

April 12, 2018

Progress Report #3



Preliminary Progress Report #3

Selected Financial and Production Factors

Average All Farms

Less Than 500 Cows

500 to 1,099 Cows

Greater Than 1,100 Cows

Dairy Farm Business Summary

New York State

131 Farms

Wayne Knoblauch

Jason Karszes

**Agricultural Finance and Management at Cornell
Cornell Dairy Farm Business Summary & Analysis Program
Cornell University
Ithaca, New York 14853-7801**

PROGRESS OF THE FARM BUSINESS

Same 125 New York Dairy Farms, 2016 & Preliminary 2017, DFBS

SELECTED FACTORS	Average of 125 Farms		Percent Change
	2016	2017	
<i>Size of Business</i>			
Average number of cows	887	943	6%
Average number of heifers	770	811	5%
Milk sold, pounds	23,344,129	24,519,544	5%
Worker equivalent	19.1	19.8	4%
Total tillable acres	1,767	1,803	2%
<i>Rates of Production</i>			
Milk sold per cow, pounds	26,314	26,003	-1%
Hay DM per acre, tons	3.2	3.30	3%
Corn silage per acre, tons	17.5	18.10	3%
<i>Labor Efficiency</i>			
Cows per worker	46.4	47.6	3%
Milk sold per worker, pounds	1,221,566	1,237,736	1%
<i>Cost Control and Milk Price</i>			
Grain & concentrate per cwt. milk	\$5.72	\$5.68	-1%
Grain & concentrate purchased as % milk sales	34	31	-9%
Dairy feed & crop expense per cwt. milk	\$7.24	\$7.14	-1%
Labor and machinery costs per cow	\$1,676	\$1,730	3%
Hired labor costs per cwt. milk	\$2.84	\$2.97	5%
Hired labor costs per worker equivalent	\$40,329	\$42,654	6%
Operating cost of producing milk per cwt.	\$14.48	\$14.94	3%
Purchased input cost of producing milk per cwt.	\$16.13	\$16.64	3%
Total cost of producing milk per cwt.	\$18.41	\$18.88	3%
Net milk price	\$16.12	\$17.42	8%
<i>Capital Efficiency (average for year)</i>			
Farm capital per cow	\$12,005	\$11,939	-1%
Machinery and equipment per cow	\$1,951	\$1,870	-4%
Asset turnover ratio	0.45	0.48	7%
<i>Profitability</i>			
Net farm income without appreciation	\$214,957	\$453,020	111%
Net farm income without appreciation per cow	\$242	\$480	98%
Net farm income with appreciation	\$390,241	\$699,700	79%
Net farm income with appreciation per cow	\$440	\$742	69%
Labor & management income per operator/manager	-\$62,425	\$33,920	154%
Rate return on equity capital with appreciation	3.1%	7.0%	126%
Rate return on equity capital without appreciation	0.6%	3.7%	516%
Rate return on all capital with appreciation	3.2%	6.0%	88%
Rate return on all capital without appreciation	1.6%	3.8%	142%
<i>Financial Summary (based on market value, excluding deferred taxes)</i>			
Farm net worth, end year	\$7,192,097	\$7,593,538	6%
Debt to asset ratio	0.34	0.35	3%
Farm debt per cow	\$4,093	\$4,102	0%
Debt coverage ratio	1	1.57	57%

*Farm participating both years



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 125 New York Dairy Farms, 2016 & Preliminary 2017, DFBS

Item	2016		2017		% Change Per Cwt.
	Per Cow	Per Cwt.	Per Cow	Per Cwt.	
Average number of cows	887		943		
Cwt. of milk sold		233,441		245,195	
ACCRUAL OPERATING RECEIPTS					
Milk	\$4,488	\$17.06	\$4,806	\$18.48	8%
Dairy cattle	\$411	\$1.56	\$393	\$1.51	-3%
Dairy calves	\$51	\$0.19	\$50	\$0.19	0%
Other livestock	\$13	\$0.05	\$14	\$0.05	0%
Crops	\$106	\$0.40	\$113	\$0.43	7%
Miscellaneous receipts	<u>\$158</u>	<u>\$0.60</u>	<u>\$153</u>	<u>\$0.59</u>	-2%
Total Operating Receipts	\$5,226	\$19.86	\$5,528	\$21.26	7%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$747	\$2.84	\$773	\$2.97	5%
Dairy grain & concentrate	\$1,504	\$5.72	\$1,477	\$5.68	-1%
Dairy roughage	\$93	\$0.35	\$88	\$0.34	-3%
Nondairy feed	\$1	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.01	\$1	\$0.00	-100%
Machine hire, rent & lease	\$119	\$0.45	\$129	\$0.50	11%
Machine repair & vehicle expense	\$240	\$0.91	\$247	\$0.95	4%
Fuel, oil & grease	\$116	\$0.44	\$133	\$0.51	16%
Replacement livestock	\$13	\$0.05	\$11	\$0.04	-20%
Breeding	\$55	\$0.21	\$55	\$0.21	0%
Veterinary & medicine	\$163	\$0.62	\$165	\$0.63	2%
Milk marketing	\$246	\$0.94	\$276	\$1.06	13%
Bedding	\$90	\$0.34	\$88	\$0.34	0%
Milking supplies	\$90	\$0.34	\$88	\$0.34	0%
Cattle lease	\$3	\$0.01	\$3	\$0.01	0%
Custom boarding	\$110	\$0.42	\$108	\$0.42	0%
BST expense	\$34	\$0.13	\$11	\$0.04	-69%
Livestock professional fees	\$15	\$0.06	\$17	\$0.06	0%
Other livestock expense	\$20	\$0.08	\$27	\$0.10	25%
Fertilizer & lime	\$115	\$0.44	\$100	\$0.39	-11%
Seeds & plants	\$118	\$0.45	\$119	\$0.46	2%
Spray & other crop expense	\$65	\$0.25	\$65	\$0.25	0%
Crop professional fees	\$10	\$0.04	\$9	\$0.03	-25%
Land, building & fence repair	\$70	\$0.26	\$68	\$0.26	0%
Taxes	\$64	\$0.24	\$63	\$0.24	0%
Real estate rent & lease	\$75	\$0.28	\$78	\$0.30	7%
Insurance	\$46	\$0.18	\$44	\$0.17	-6%
Utilities	\$86	\$0.33	\$87	\$0.33	0%
Interest paid	\$141	\$0.54	\$166	\$0.64	19%
Other professional fees	\$27	\$0.10	\$27	\$0.10	0%
Miscellaneous	<u>\$27</u>	<u>\$0.10</u>	<u>\$27</u>	<u>\$0.10</u>	0%
Total Operating Expenses	\$4,506	\$17.12	\$4,547	\$17.49	2%
Expansion livestock	\$41	\$0.16	\$61	\$0.23	44%
Extraordinary expenses	\$0	\$0.00	\$5	\$0.02	NA
Machinery depreciation	\$252	\$0.96	\$248	\$0.95	-1%
Real estate depreciation	<u>\$184</u>	<u>\$0.70</u>	<u>\$187</u>	<u>\$0.72</u>	3%
Total Expenses	\$4,983	\$18.94	\$5,048	\$19.41	2%
Net Farm Income w/o Appreciation	\$242	\$0.92	\$480	\$1.85	101%



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

131 New York Dairy Farms, Preliminary 2017

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)
43.0	2,107	54,997,506	28,620	4.8	22.3	61.7	1,551,802
24.2	1,142	30,830,240	27,098	3.9	19.8	50.3	1,305,991
17.6	809	20,940,553	26,023	3.3	18.0	45.7	1,174,398
10.1	472	11,424,533	24,779	2.7	16.3	40.6	1,013,657
3.8	139	3,194,719	19,990	1.7	11.4	30.0	715,304

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)
\$1,022	\$4.50	24	\$603	\$1,334	\$1,358	\$5.99	\$25,029
\$1,329	\$5.36	29	\$778	\$1,665	\$1,684	\$6.74	\$36,758
\$1,497	\$5.75	31	\$881	\$1,838	\$1,844	\$7.28	\$40,285
\$1,612	\$6.11	33	\$987	\$1,958	\$2,019	\$7.70	\$44,041
\$1,789	\$6.83	37	\$1,283	\$2,400	\$2,289	\$8.61	\$50,475

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)
\$5,333	\$19.66	\$12.64	\$17.31	7.6	\$1,516,357	\$357,151	\$1,615,238
\$5,017	\$18.83	\$13.98	\$18.64	4.3	\$558,290	\$57,166	\$395,604
\$4,781	\$18.48	\$15.00	\$19.74	2.2	\$214,039	\$3,344	\$123,187
\$4,547	\$18.12	\$16.38	\$20.68	0.5	\$67,419	-\$56,870	\$9,483
\$3,738	\$17.64	\$17.65	\$23.33	-3.0	-\$129,748	-\$233,805	-\$330,874

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)
\$8,104	\$941	0.71	0.71	10.48	\$75	93	55
\$10,757	\$1,599	0.53	0.76	1.97	\$366	75	28
\$12,403	\$2,042	0.46	0.80	1.14	\$574	63	18
\$13,771	\$2,528	0.41	0.85	0.77	\$737	55	10
\$18,209	\$3,837	0.30	0.92	0.17	\$1,021	39	-7

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

PROGRESS OF THE FARM BUSINESS

Same 40 New York Dairy Farms, Less Than 500 Cows, 2016 & Preliminary 2017, DFBS

SELECTED FACTORS	Average of 40 Farms		Percent Change
	2016	2017	
<i>Size of Business</i>			
Average number of cows	226	234	4%
Average number of heifers	194	205	6%
Milk sold, pounds	5,619,988	5,821,174	4%
Worker equivalent	5.9	6.0	3%
Total tillable acres	543	545	0%
<i>Rates of Production</i>			
Milk sold per cow, pounds	24,878	24,856	0%
Hay DM per acre, tons	3	2.90	-3%
Corn silage per acre, tons	17.6	18.50	5%
<i>Labor Efficiency</i>			
Cows per worker	38.6	38.9	1%
Milk sold per worker, pounds	959,042	968,581	1%
<i>Cost Control and Milk Price</i>			
Grain & concentrate per cwt. milk	\$5.64	\$5.57	-1%
Grain & concentrate purchased as % milk sales	33	30	-9%
Dairy feed & crop expense per cwt. milk	\$7.00	\$6.99	0%
Labor and machinery costs per cow	\$1,882	\$1,965	4%
Hired labor costs per cwt. milk	\$2.39	\$2.44	2%
Hired labor costs per worker equivalent	\$37,507	\$38,806	3%
Operating cost of producing milk per cwt.	\$14.30	\$14.99	5%
Purchased input cost of producing milk per cwt.	\$16.32	\$17.04	4%
Total cost of producing milk per cwt.	\$19.93	\$20.67	4%
Net milk price	\$16.13	\$17.44	8%
<i>Capital Efficiency (average for year)</i>			
Farm capital per cow	\$13,488	\$13,510	0%
Machinery and equipment per cow	\$2,679	\$2,694	1%
Asset turnover ratio	0.38	0.40	5%
<i>Profitability</i>			
Net farm income without appreciation	\$44,506	\$89,048	100%
Net farm income without appreciation per cow	\$197	\$380	93%
Net farm income with appreciation	\$89,444	\$146,878	64%
Net farm income with appreciation per cow	\$396	\$627	58%
Labor & management income per operator/manager	-\$35,692	-\$12,410	65%
Rate return on equity capital with appreciation	-0.4%	2.0%	-600%
Rate return on equity capital without appreciation	-2.5%	-0.7%	-73%
Rate return on all capital with appreciation	0.9%	2.7%	200%
Rate return on all capital without appreciation	-0.6%	0.9%	-247%
<i>Financial Summary (based on market value, excluding deferred taxes)</i>			
Farm net worth, end year	\$2,102,780	\$2,183,709	4%
Debt to asset ratio	0.32	0.32	0%
Farm debt per cow	\$4,363	\$3,743	-14%
Debt coverage ratio	1.02	1.25	23%

*Farm participating both years



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 40 New York Dairy Farms, Less Than 500 Cows, 2016 & Preliminary 2017, DFBS

Item	2016		2017		% Change Per Cwt.
	Per Cow	Per Cwt.	Per Cow	Per Cwt.	
Average number of cows	226		234		
Cwt. of milk sold		56,200		58,212	
ACCRUAL OPERATING RECEIPTS					
Milk	\$4,258	\$17.11	\$4,615	\$18.57	9%
Dairy cattle	\$336	\$1.35	\$307	\$1.24	-8%
Dairy calves	\$52	\$0.21	\$39	\$0.16	-24%
Other livestock	\$12	\$0.05	\$3	\$0.01	-80%
Crops	\$102	\$0.41	\$74	\$0.30	-27%
Miscellaneous receipts	<u>\$138</u>	<u>\$0.55</u>	<u>\$142</u>	<u>\$0.57</u>	4%
Total Operating Receipts	\$4,898	\$19.69	\$5,182	\$20.85	6%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$594	\$2.39	\$606	\$2.44	2%
Dairy grain & concentrate	\$1,403	\$5.64	\$1,384	\$5.57	-1%
Dairy roughage	\$35	\$0.14	\$56	\$0.23	64%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$3	\$0.01	\$1	\$0.01	0%
Machine hire, rent & lease	\$112	\$0.45	\$143	\$0.58	29%
Machine repair & vehicle expense	\$253	\$1.02	\$255	\$1.03	1%
Fuel, oil & grease	\$119	\$0.48	\$138	\$0.56	17%
Replacement livestock	\$13	\$0.05	\$8	\$0.03	-40%
Breeding	\$65	\$0.26	\$64	\$0.26	0%
Veterinary & medicine	\$155	\$0.62	\$148	\$0.60	-3%
Milk marketing	\$244	\$0.98	\$280	\$1.13	15%
Bedding	\$90	\$0.36	\$101	\$0.41	14%
Milking supplies	\$95	\$0.38	\$103	\$0.41	8%
Cattle lease	\$0	\$0.00	\$0	\$0.00	NA
Custom boarding	\$45	\$0.18	\$43	\$0.17	-6%
BST expense	\$24	\$0.10	\$7	\$0.03	-70%
Livestock professional fees	\$17	\$0.07	\$25	\$0.10	43%
Other livestock expense	\$31	\$0.12	\$31	\$0.12	0%
Fertilizer & lime	\$118	\$0.48	\$109	\$0.44	-8%
Seeds & plants	\$117	\$0.47	\$113	\$0.45	-4%
Spray & other crop expense	\$60	\$0.24	\$68	\$0.27	13%
Crop professional fees	\$7	\$0.03	\$7	\$0.03	0%
Land, building & fence repair	\$62	\$0.25	\$53	\$0.21	-16%
Taxes	\$86	\$0.35	\$85	\$0.34	-3%
Real estate rent & lease	\$72	\$0.29	\$67	\$0.27	-7%
Insurance	\$61	\$0.25	\$59	\$0.24	-4%
Utilities	\$93	\$0.37	\$90	\$0.36	-3%
Interest paid	\$156	\$0.63	\$178	\$0.72	14%
Other professional fees	\$27	\$0.11	\$21	\$0.09	-18%
Miscellaneous	<u>\$23</u>	<u>\$0.09</u>	<u>\$23</u>	<u>\$0.09</u>	0%
Total Operating Expenses	\$4,180	\$16.80	\$4,268	\$17.17	2%
Expansion livestock	\$16	\$0.06	\$25	\$0.10	67%
Extraordinary expenses	\$0	\$0.00	\$1	\$0.00	NA
Machinery depreciation	\$321	\$1.29	\$316	\$1.27	-2%
Real estate depreciation	<u>\$183</u>	<u>\$0.74</u>	<u>\$191</u>	<u>\$0.77</u>	4%
Total Expenses	\$4,700	\$18.89	\$4,801	\$19.31	2%
Net Farm Income w/o Appreciation	\$197	\$0.79	\$380	\$1.53	94%



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 arms included in the summary. Use this information to identify business areas where more challenging goals are needed.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

Same 43 New York Dairy Farms, Less Than 500 Cows, 2016 & Preliminary 2017, 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)
12.0	470	12,089,232	28,338	4.7	22.8	56.1	1,349,113
7.7	320	8,392,840	26,453	3.5	20.2	44.9	1,087,460
5.3	209	4,939,057	25,168	2.9	18.1	38.6	928,027
3.5	144	3,382,759	22,856	2.3	16.5	31.3	783,861
2.5	63	1,262,343	17,313	1.5	12.8	23.6	484,869

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)
\$894	\$4.24	23	\$623	\$1,451	\$1,175	\$5.66	\$9,400
\$1,185	\$5.35	29	\$788	\$1,841	\$1,562	\$6.70	\$31,925
\$1,405	\$5.73	31	\$934	\$1,991	\$1,698	\$7.23	\$36,882
\$1,557	\$6.15	33	\$1,122	\$2,340	\$1,955	\$7.82	\$42,457
\$1,786	\$6.90	37	\$1,584	\$2,750	\$2,279	\$8.68	\$51,211

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)
\$5,242	\$19.41	\$12.06	\$18.56	4.8	\$297,722	\$68,790	\$318,740
\$4,865	\$18.92	\$14.06	\$20.19	2.3	\$152,028	\$14,287	\$120,244
\$4,655	\$18.61	\$14.85	\$21.12	0.6	\$68,323	-\$1,725	\$44,990
\$4,267	\$18.14	\$16.04	\$22.35	-1.4	\$30,928	-\$35,814	\$5,129
\$3,190	\$17.62	\$17.34	\$25.88	-5.3	-\$40,080	-\$96,438	-\$66,135

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)
\$9,213	\$1,311	0.61	0.69	3.65	\$47	96	60
\$11,547	\$1,968	0.47	0.76	1.63	\$299	84	33
\$13,237	\$2,477	0.41	0.79	1.04	\$562	70	20
\$15,621	\$3,419	0.34	0.85	0.75	\$773	58	13
\$22,393	\$5,217	0.23	0.91	-0.05	\$1,095	43	0

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



PROGRESS OF THE FARM BUSINESS

Same 45 New York Dairy Farms, 500 to 1,099 Cows, 2016 & Preliminary 2017, DFBS

SELECTED FACTORS	Average of 45 Farms		Percent Change
	2016	2017	
<i>Size of Business</i>			
Average number of cows	779	810	4%
Average number of heifers	653	668	2%
Milk sold, pounds	20,319,749	20,801,887	2%
Worker equivalent	17.0	17.4	2%
Total tillable acres	1,571	1,633	4%
<i>Rates of Production</i>			
Milk sold per cow, pounds	26,075	25,675	-2%
Hay DM per acre, tons	3.3	3.20	-3%
Corn silage per acre, tons	18.8	17.70	-6%
<i>Labor Efficiency</i>			
Cows per worker	45.8	46.6	2%
Milk sold per worker, pounds	1,193,875	1,197,576	0%
<i>Cost Control and Milk Price</i>			
Grain & concentrate per cwt. milk	\$5.86	\$5.77	-2%
Grain & concentrate purchased as % milk sales	34	31	-9%
Dairy feed & crop expense per cwt. milk	\$7.58	\$7.43	-2%
Labor and machinery costs per cow	\$1,676	\$1,737	4%
Hired labor costs per cwt. milk	\$2.74	\$2.88	5%
Hired labor costs per worker equivalent	\$38,743	\$40,943	6%
Operating cost of producing milk per cwt.	\$15.07	\$15.67	4%
Purchased input cost of producing milk per cwt.	\$16.68	\$17.32	4%
Total cost of producing milk per cwt.	\$18.94	\$19.60	3%
Net milk price	\$16.09	\$17.45	8%
<i>Capital Efficiency (average for year)</i>			
Farm capital per cow	\$11,898	\$11,868	0%
Machinery and equipment per cow	\$1,954	\$1,913	-2%
Asset turnover ratio	0.46	0.48	4%
<i>Profitability</i>			
Net farm income without appreciation	\$84,298	\$264,519	214%
Net farm income without appreciation per cow	\$108	\$326	202%
Net farm income with appreciation	\$222,225	\$467,525	110%
Net farm income with appreciation per cow	\$285	\$577	102%
Labor & management income per operator/manager	-\$89,840	-\$14,693	84%
Rate return on equity capital with appreciation	1.0%	4.9%	390%
Rate return on equity capital without appreciation	-1.4%	1.5%	-209%
Rate return on all capital with appreciation	2.0%	4.6%	130%
Rate return on all capital without appreciation	0.5%	2.5%	395%
<i>Financial Summary (based on market value, excluding deferred taxes)</i>			
Farm net worth, end year	\$5,839,319	\$6,046,421	4%
Debt to asset ratio	0.38	0.38	0%
Farm debt per cow	\$4,471	\$4,645	4%
Debt coverage ratio	0.51	1.12	120%

*Farm participating both years



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 45 New York Dairy Farms, 500 to 1,099 Cows, 2016 & Preliminary 2017, DFBS

Item	2016		2017		% Change Per Cwt.
	Per Cow	Per Cwt.	Per Cow	Per Cwt.	
Average number of cows	779		810		
Cwt. of milk sold		203,197		208,019	
ACCRUAL OPERATING RECEIPTS					
Milk	\$4,459	\$17.10	\$4,773	\$18.59	9%
Dairy cattle	\$375	\$1.44	\$374	\$1.46	1%
Dairy calves	\$51	\$0.20	\$59	\$0.23	15%
Other livestock	\$21	\$0.08	\$33	\$0.13	63%
Crops	\$165	\$0.63	\$96	\$0.37	-41%
Miscellaneous receipts	<u>\$167</u>	<u>\$0.64</u>	<u>\$144</u>	<u>\$0.56</u>	-13%
Total Operating Receipts	\$5,237	\$20.09	\$5,479	\$21.34	6%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$716	\$2.74	\$739	\$2.88	5%
Dairy grain & concentrate	\$1,529	\$5.86	\$1,482	\$5.77	-2%
Dairy roughage	\$122	\$0.47	\$111	\$0.43	-9%
Nondairy feed	\$2	\$0.01	\$1	\$0.00	-100%
Professional nutritional services	\$2	\$0.01	\$3	\$0.01	0%
Machine hire, rent & lease	\$163	\$0.62	\$175	\$0.68	10%
Machine repair & vehicle expense	\$223	\$0.86	\$228	\$0.89	3%
Fuel, oil & grease	\$115	\$0.44	\$130	\$0.51	16%
Replacement livestock	\$27	\$0.10	\$15	\$0.06	-40%
Breeding	\$53	\$0.20	\$53	\$0.21	5%
Veterinary & medicine	\$171	\$0.66	\$169	\$0.66	0%
Milk marketing	\$262	\$1.01	\$293	\$1.14	13%
Bedding	\$99	\$0.38	\$99	\$0.39	3%
Milking supplies	\$86	\$0.33	\$86	\$0.34	3%
Cattle lease	\$1	\$0.00	\$2	\$0.01	NA
Custom boarding	\$146	\$0.56	\$140	\$0.54	-4%
BST expense	\$34	\$0.13	\$11	\$0.04	-69%
Livestock professional fees	\$18	\$0.07	\$19	\$0.07	0%
Other livestock expense	\$19	\$0.07	\$17	\$0.07	0%
Fertilizer & lime	\$132	\$0.51	\$106	\$0.41	-20%
Seeds & plants	\$112	\$0.43	\$124	\$0.48	12%
Spray & other crop expense	\$73	\$0.28	\$71	\$0.28	0%
Crop professional fees	\$9	\$0.03	\$13	\$0.05	67%
Land, building & fence repair	\$65	\$0.25	\$74	\$0.29	16%
Taxes	\$57	\$0.22	\$59	\$0.23	5%
Real estate rent & lease	\$80	\$0.31	\$88	\$0.34	10%
Insurance	\$51	\$0.20	\$46	\$0.18	-10%
Utilities	\$92	\$0.35	\$88	\$0.34	-3%
Interest paid	\$162	\$0.62	\$186	\$0.72	16%
Other professional fees	\$29	\$0.11	\$31	\$0.12	9%
Miscellaneous	<u>\$32</u>	<u>\$0.12</u>	<u>\$28</u>	<u>\$0.11</u>	-8%
Total Operating Expenses	\$4,679	\$17.95	\$4,688	\$18.26	2%
Expansion livestock	\$28	\$0.11	\$42	\$0.16	45%
Extraordinary expenses	\$0	\$0.00	\$1	\$0.00	NA
Machinery depreciation	\$244	\$0.94	\$243	\$0.95	1%
Real estate depreciation	<u>\$178</u>	<u>\$0.68</u>	<u>\$178</u>	<u>\$0.69</u>	1%
Total Expenses	\$5,129	\$19.68	\$5,152	\$20.06	2%
Net Farm Income w/o Appreciation	\$108	\$0.41	\$326	\$1.27	210%



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 arms included in the summary. Use this information to identify business areas where more challenging goals are needed

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

Same 47 New York Dairy Farms, 500 to 1,099 Cows, 2016 & Preliminary 2017, 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)
23.9	1,032	27,909,758	28,751	4.6	21.5	65.4	1,574,022
20.3	897	24,490,116	27,424	3.9	19.3	50.6	1,332,095
18.1	826	21,375,931	26,387	3.3	17.6	47.7	1,206,046
15.7	738	18,278,347	24,981	2.7	15.6	43.5	1,099,643
10.5	596	13,318,128	20,433	1.5	7.9	36.4	917,794

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	\$4.45	24	\$564	\$1,265	\$1,423	\$6.17	\$34,618
\$1,364	\$5.34	29	\$797	\$1,628	\$1,771	\$6.91	\$37,986
\$1,548	\$5.94	31	\$908	\$1,810	\$1,914	\$7.61	\$40,322
\$1,659	\$6.28	33	\$986	\$1,924	\$2,066	\$7.86	\$43,231
\$1,834	\$7.05	38	\$1,144	\$2,086	\$2,431	\$9.10	\$46,981

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)
\$5,389	\$20.31	\$13.50	\$17.55	7.9	\$780,209	\$234,220	\$799,689
\$5,117	\$18.85	\$14.50	\$19.05	3.8	\$470,423	\$38,148	\$362,019
\$4,845	\$18.51	\$16.16	\$19.88	1.9	\$248,665	-\$9,403	\$107,458
\$4,546	\$18.23	\$16.98	\$20.53	0.7	\$78,478	-\$94,088	-\$11,291
\$3,905	\$17.60	\$18.30	\$22.05	-1.6	-\$169,797	-\$286,247	-\$358,646

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)
\$7,024	\$717	0.83	0.74	10.07	\$121	88	43
\$10,477	\$1,503	0.54	0.79	1.80	\$453	70	24
\$12,439	\$1,898	0.48	0.84	1.03	\$638	61	17
\$13,228	\$2,455	0.43	0.89	0.68	\$760	54	9
\$16,207	\$3,049	0.36	0.94	0.22	\$1,000	33	-18

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

PROGRESS OF THE FARM BUSINESS

Same 40 New York Dairy Farms, Greater than 1,100 Cows, 2016 & Preliminary 2017, DFBS

SELECTED FACTORS	Average of 40 Farms		Percent Change
	2016	2017	
<i>Size of Business</i>			
Average number of cows	1,670	1,801	8%
Average number of heifers	1,477	1,579	7%
Milk sold, pounds	44,470,698	47,400,277	7%
Worker equivalent	34.7	36.4	5%
Total tillable acres	3,210	3,253	1%
<i>Rates of Production</i>			
Milk sold per cow, pounds	26,634	26,317	-1%
Hay DM per acre, tons	3.3	3.50	6%
Corn silage per acre, tons	16.9	18.30	8%
<i>Labor Efficiency</i>			
Cows per worker	48.1	49.5	3%
Milk sold per worker, pounds	1,281,207	1,303,997	2%
<i>Cost Control and Milk Price</i>			
Grain & concentrate per cwt. milk	\$5.65	\$5.65	0%
Grain & concentrate purchased as % milk sales	33	31	-6%
Dairy feed & crop expense per cwt. milk	\$7.10	\$7.02	-1%
Labor and machinery costs per cow	\$1,648	\$1,696	3%
Hired labor costs per cwt. milk	\$2.94	\$3.08	5%
Hired labor costs per worker equivalent	\$41,461	\$43,922	6%
Operating cost of producing milk per cwt.	\$14.20	\$14.58	3%
Purchased input cost of producing milk per cwt.	\$15.83	\$16.25	3%
Total cost of producing milk per cwt.	\$17.94	\$18.30	2%
Net milk price	\$16.13	\$17.41	8%
<i>Capital Efficiency (average for year)</i>			
Farm capital per cow	\$11,861	\$11,770	-1%
Machinery and equipment per cow	\$1,851	\$1,742	-6%
Asset turnover ratio	0.46	0.50	9%
<i>Profitability</i>			
Net farm income without appreciation	\$532,398	\$1,029,055	93%
Net farm income without appreciation per cow	\$319	\$571	79%
Net farm income with appreciation	\$880,057	\$1,513,719	72%
Net farm income with appreciation per cow	\$527	\$840	59%
Labor & management income per operator/manager	-\$53,858	\$115,028	314%
Rate return on equity capital with appreciation	4.6%	8.8%	91%
Rate return on equity capital without appreciation	2.0%	5.4%	166%
Rate return on all capital with appreciation	4.2%	7.2%	71%
Rate return on all capital without appreciation	2.5%	4.9%	99%
<i>Financial Summary (based on market value, excluding deferred taxes)</i>			
Farm net worth, end year	\$13,803,290	\$14,743,875	7%
Debt to asset ratio	0.32	0.33	3%
Farm debt per cow	\$3,859	\$3,889	1%
Debt coverage ratio	1.32	1.89	43%

*Farm participating both years



RECEIPTS & EXPENSES PER COW AND PER HUNDREDWEIGHT

Same 40 New York Dairy Farms, Greater than 1,100 Cows, 2016 & Preliminary 2017, DFBS

Item	2016		2017		% Change Per Cwt.
	Per Cow	Per Cwt.	Per Cow	Per Cwt.	
Average number of cows	1,670		1,801		
Cwt. of milk sold		444,707		474,003	
ACCRUAL OPERATING RECEIPTS					
Milk	\$4,534	\$17.02	\$4,847	\$18.42	8%
Dairy cattle	\$440	\$1.65	\$414	\$1.57	-5%
Dairy calves	\$50	\$0.19	\$47	\$0.18	-5%
Other livestock	\$8	\$0.03	\$6	\$0.02	-33%
Crops	\$75	\$0.28	\$126	\$0.48	71%
Miscellaneous receipts	<u>\$157</u>	<u>\$0.59</u>	<u>\$158</u>	<u>\$0.60</u>	2%
Total Operating Receipts	\$5,265	\$19.77	\$5,599	\$21.27	8%
ACCRUAL OPERATING EXPENSES					
Hired labor	\$784	\$2.94	\$812	\$3.08	5%
Dairy grain & concentrate	\$1,505	\$5.65	\$1,487	\$5.65	0%
Dairy roughage	\$85	\$0.32	\$81	\$0.31	-3%
Nondairy feed	\$0	\$0.00	\$0	\$0.00	NA
Professional nutritional services	\$1	\$0.00	\$0	\$0.00	NA
Machine hire, rent & lease	\$97	\$0.36	\$105	\$0.40	11%
Machine repair & vehicle expense	\$247	\$0.93	\$255	\$0.97	4%
Fuel, oil & grease	\$116	\$0.43	\$134	\$0.51	19%
Replacement livestock	\$6	\$0.02	\$9	\$0.03	50%
Breeding	\$54	\$0.20	\$54	\$0.21	5%
Veterinary & medicine	\$161	\$0.60	\$165	\$0.63	5%
Milk marketing	\$238	\$0.90	\$267	\$1.01	12%
Bedding	\$86	\$0.32	\$81	\$0.31	-3%
Milking supplies	\$91	\$0.34	\$87	\$0.33	-3%
Cattle lease	\$5	\$0.02	\$4	\$0.02	0%
Custom boarding	\$100	\$0.38	\$101	\$0.38	0%
BST expense	\$36	\$0.14	\$11	\$0.04	-71%
Livestock professional fees	\$14	\$0.05	\$14	\$0.06	20%
Other livestock expense	\$20	\$0.08	\$31	\$0.12	50%
Fertilizer & lime	\$106	\$0.40	\$96	\$0.37	-8%
Seeds & plants	\$121	\$0.45	\$117	\$0.45	0%
Spray & other crop expense	\$62	\$0.23	\$61	\$0.23	0%
Crop professional fees	\$11	\$0.04	\$7	\$0.03	-25%
Land, building & fence repair	\$73	\$0.27	\$66	\$0.25	-7%
Taxes	\$64	\$0.24	\$62	\$0.23	-4%
Real estate rent & lease	\$73	\$0.27	\$74	\$0.28	4%
Insurance	\$41	\$0.16	\$42	\$0.16	0%
Utilities	\$82	\$0.31	\$86	\$0.33	6%
Interest paid	\$128	\$0.48	\$154	\$0.58	21%
Other professional fees	\$27	\$0.10	\$25	\$0.10	0%
Miscellaneous	<u>\$26</u>	<u>\$0.10</u>	<u>\$26</u>	<u>\$0.10</u>	0%
Total Operating Expenses	\$4,459	\$16.74	\$4,513	\$17.15	2%
Expansion livestock	\$52	\$0.20	\$75	\$0.28	40%
Extraordinary expenses	\$0	\$0.00	\$8	\$0.03	NA
Machinery depreciation	\$247	\$0.93	\$241	\$0.92	-1%
Real estate depreciation	<u>\$188</u>	<u>\$0.71</u>	<u>\$191</u>	<u>\$0.72</u>	1%
Total Expenses	\$4,946	\$18.58	\$5,028	\$19.10	3%
Net Farm Income w/o Appreciation	\$319	\$1.20	\$571	\$2.17	81%



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 arms included in the summary. Use this information to identify business areas where more challenging goals are needed.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

Same 41 New York Dairy Farms, Greater than 1,100 Cows, 2016 & Preliminary 2017, 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)
61.3	3,102	81,017,108	28,674	5.1	22.7	61.9	1,630,825
38.4	1,891	47,929,492	27,366	4.3	20.2	53.8	1,411,461
32.8	1,507	40,549,222	26,477	3.7	18.8	49.4	1,300,009
27.7	1,327	36,045,850	25,848	3.3	17.1	45.1	1,213,276
22.9	1,191	31,652,965	24,306	2.5	14.8	40.2	1,068,161

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)
\$1,236	\$4.90	27	\$641	\$1,351	\$1,577	\$6.22	\$35,556
\$1,445	\$5.48	29	\$765	\$1,617	\$1,774	\$6.81	\$40,024
\$1,538	\$5.74	31	\$855	\$1,763	\$1,893	\$7.16	\$43,101
\$1,619	\$5.99	33	\$931	\$1,884	\$2,022	\$7.40	\$46,564
\$1,733	\$6.43	35	\$1,067	\$2,071	\$2,156	\$7.93	\$53,096

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)
\$5,303	\$19.23	\$12.46	\$16.72	8.8	\$2,484,386	\$685,461	\$3,019,060
\$5,086	\$18.79	\$13.71	\$17.87	6.3	\$1,232,997	\$192,916	\$1,174,300
\$4,919	\$18.37	\$14.63	\$18.40	4.7	\$953,281	\$85,398	\$621,021
\$4,721	\$18.07	\$15.66	\$19.13	3.2	\$551,282	-\$37,909	\$231,631
\$4,422	\$17.73	\$17.09	\$20.37	0.1	-\$81,228	-\$262,362	-\$517,915

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)
\$8,697	\$963	0.65	0.70	18.20	\$81	93	65
\$10,289	\$1,528	0.57	0.77	2.94	\$392	74	30
\$12,353	\$1,874	0.52	0.79	1.68	\$557	63	20
\$13,315	\$2,270	0.46	0.84	1.03	\$704	55	10
\$15,574	\$2,724	0.37	0.91	0.41	\$972	44	1

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