net farm income without appreciation	-\$12,634	\$54,646	533%
Net farm income without appreciation per cow	-\$96	\$409	526%
Net farm income with appreciation	-\$42,062	\$77,102	283%
Net farm income with appreciation per cow	-\$320	\$577	280%
Labor & management income per operator/manager	-\$48,982	-\$15,710	68%
Rate return on equity capital with appreciation	-10.5%	-1.9%	82%
Rate return on equity capital without appreciation	-8.4%	-3.4%	60%
Rate return on all capital with appreciation	-6.1%	0.0%	100%
Rate return on all capital without appreciation	-4.7%	-1.1%	77%
<b><i>Financial Summary (based on market value, excluding deferred taxes)</i></b>			
Farm net worth, end year	\$1,392,259	\$1,500,888	8%
Debt to asset ratio	0.29	0.27	-7%
Farm debt per cow	\$4,383	\$4,155	-5%
Debt coverage ratio	0.56	1.43	155%

\*Farm participating both years

## RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 29 New York Dairy Farms, Less Than 250 Cows, 2018 & 2019, DFBS

Item	2018		2019		% Change Per Cwt.
	Per Cow	Per Cwt.	Per Cow	Per Cwt.	
Average number of cows	132		134		2%
Cwt. of milk sold		30,551		31,275	2%
<b>ACCRUAL OPERATING RECEIPTS</b>					
Milk	\$4,018	\$17.30	\$4,571	\$19.54	13%
Dairy cattle	\$219	\$0.94	\$233	\$1.00	6%
Dairy calves	\$44	\$0.19	\$23	\$0.10	-47%
Other livestock	-\$4	-\$0.02	\$20	\$0.09	550%
Crops	\$166	\$0.71	\$112	\$0.48	-32%
Miscellaneous receipts	<u>\$196</u>	<u>\$0.84</u>	<u>\$174</u>	<u>\$0.74</u>	-12%
Total Operating Receipts	\$4,639	\$19.97	\$5,133	\$21.95	10%
<b>ACCRUAL OPERATING EXPENSES</b>					
Hired labor	\$430	\$1.85	\$396	\$1.69	-9%
Dairy grain & concentrate	\$1,413	\$6.08	\$1,465	\$6.26	3%
Dairy roughage	\$39	\$0.17	\$32	\$0.14	-18%
Nondairy feed	\$4	\$0.02	\$6	\$0.03	50%
Professional nutritional services	\$0	\$0.00	\$0	\$0.00	NA
Machine hire, rent & lease	\$124	\$0.53	\$115	\$0.49	-8%
Machine repair & vehicle expense	\$277	\$1.19	\$299	\$1.28	8%
Fuel, oil & grease	\$186	\$0.80	\$163	\$0.70	-13%
Replacement livestock	\$15	\$0.06	\$10	\$0.04	-33%
Breeding	\$61	\$0.26	\$57	\$0.24	-8%
Veterinary & medicine	\$131	\$0.57	\$129	\$0.55	-4%
Milk marketing	\$286	\$1.23	\$294	\$1.26	2%
Bedding	\$87	\$0.38	\$97	\$0.41	8%
Milking supplies	\$101	\$0.43	\$98	\$0.42	-2%
Cattle lease	\$0	\$0.00	\$0	\$0.00	NA
Custom boarding	\$0	\$0.00	\$4	\$0.02	NA
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$37	\$0.16	\$18	\$0.07	-56%
Other livestock expense	\$51	\$0.22	\$52	\$0.22	0%
Fertilizer & lime	\$105	\$0.45	\$109	\$0.47	4%
Seeds & plants	\$103	\$0.44	\$110	\$0.47	7%
Spray & other crop expense	\$76	\$0.33	\$68	\$0.29	-12%
Crop professional fees	\$6	\$0.03	\$9	\$0.04	33%
Land, building & fence repair	\$46	\$0.20	\$56	\$0.24	20%
Taxes	\$124	\$0.53	\$130	\$0.55	4%
Real estate rent & lease	\$46	\$0.20	\$54	\$0.23	15%
Insurance	\$83	\$0.36	\$84	\$0.36	0%
Utilities	\$124	\$0.53	\$114	\$0.49	-8%
Interest paid	\$198	\$0.85	\$208	\$0.89	5%
Other professional fees	\$21	\$0.09	-\$1	\$0.09	0%
Miscellaneous	<u>\$43</u>	<u>\$0.18</u>	<u>\$30</u>	<u>\$0.13</u>	-28%
Total Operating Expenses	\$4,219	\$18.16	\$4,227	\$18.07	0%
Expansion livestock	\$0	\$0.00	\$0	\$0.00	NA
Extraordinary expenses	\$7	\$0.03	\$0	\$0.00	-100%
Machinery depreciation	\$366	\$1.58	\$350	\$1.50	-5%
Real estate depreciation	<u>\$143</u>	<u>\$0.62</u>	<u>\$148</u>	<u>\$0.63</u>	2%
Total Expenses	\$4,735	\$20.39	\$4,725	\$20.20	-1%
Net Farm Income w/o Appreciation	-\$96	-\$0.41	\$409	\$1.75	527%

NA - Percent change could not be calculated



## Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

### FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

30 New York Dairy Farms, Less Than 250 Cows, 2019, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14)*	(12)	(12)	(12)	(11)	(11)	(14)	(14)
6.8	232	5,805,460	27,391	4.4	22.1	51.7	1,218,604
4.7	168	3,928,988	24,672	3.1	19.5	39.0	947,250
3.6	131	3,163,804	22,486	2.4	18.3	34.8	759,779
2.8	89	1,835,520	20,917	1.9	15.0	26.7	590,838
2.0	52	905,643	15,510	1.5	9.8	20.2	363,954

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/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)
\$972	\$4.78	25	\$640	\$1,622	\$1,209	\$6.16	\$0
\$1,196	\$5.85	29	\$819	\$1,931	\$1,542	\$7.28	\$13,792
\$1,368	\$6.37	32	\$1,020	\$2,086	\$1,714	\$7.79	\$32,828
\$1,570	\$6.79	35	\$1,255	\$2,638	\$1,910	\$8.44	\$38,536
\$1,883	\$7.93	40	\$1,760	\$3,395	\$2,212	\$9.33	\$47,615

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)
\$5,291	\$21.43	\$13.32	\$19.01	5.5	\$180,132	\$62,516	\$165,543
\$4,786	\$20.00	\$14.73	\$22.00	0.5	\$88,681	\$2,023	\$67,565
\$4,404	\$19.53	\$16.06	\$24.92	-2.4	\$41,532	-\$20,853	\$22,829
\$4,196	\$18.97	\$17.18	\$27.70	-4.5	\$6,848	-\$44,125	-\$4,137
\$3,105	\$18.43	\$20.22	\$34.53	-9.9	-\$56,129	-\$93,814	-\$42,986

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)	(12)	(7)	(7)
\$9,936	\$1,576	0.53	0.68	11.62	\$57	98	48
\$11,568	\$2,203	0.44	0.75	1.58	\$337	82	30
\$13,137	\$2,875	0.36	0.78	1.16	\$540	70	20
\$17,357	\$4,255	0.26	0.83	0.81	\$812	64	15
\$24,958	\$6,308	0.21	0.99	-0.11	\$1,045	54	2

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

## PROGRESS OF THE FARM BUSINESS

Same 28 New York Dairy Farms, 250 to 649 Cows, 2018 & 2019, DFBS

SELECTED FACTORS	Average of 28 Farms		Percent Change
	2018	2019	
<b><i>Size of Business</i></b>			
Average number of cows	436	455	4%
Average number of heifers	351	348	-1%
Milk sold, pounds	10,790,590	11,277,700	5%
Worker equivalent	9.5	9.9	4%
Total tillable acres	961	971	1%
<b><i>Rates of Production</i></b>			
Milk sold per cow, pounds	24,739	24,792	0%
Hay DM per acre, tons	3.3	3.1	-6%
Corn silage per acre, tons	18.2	18.3	1%
<b><i>Labor Efficiency</i></b>			
Cows per worker	45.8	46.1	1%
Milk sold per worker, pounds	1,132,276	1,141,468	1%
<b><i>Cost Control and Milk Price</i></b>			
Grain & concentrate per cwt. milk	\$5.69	\$5.57	-2%
Net milk income over purchased grain & conc. per cow	\$2,514	\$3,127	24%
Dairy feed & crop expense per cwt. milk	\$7.17	\$7.03	-2%
Labor and machinery costs per cow	\$1,848	\$1,884	2%
Hired labor costs per cwt. milk	\$2.76	\$2.82	2%
Hired labor costs per worker equivalent	\$41,951	\$42,196	1%
Operating cost of producing milk per cwt.	\$15.56	\$16.19	4%
Purchased input cost of producing milk per cwt.	\$17.53	\$18.15	4%
Total cost of producing milk per cwt.	\$20.51	\$21.04	3%
Net milk price	\$15.85	\$18.18	15%
<b><i>Capital Efficiency (average for year)</i></b>			
Farm capital per cow	\$12,633	\$12,325	-2%
Machinery and equipment per cow	\$2,423	\$2,385	-2%
Asset turnover ratio	0.36	0.46	28%
<b><i>Profitability</i></b>			
Net farm income without appreciation	-\$52,261	\$139,705	367%
Net farm income without appreciation per cow	-\$120	\$307	356%
Net farm income with appreciation	-\$117,077	\$342,182	392%
Net farm income with appreciation per cow	-\$268	\$752	381%
Labor & management income per operator/manager	-\$121,428	-\$24,258	80%
Rate return on equity capital with appreciation	-6.6%	5.4%	182%
Rate return on equity capital without appreciation	-4.9%	0.0%	101%
Rate return on all capital with appreciation	-3.1%	5.4%	274%
Rate return on all capital without appreciation	-1.9%	1.8%	194%
<b><i>Financial Summary (based on market value, excluding deferred taxes)</i></b>			
Farm net worth, end year	\$3,679,341	\$3,843,118	4%
Debt to asset ratio	0.33	0.33	0%
Farm debt per cow	\$4,152	\$4,018	-3%
Debt coverage ratio	0.68	1.38	103%

\*Farm participating both years

## RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 28 New York Dairy Farms, 250 to 649 Cows, 2018 & 2019, DFBS

Item	2018		2019		% Change Per Cwt.
	Per Cow	Per Cwt.	Per Cow	Per Cwt.	
Average number of cows	436		455		4%
Cwt. of milk sold		107,906		112,777	5%
<b>ACCRUAL OPERATING RECEIPTS</b>					
Milk	\$4,216	\$17.04	\$4,805	\$19.38	14%
Dairy cattle	\$260	\$1.05	\$250	\$1.01	-4%
Dairy calves	\$12	\$0.05	\$25	\$0.10	100%
Other livestock	\$13	\$0.05	\$10	\$0.04	-20%
Crops	\$90	\$0.36	\$17	\$0.07	-81%
Miscellaneous receipts	<u>\$123</u>	<u>\$0.50</u>	<u>\$145</u>	<u>\$0.58</u>	16%
Total Operating Receipts	\$4,713	\$19.05	\$5,250	\$21.18	11%
<b>ACCRUAL OPERATING EXPENSES</b>					
Hired labor	\$682	\$2.76	\$698	\$2.82	2%
Dairy grain & concentrate	\$1,408	\$5.69	\$1,382	\$5.57	-2%
Dairy roughage	\$64	\$0.26	\$56	\$0.23	-12%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$2	\$0.01	\$7	\$0.03	200%
Machine hire, rent & lease	\$175	\$0.71	\$188	\$0.76	7%
Machine repair & vehicle expense	\$215	\$0.87	\$251	\$1.01	16%
Fuel, oil & grease	\$167	\$0.67	\$154	\$0.62	-7%
Replacement livestock	\$20	\$0.08	\$63	\$0.25	213%
Breeding	\$54	\$0.22	\$49	\$0.20	-9%
Veterinary & medicine	\$145	\$0.58	\$142	\$0.57	-2%
Milk marketing	\$296	\$1.20	\$299	\$1.21	1%
Bedding	\$97	\$0.39	\$95	\$0.38	-3%
Milking supplies	\$86	\$0.35	\$73	\$0.29	-17%
Cattle lease	\$3	\$0.01	\$3	\$0.01	0%
Custom boarding	\$15	\$0.06	\$17	\$0.07	17%
BST expense	\$1	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$17	\$0.07	\$19	\$0.08	14%
Other livestock expense	\$24	\$0.10	\$29	\$0.12	20%
Fertilizer & lime	\$103	\$0.42	\$115	\$0.47	12%
Seeds & plants	\$126	\$0.51	\$126	\$0.51	0%
Spray & other crop expense	\$62	\$0.25	\$52	\$0.21	-16%
Crop professional fees	\$10	\$0.04	\$11	\$0.04	0%
Land, building & fence repair	\$47	\$0.19	\$57	\$0.23	21%
Taxes	\$69	\$0.28	\$69	\$0.28	0%
Real estate rent & lease	\$84	\$0.34	\$77	\$0.31	-9%
Insurance	\$54	\$0.22	\$55	\$0.22	0%
Utilities	\$89	\$0.36	\$83	\$0.34	-6%
Interest paid	\$185	\$0.75	\$214	\$0.86	15%
Other professional fees	\$22	\$0.09	-\$1	\$0.12	33%
Miscellaneous	<u>\$19</u>	<u>\$0.08</u>	<u>\$20</u>	<u>\$0.08</u>	0%
Total Operating Expenses	\$4,340	\$17.54	\$4,436	\$17.89	2%
Expansion livestock	\$4	\$0.02	\$21	\$0.09	350%
Extraordinary expenses	\$0	\$0.00	\$0	\$0.00	NA
Machinery depreciation	\$274	\$1.11	\$268	\$1.08	-3%
Real estate depreciation	<u>\$214</u>	<u>\$0.86</u>	<u>\$218</u>	<u>\$0.88</u>	2%
Total Expenses	\$4,832	\$19.53	\$4,943	\$19.94	2%
Net Farm Income w/o Appreciation	-\$120	-\$0.48	\$307	\$1.24	358%

NA - Percent change could not be calculated

## Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

### FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

31 New York Dairy Farms, 250 to 649 Cows, 2019, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14)*	(12)	(12)	(12)	(11)	(11)	(14)	(14)
14.7	585	14,953,083	27,631	4.5	22.2	66.7	1,569,806
11.5	533	13,365,650	26,394	3.6	20.1	51.2	1,261,760
9.5	481	12,219,936	25,728	3.1	19.0	45.0	1,108,247
7.7	376	9,341,360	24,620	2.5	17.5	40.8	993,348
6.2	279	6,175,376	20,224	2.1	12.3	34.9	869,389

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/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)
\$971	\$4.49	23	\$646	\$1,443	\$1,311	\$6.02	\$34,823
\$1,317	\$5.28	27	\$826	\$1,792	\$1,616	\$6.70	\$38,904
\$1,435	\$5.61	29	\$917	\$1,918	\$1,795	\$7.08	\$41,841
\$1,564	\$6.10	31	\$1,086	\$2,068	\$1,977	\$7.71	\$44,535
\$1,843	\$7.01	37	\$1,346	\$2,221	\$2,307	\$8.63	\$50,231

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)
\$5,447	\$20.27	\$13.92	\$19.42	6.5	\$429,906	\$110,487	\$746,904
\$5,105	\$19.83	\$15.37	\$20.40	3.4	\$247,867	\$32,154	\$294,927
\$5,007	\$19.50	\$15.90	\$20.96	2.5	\$199,709	\$10,606	\$155,436
\$4,737	\$19.19	\$16.78	\$21.58	1.2	\$87,848	-\$65,372	\$96,765
\$3,893	\$18.57	\$18.86	\$23.05	-2.5	-\$159,233	-\$215,343	-\$177,604

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)	(12)	(7)	(7)
\$8,416	\$1,004	0.67	0.71	6.26	\$39	96	53
\$11,022	\$1,857	0.55	0.76	2.14	\$305	80	32
\$12,562	\$2,486	0.47	0.79	1.29	\$567	67	23
\$13,726	\$2,865	0.42	0.83	0.88	\$717	57	16
\$17,290	\$3,831	0.33	0.95	0.18	\$979	43	-18

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

## PROGRESS OF THE FARM BUSINESS

Same 28 New York Dairy Farms, 650 to 999 Cows, 2018 & 2019, DFBS

SELECTED FACTORS	Average of 28 Farms		Percent Change
	2018	2019	
<b><i>Size of Business</i></b>			
Average number of cows	802	836	4%
Average number of heifers	716	726	1%
Milk sold, pounds	20,162,789	21,044,684	4%
Worker equivalent	16.9	17.2	2%
Total tillable acres	1,672	1,704	2%
<b><i>Rates of Production</i></b>			
Milk sold per cow, pounds	25,146	25,181	0%
Hay DM per acre, tons	2.9	3.1	7%
Corn silage per acre, tons	19.2	18.7	-3%
<b><i>Labor Efficiency</i></b>			
Cows per worker	47.4	48.7	3%
Milk sold per worker, pounds	1,192,359	1,224,953	3%
<b><i>Cost Control and Milk Price</i></b>			
Grain & concentrate per cwt. milk	\$6.06	\$5.89	-3%
Net milk income over purchased grain & conc. per cow	\$2,569	\$3,172	23%
Dairy feed & crop expense per cwt. milk	\$7.48	\$7.27	-3%
Labor and machinery costs per cow	\$1,722	\$1,777	3%
Hired labor costs per cwt. milk	\$2.76	\$2.90	5%
Hired labor costs per worker equivalent	\$40,284	\$43,119	7%
Operating cost of producing milk per cwt.	\$15.51	\$15.61	1%
Purchased input cost of producing milk per cwt.	\$17.09	\$17.23	1%
Total cost of producing milk per cwt.	\$19.58	\$19.66	0%
Net milk price	\$16.32	\$18.52	13%
<b><i>Capital Efficiency (average for year)</i></b>			
Farm capital per cow	\$11,687	\$11,526	-1%
Machinery and equipment per cow	\$1,926	\$1,925	0%
Asset turnover ratio	0.42	0.52	24%
<b><i>Profitability</i></b>			
Net farm income without appreciation	\$71,761	\$509,084	609%
Net farm income without appreciation per cow	\$90	\$609	577%
Net farm income with appreciation	-\$60,616	\$816,660	1447%
Net farm income with appreciation per cow	-\$76	\$977	1386%
Labor & management income per operator/manager	-\$86,754	\$71,255	182%
Rate return on equity capital with appreciation	-4.1%	9.8%	339%
Rate return on equity capital without appreciation	-2.0%	4.9%	348%
Rate return on all capital with appreciation	-1.2%	8.1%	775%
Rate return on all capital without appreciation	0.2%	4.9%	1880%
<b><i>Financial Summary (based on market value, excluding deferred taxes)</i></b>			
Farm net worth, end year	\$6,038,393	\$6,624,404	10%
Debt to asset ratio	0.35	0.33	-6%
Farm debt per cow	\$3,980	\$3,869	-3%
Debt coverage ratio	0.71	1.63	130%

\*Farm participating both years

## RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 28 New York Dairy Farms, 650 to 999 Cows, 2018 & 2019, DFBS

Item	2018		2019		% Change Per Cwt.
	Per Cow	Per Cwt.	Per Cow	Per Cwt.	
Average number of cows	802		836		4%
Cwt. of milk sold		201,628		210,447	4%
<b>ACCRUAL OPERATING RECEIPTS</b>					
Milk	\$4,387	\$17.45	\$4,947	\$19.64	13%
Dairy cattle	\$303	\$1.21	\$278	\$1.10	-9%
Dairy calves	\$22	\$0.09	\$22	\$0.09	0%
Other livestock	\$56	\$0.22	\$15	\$0.06	-73%
Crops	\$86	\$0.34	\$111	\$0.44	29%
Miscellaneous receipts	<u>\$214</u>	<u>\$0.85</u>	<u>\$246</u>	<u>\$0.98</u>	15%
Total Operating Receipts	\$5,069	\$20.16	\$5,618	\$22.31	11%
<b>ACCRUAL OPERATING EXPENSES</b>					
Hired labor	\$694	\$2.76	\$731	\$2.90	5%
Dairy grain & concentrate	\$1,523	\$6.06	\$1,483	\$5.89	-3%
Dairy roughage	\$64	\$0.26	\$67	\$0.27	4%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.00	\$1	\$0.00	NA
Machine hire, rent & lease	\$186	\$0.74	\$189	\$0.75	1%
Machine repair & vehicle expense	\$213	\$0.85	\$237	\$0.94	11%
Fuel, oil & grease	\$154	\$0.61	\$141	\$0.56	-8%
Replacement livestock	\$1	\$0.00	\$2	\$0.01	NA
Breeding	\$55	\$0.22	\$51	\$0.20	-9%
Veterinary & medicine	\$150	\$0.60	\$160	\$0.64	7%
Milk marketing	\$282	\$1.12	\$282	\$1.12	0%
Bedding	\$100	\$0.40	\$103	\$0.41	2%
Milking supplies	\$89	\$0.35	\$97	\$0.38	9%
Cattle lease	\$1	\$0.01	\$2	\$0.01	0%
Custom boarding	\$104	\$0.42	\$110	\$0.44	5%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$20	\$0.08	\$22	\$0.09	13%
Other livestock expense	\$27	\$0.11	\$23	\$0.09	-18%
Fertilizer & lime	\$113	\$0.45	\$109	\$0.43	-4%
Seeds & plants	\$105	\$0.42	\$107	\$0.42	0%
Spray & other crop expense	\$59	\$0.23	\$60	\$0.24	4%
Crop professional fees	\$17	\$0.07	\$6	\$0.02	-71%
Land, building & fence repair	\$62	\$0.25	\$70	\$0.28	12%
Taxes	\$68	\$0.27	\$64	\$0.25	-7%
Real estate rent & lease	\$107	\$0.42	\$102	\$0.41	-2%
Insurance	\$44	\$0.18	\$49	\$0.19	6%
Utilities	\$90	\$0.36	\$82	\$0.33	-8%
Interest paid	\$182	\$0.72	\$187	\$0.74	3%
Other professional fees	\$23	\$0.09	-\$1	\$0.13	44%
Miscellaneous	<u>\$29</u>	<u>\$0.12</u>	<u>\$27</u>	<u>\$0.11</u>	-8%
Total Operating Expenses	\$4,565	\$18.15	\$4,596	\$18.25	1%
Expansion livestock	\$18	\$0.07	\$6	\$0.02	-71%
Extraordinary expenses	\$5	\$0.02	\$0	\$0.00	-100%
Machinery depreciation	\$229	\$0.91	\$240	\$0.95	4%
Real estate depreciation	<u>\$162</u>	<u>\$0.65</u>	<u>\$166</u>	<u>\$0.66</u>	2%
Total Expenses	\$4,979	\$19.80	\$5,008	\$19.88	0%
Net Farm Income w/o Appreciation	\$89	\$0.36	\$609	\$2.42	572%

NA - Percent change could not be calculated

## Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

### FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

30 New York Dairy Farms, 650 to 999 Cows, 2019, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14)*	(12)	(12)	(12)	(11)	(11)	(14)	(14)
21.7	985	26,086,514	28,277	4.8	21.5	62.8	1,541,507
19.5	906	23,773,488	27,115	3.5	20.0	52.5	1,329,281
17.5	816	21,063,664	25,743	3.0	18.9	48.2	1,251,486
15.3	746	18,077,766	24,356	2.5	17.0	45.3	1,145,914
11.7	673	14,704,982	19,714	1.7	10.4	39.0	887,592

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/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)
\$1,057	\$4.74	24	\$593	\$1,298	\$1,392	\$6.01	\$38,548
\$1,345	\$5.38	28	\$794	\$1,669	\$1,623	\$6.80	\$39,647
\$1,417	\$5.97	30	\$900	\$1,794	\$1,770	\$7.24	\$41,331
\$1,615	\$6.18	32	\$1,042	\$1,921	\$1,961	\$7.57	\$44,199
\$1,838	\$6.70	34	\$1,237	\$2,278	\$2,279	\$8.56	\$51,480

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)
\$5,709	\$22.20	\$13.11	\$17.73	8.8	\$952,460	\$305,164	\$1,039,256
\$5,218	\$19.67	\$14.79	\$19.03	6.0	\$598,804	\$118,355	\$708,616
\$4,924	\$19.31	\$15.49	\$19.48	4.9	\$487,518	\$73,070	\$556,846
\$4,696	\$19.05	\$16.65	\$20.51	3.9	\$352,851	\$23,808	\$401,452
\$4,088	\$18.66	\$18.53	\$22.80	1.5	\$117,678	-\$49,749	\$98,679

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)	(12)	(7)	(7)
\$7,228	\$801	0.94	0.71	23.31	\$45	87	43
\$10,648	\$1,407	0.56	0.76	1.99	\$340	74	28
\$11,809	\$1,937	0.51	0.78	1.40	\$639	66	20
\$13,368	\$2,337	0.45	0.80	1.16	\$768	58	9
\$16,820	\$3,312	0.36	0.87	0.71	\$919	32	-26

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

## PROGRESS OF THE FARM BUSINESS

Same 31 New York Dairy Farms, 1,000 to 1,449 Cows, 2018 & 2019, DFBS

SELECTED FACTORS	Average of 31 Farms		Percent Change
	2018	2019	
<b><i>Size of Business</i></b>			
Average number of cows	1,163	1,218	5%
Average number of heifers	986	979	-1%
Milk sold, pounds	31,128,231	32,914,019	6%
Worker equivalent	24.2	24.8	2%
Total tillable acres	2,055	2,106	2%
<b><i>Rates of Production</i></b>			
Milk sold per cow, pounds	26,768	27,024	1%
Hay DM per acre, tons	3.3	3.3	0%
Corn silage per acre, tons	19.2	18.4	-4%
<b><i>Labor Efficiency</i></b>			
Cows per worker	48.1	49.2	2%
Milk sold per worker, pounds	1,287,354	1,329,322	3%
<b><i>Cost Control and Milk Price</i></b>			
Grain & concentrate per cwt. milk	\$5.94	\$5.74	-3%
Net milk income over purchased grain & conc. per cow	\$2,712	\$3,384	25%
Dairy feed & crop expense per cwt. milk	\$7.33	\$7.18	-2%
Labor and machinery costs per cow	\$1,703	\$1,747	3%
Hired labor costs per cwt. milk	\$3.07	\$3.10	1%
Hired labor costs per worker equivalent	\$43,744	\$45,581	4%
Operating cost of producing milk per cwt.	\$15.46	\$15.97	3%
Purchased input cost of producing milk per cwt.	\$16.99	\$17.50	3%
Total cost of producing milk per cwt.	\$18.80	\$19.28	3%
Net milk price	\$16.08	\$18.27	14%
<b><i>Capital Efficiency (average for year)</i></b>			
Farm capital per cow	\$11,236	\$11,000	-2%
Machinery and equipment per cow	\$1,720	\$1,686	-2%
Asset turnover ratio	0.46	0.55	20%
<b><i>Profitability</i></b>			
Net farm income without appreciation	\$94,193	\$637,176	576%
Net farm income without appreciation per cow	\$81	\$523	546%
Net farm income with appreciation	-\$22,676	\$949,026	4285%
Net farm income with appreciation per cow	-\$20	\$779	3995%
Labor & management income per operator/manager	-\$138,217	\$112,865	182%
Rate return on equity capital with appreciation	-2.6%	9.5%	465%
Rate return on equity capital without appreciation	-1.0%	5.6%	636%
Rate return on all capital with appreciation	0.3%	7.7%	2467%
Rate return on all capital without appreciation	1.2%	5.4%	333%
<b><i>Financial Summary (based on market value, excluding deferred taxes)</i></b>			
Farm net worth, end year	\$7,681,713	\$8,276,186	8%
Debt to asset ratio	0.41	0.40	-2%
Farm debt per cow	\$4,524	\$4,355	-4%
Debt coverage ratio	0.8	1.37	71%

\*Farm participating both years



## RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 31 New York Dairy Farms, 1,000 to 1,449 Cows, 2018 & 2019, DFBS

Item	2018		2019		% Change Per Cwt.
	Per Cow	Per Cwt.	Per Cow	Per Cwt.	
Average number of cows	1,163		1,218		5%
Cwt. of milk sold		311,282		329,140	6%
<b>ACCRUAL OPERATING RECEIPTS</b>					
Milk	\$4,629	\$17.29	\$5,252	\$19.43	12%
Dairy cattle	\$287	\$1.07	\$282	\$1.04	-3%
Dairy calves	\$29	\$0.11	\$26	\$0.10	-9%
Other livestock	\$27	\$0.10	\$23	\$0.08	-20%
Crops	\$118	\$0.44	\$27	\$0.10	-77%
Miscellaneous receipts	<u>\$154</u>	<u>\$0.57</u>	<u>\$183</u>	<u>\$0.68</u>	19%
Total Operating Receipts	\$5,244	\$19.59	\$5,792	\$21.43	9%
<b>ACCRUAL OPERATING EXPENSES</b>					
Hired labor	\$823	\$3.07	\$839	\$3.10	1%
Dairy grain & concentrate	\$1,591	\$5.94	\$1,552	\$5.74	-3%
Dairy roughage	\$103	\$0.39	\$123	\$0.45	15%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.00	\$2	\$0.01	NA
Machine hire, rent & lease	\$116	\$0.43	\$144	\$0.53	23%
Machine repair & vehicle expense	\$225	\$0.84	\$238	\$0.88	5%
Fuel, oil & grease	\$159	\$0.59	\$151	\$0.56	-5%
Replacement livestock	\$1	\$0.01	\$11	\$0.04	300%
Breeding	\$43	\$0.16	\$40	\$0.15	-6%
Veterinary & medicine	\$157	\$0.59	\$156	\$0.58	-2%
Milk marketing	\$324	\$1.21	\$315	\$1.17	-3%
Bedding	\$92	\$0.34	\$99	\$0.36	6%
Milking supplies	\$87	\$0.33	\$94	\$0.35	6%
Cattle lease	\$0	\$0.00	\$0	\$0.00	NA
Custom boarding	\$96	\$0.36	\$96	\$0.35	-3%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$14	\$0.05	\$14	\$0.05	0%
Other livestock expense	\$17	\$0.06	\$25	\$0.09	50%
Fertilizer & lime	\$104	\$0.39	\$93	\$0.34	-13%
Seeds & plants	\$108	\$0.40	\$114	\$0.42	5%
Spray & other crop expense	\$44	\$0.17	\$53	\$0.20	18%
Crop professional fees	\$10	\$0.04	\$5	\$0.02	-50%
Land, building & fence repair	\$66	\$0.25	\$83	\$0.31	24%
Taxes	\$55	\$0.21	\$58	\$0.21	0%
Real estate rent & lease	\$93	\$0.35	\$103	\$0.38	9%
Insurance	\$43	\$0.16	\$42	\$0.16	0%
Utilities	\$102	\$0.38	\$92	\$0.34	-11%
Interest paid	\$209	\$0.78	\$220	\$0.81	4%
Other professional fees	\$24	\$0.09	-\$1	\$0.11	22%
Miscellaneous	<u>\$26</u>	<u>\$0.10</u>	<u>\$34</u>	<u>\$0.12</u>	20%
Total Operating Expenses	\$4,736	\$17.69	\$4,823	\$17.85	1%
Expansion livestock	\$17	\$0.06	\$32	\$0.12	100%
Extraordinary expenses	\$2	\$0.01	\$6	\$0.02	100%
Machinery depreciation	\$217	\$0.81	\$214	\$0.79	-2%
Real estate depreciation	<u>\$191</u>	<u>\$0.71</u>	<u>\$193</u>	<u>\$0.72</u>	1%
Total Expenses	\$5,163	\$19.28	\$5,268	\$19.50	1%
<b>Net Farm Income w/o Appreciation</b>	<b>\$81</b>	<b>\$0.30</b>	<b>\$523</b>	<b>\$1.94</b>	<b>547%</b>

NA - Percent change could not be calculated

## Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

### FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

31 New York Dairy Farms, 1,000 to 1,449 Cows, 2019, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14)*	(12)	(12)	(12)	(11)	(11)	(14)	(14)
32.2	1,414	38,292,823	28,466	4.5	22.4	67.7	1,821,005
26.4	1,329	35,849,034	27,888	3.9	20.1	52.7	1,473,502
24.8	1,232	33,336,609	27,305	3.5	18.7	49.5	1,316,702
22.8	1,105	30,285,284	26,656	3.0	17.3	45.3	1,210,071
18.6	1,040	27,678,869	25,154	1.7	11.1	40.4	1,080,842

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/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)
\$1,297	\$4.89	25	\$604	\$1,332	\$1,560	\$5.90	\$40,038
\$1,477	\$5.37	28	\$743	\$1,638	\$1,815	\$6.78	\$43,018
\$1,560	\$5.73	29	\$864	\$1,786	\$1,970	\$7.15	\$44,999
\$1,655	\$6.04	31	\$928	\$1,924	\$2,077	\$7.74	\$47,589
\$1,792	\$6.76	35	\$1,043	\$2,122	\$2,311	\$8.41	\$52,916

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)
\$5,666	\$20.68	\$14.21	\$17.34	11.0	\$1,320,582	\$683,940	\$1,275,696
\$5,393	\$19.63	\$15.18	\$18.71	6.7	\$883,120	\$209,539	\$822,249
\$5,249	\$19.30	\$15.75	\$19.37	5.2	\$608,381	\$88,221	\$601,397
\$5,156	\$19.04	\$16.76	\$19.89	3.7	\$396,522	\$8,794	\$352,074
\$4,866	\$18.67	\$18.37	\$21.60	1.6	\$71,546	-\$123,749	\$48,951

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)	(12)	(7)	(7)
\$7,615	\$653	0.84	0.73	3.83	\$185	90	54
\$9,782	\$1,417	0.65	0.77	1.80	\$506	64	30
\$11,079	\$1,762	0.55	0.80	1.27	\$679	58	15
\$12,333	\$2,110	0.49	0.83	0.86	\$817	51	7
\$14,895	\$2,713	0.41	0.88	0.32	\$1,212	34	-3

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

## PROGRESS OF THE FARM BUSINESS

Same 31 New York Dairy Farms, Greater Than 1,450 Cows, 2018 & 2019, DFBS

SELECTED FACTORS	Average of 31 Farms		Percent Change
	2018	2019	
<b><i>Size of Business</i></b>			
Average number of cows	2,190	2,344	7%
Average number of heifers	1,850	1,876	1%
Milk sold, pounds	56,911,532	62,588,086	10%
Worker equivalent	42.6	43.6	2%
Total tillable acres	3,701	3,829	3%
<b><i>Rates of Production</i></b>			
Milk sold per cow, pounds	25,988	26,700	3%
Hay DM per acre, tons	3.3	3.3	0%
Corn silage per acre, tons	19.1	18.7	-2%
<b><i>Labor Efficiency</i></b>			
Cows per worker	51.4	53.7	4%
Milk sold per worker, pounds	1,336,893	1,435,177	7%
<b><i>Cost Control and Milk Price</i></b>			
Grain & concentrate per cwt. milk	\$5.64	\$5.56	-1%
Net milk income over purchased grain & conc. per cow	\$2,717	\$3,373	24%
Dairy feed & crop expense per cwt. milk	\$7.03	\$6.82	-3%
Labor and machinery costs per cow	\$1,619	\$1,658	2%
Hired labor costs per cwt. milk	\$3.05	\$3.00	-2%
Hired labor costs per worker equivalent	\$44,476	\$46,844	5%
Operating cost of producing milk per cwt.	\$14.66	\$14.99	2%
Purchased input cost of producing milk per cwt.	\$16.26	\$16.48	1%
Total cost of producing milk per cwt.	\$18.32	\$18.43	1%
Net milk price	\$16.03	\$18.18	13%
<b><i>Capital Efficiency (average for year)</i></b>			
Farm capital per cow	\$11,551	\$11,199	-3%
Machinery and equipment per cow	\$1,596	\$1,521	-5%
Asset turnover ratio	0.43	0.53	23%
<b><i>Profitability</i></b>			
Net farm income without appreciation	\$533,748	\$1,786,876	235%
Net farm income without appreciation per cow	\$244	\$762	212%
Net farm income with appreciation	\$258,747	\$2,400,166	828%
Net farm income with appreciation per cow	\$118	\$1,024	768%
Labor & management income per operator/manager	-\$102,580	\$290,534	383%
Rate return on equity capital with appreciation	-0.4%	11.7%	3025%
Rate return on equity capital without appreciation	1.3%	8.2%	557%
Rate return on all capital with appreciation	1.3%	9.6%	638%
Rate return on all capital without appreciation	2.4%	7.2%	202%
<b><i>Financial Summary (based on market value, excluding deferred taxes)</i></b>			
Farm net worth, end year	\$16,883,581	\$18,508,416	10%
Debt to asset ratio	0.34	0.31	-9%
Farm debt per cow	\$3,836	\$3,552	-7%
Debt coverage ratio	1.15	2.04	77%

\*Farm participating both years

**RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT**  
Same 31 New York Dairy Farms, Greater Than 1,450 Cows, 2018 & 2019, DFBS

Item	2018		2019		% Change Per Cwt.
	Per Cow	Per Cwt.	Per Cow	Per Cwt.	
Average number of cows	2,190		2,344		7%
Cwt. of milk sold		569,115		625,881	10%
<b>ACCRUAL OPERATING RECEIPTS</b>					
Milk	\$4,470	\$17.20	\$5,163	\$19.34	12%
Dairy cattle	\$352	\$1.36	\$312	\$1.17	-14%
Dairy calves	\$21	\$0.08	\$18	\$0.07	-13%
Other livestock	\$12	\$0.05	\$2	\$0.01	-80%
Crops	\$125	\$0.48	\$43	\$0.16	-67%
Miscellaneous receipts	<u>\$169</u>	<u>\$0.65</u>	<u>\$186</u>	<u>\$0.70</u>	8%
Total Operating Receipts	\$5,150	\$19.82	\$5,724	\$21.44	8%
<b>ACCRUAL OPERATING EXPENSES</b>					
Hired labor	\$792	\$3.05	\$800	\$3.00	-2%
Dairy grain & concentrate	\$1,466	\$5.64	\$1,485	\$5.56	-1%
Dairy roughage	\$101	\$0.39	\$104	\$0.39	0%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.00	\$1	\$0.00	NA
Machine hire, rent & lease	\$105	\$0.40	\$131	\$0.49	23%
Machine repair & vehicle expense	\$216	\$0.83	\$244	\$0.91	10%
Fuel, oil & grease	\$148	\$0.57	\$138	\$0.52	-9%
Replacement livestock	\$7	\$0.03	\$21	\$0.08	167%
Breeding	\$57	\$0.22	\$49	\$0.18	-18%
Veterinary & medicine	\$151	\$0.58	\$151	\$0.56	-3%
Milk marketing	\$304	\$1.17	\$308	\$1.15	-2%
Bedding	\$74	\$0.28	\$83	\$0.31	11%
Milking supplies	\$79	\$0.31	\$89	\$0.33	6%
Cattle lease	\$4	\$0.02	\$7	\$0.03	50%
Custom boarding	\$77	\$0.30	\$85	\$0.32	7%
BST expense	\$0	\$0.00	\$0	\$0.00	NA
Livestock professional fees	\$12	\$0.05	\$15	\$0.05	0%
Other livestock expense	\$19	\$0.07	\$21	\$0.08	14%
Fertilizer & lime	\$89	\$0.34	\$83	\$0.31	-9%
Seeds & plants	\$110	\$0.42	\$94	\$0.35	-17%
Spray & other crop expense	\$57	\$0.22	\$50	\$0.19	-14%
Crop professional fees	\$4	\$0.01	\$4	\$0.02	100%
Land, building & fence repair	\$64	\$0.25	\$76	\$0.28	12%
Taxes	\$61	\$0.23	\$60	\$0.22	-4%
Real estate rent & lease	\$73	\$0.28	\$65	\$0.24	-14%
Insurance	\$40	\$0.16	\$41	\$0.15	-6%
Utilities	\$92	\$0.35	\$82	\$0.31	-11%
Interest paid	\$179	\$0.69	\$188	\$0.70	1%
Other professional fees	\$29	\$0.11	-\$1	\$0.10	-9%
Miscellaneous	<u>\$22</u>	<u>\$0.09</u>	<u>\$26</u>	<u>\$0.10</u>	11%
Total Operating Expenses	\$4,432	\$17.05	\$4,527	\$16.96	-1%
Expansion livestock	\$57	\$0.22	\$35	\$0.13	-41%
Extraordinary expenses	\$3	\$0.01	\$0	\$0.00	-100%
Machinery depreciation	\$217	\$0.83	\$208	\$0.78	-6%
Real estate depreciation	<u>\$198</u>	<u>\$0.76</u>	<u>\$191</u>	<u>\$0.72</u>	-5%
Total Expenses	\$4,907	\$18.87	\$4,961	\$18.59	-1%
Net Farm Income w/o Appreciation	\$244	\$0.94	\$762	\$2.85	203%

NA - Percent change could not be calculated

## Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column, which represents your current level of performance. The five figures in each column represents the average of each 20 percent or quintile of farms included in the summary. Use this information to identify business areas where more challenging goals are needed.

### FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

31 New York Dairy Farms, Greater Than 1,450 Cows, 2019, DFBS

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalents	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14)*	(12)	(12)	(12)	(11)	(11)	(14)	(14)
73.3	4,006	105,748,467	28,902	4.8	22.9	66.7	1,818,461
48.1	2,740	75,046,893	27,623	3.7	20.6	57.7	1,550,772
38.8	1,961	51,247,477	26,623	3.4	18.7	53.3	1,423,335
33.5	1,651	44,097,039	25,926	3.0	17.9	49.3	1,317,958
27.1	1,503	40,484,487	25,004	2.1	15.9	44.3	1,165,653

Cost Control							
Grain Bought per Cow	Grain Bought per Cwt.	% Grain is of Milk Receipts	Machinery Costs per Cow	Labor & Machinery Costs/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)
\$1,178	\$4.59	24	\$598	\$1,345	\$1,482	\$5.66	\$39,831
\$1,346	\$5.04	26	\$761	\$1,593	\$1,663	\$6.40	\$42,728
\$1,511	\$5.58	29	\$863	\$1,715	\$1,847	\$6.90	\$45,194
\$1,612	\$6.06	31	\$910	\$1,822	\$1,988	\$7.31	\$49,086
\$1,764	\$6.36	34	\$1,023	\$2,022	\$2,166	\$7.83	\$55,612

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)
\$5,652	\$20.40	\$12.53	\$17.21	10.9	\$3,535,691	\$972,215	\$3,146,426
\$5,442	\$19.51	\$14.34	\$17.93	7.9	\$2,119,147	\$416,161	\$2,117,968
\$5,184	\$19.25	\$15.13	\$18.56	7.0	\$1,708,782	\$275,489	\$1,604,728
\$4,990	\$19.02	\$15.76	\$19.00	5.8	\$1,183,275	\$167,197	\$1,179,181
\$4,660	\$18.48	\$16.79	\$19.90	3.6	\$587,399	-\$4,796	\$559,884

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)	(12)	(7)	(7)
\$8,265	\$982	0.72	0.67	6.81	\$66	97	94
\$9,761	\$1,253	0.65	0.73	2.20	\$386	79	32
\$10,740	\$1,568	0.57	0.77	1.62	\$554	65	23
\$12,918	\$1,844	0.49	0.80	1.15	\$751	57	15
\$16,924	\$2,605	0.36	0.85	0.32	\$882	44	8

\*Page 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)
2020-05	Progress of the Dairy Farm Report Selected Financial and Production Factors Dairy Farm Business Summary New York State, 2019 153 Farms		Karszes, J., Hill, L., and Knoblauch, W.
2020-04	Business Tools for NYS Berry Growers		Williams, K., Kalaitzandonakes, M., Gómez, M.
2020-03	Regional Grass Fed Beef Supply Chain		Kalaitzandonakes, M., Gómez, M., and Peters, C.
2020-02	Cost of Establishment and Production of Cold Hardy Grapes in the Chautauqua Region of New York - 2019		Davis, T., Gómez, M., Moss, R., Martin, K., and Walter-Peterson, H.
2020-01	Cost of Establishment and Production of V. Vinifera Grapes in the Finger Lakes Region of New York - 2019		Davis, T., Gómez, M., Moss, R., Walter- Peterson, H.
2019-06	Adapting Your Labor Strategies to New York's Revised Farm Employment Laws		Eiholzer, L., Ifft, J., Karszes, J., and Stup, R.
2019-05	Assessing the Barriers to Increasing Customer Participation and Farm Sales at Farmers Markets: Implications for Marketing Strategy		Schmit T.M., Severson, R.M. & Sawaura, E.
2019-04	Crop Budgets and Cost & Return Studies for Organic Grain in Western New York		Li, J., Gómez, M. & Murphy, J.
2019-03	2018 New York State Berry Market Analysis: Pricing Information of Local Berries		Davis, T., Gomez, M. & Pritts, M.
2019-02	The State of the USDA Inspected Red Meat Harvest & Processing Industry in New York & New England		Waro, M., Kalaitzandonakes, M., Baker, M., Peters, C., Gomez, M. & Conard, M.
2019-01	The State of the Agricultural Workforce in New York		Stup, R., Ifft, J. & Maloney, T.
2018-08	Six Year Trend Analysis New York State Dairy Farms Selected Financial and Production Factors		Karszes, J.

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