

Minnesota State Colleges and Universities

**State
Farm Business Management Program
Database**

Dairy Farm Sort - 2011

Financial Sort Categories:

(By Gross Revenue)

\$50,001 to \$100,000

\$100,001 to \$250,000

\$250,001 to \$500,000

\$500,001 to \$1,000,000

Over \$1,000,000

Enterprise Sort Categories:

(By Herd Size)

Up to 50 Cows

51 to 100 Cows

101 to 200 Cows

201 to 500 Cows

Over 500 Cows

*** Including 5-yr & 20-yr trend of selected data from the statewide average. ***

Location of the Regional Program Center:

Central Lakes Community and Technical College

Minnesota West Community and Technical College

Northland Community and Technical College

Ridgewater Community and Technical College

Riverland Community and Technical College

South Central College

Minnesota Region:

Northeast and East Central

Southwestern

Northwestern & Red River Valley

Central and West Central

Southeastern

South Central

April, 2012



A MEMBER OF THE MINNESOTA STATE COLLEGES
AND UNIVERSITIES SYSTEM

In Cooperation with the Center for Farm Financial Management University of Minnesota

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visit the Farm Business Management Program Website: www.fbm.mnscu.edu

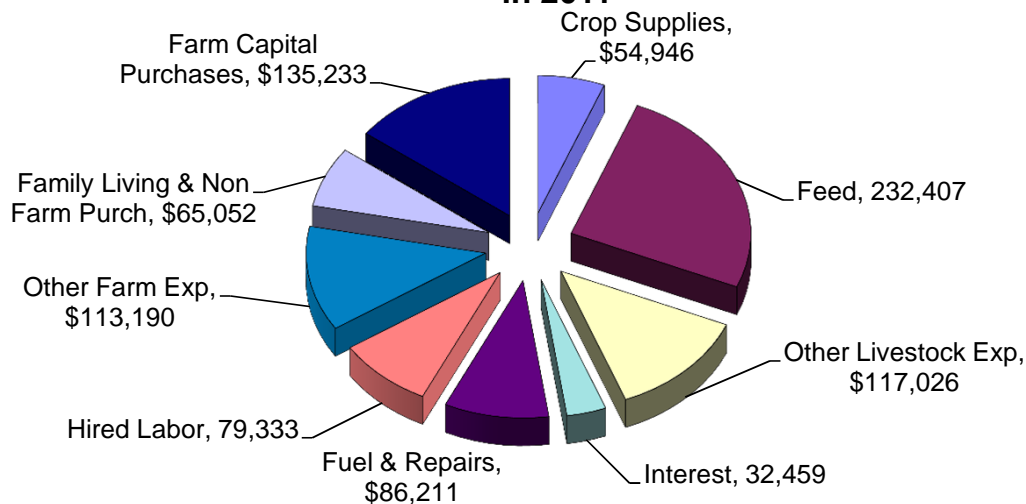
General Financial Summary
Farm Business Management Education Programs
Minnesota State Colleges and Universities
(Dairy Farms Sorted by Gross Farm Income)

	Avg. Of All Farms	50,001 - 100,000	100,001 - 250,000	250,001 - 500,000	500,001 - 1,000,000	Over 1,000,000
Number of farms	403	11	78	123	94	96
<u>Income Statement</u>						
Gross cash farm income	862,505	75,995	182,693	352,886	688,416	2,336,960
Total cash farm expense	715,572	60,731	143,147	277,716	569,062	1,967,179
Net cash farm income	146,933	15,264	39,546	75,170	119,354	369,781
Inventory change	48,316	3,165	6,857	17,183	42,318	133,368
Depreciation	-40,427	-3,685	-10,499	-19,027	-35,969	-101,104
Net farm income from operations	154,822	14,745	35,904	73,326	125,703	402,045
Gain or loss on capital sales	1,234	-	45	10	3,335	1,864
Average net farm income	156,055	14,745	35,948	73,336	129,038	403,908
Median net farm income	84,218	15,722	37,034	72,870	115,392	294,578
<u>Profitability (cost)</u>						
Rate of return on assets	9.8%	3.9%	4.5%	7.6%	8.4%	11.7%
Rate of return on equity	14.2%	1.1%	4.6%	10.4%	12.0%	17.0%
Operating profit margin	20.2%	11.8%	14.6%	20.4%	20.2%	20.6%
Asset turnover rate	48.5%	33.1%	30.8%	37.4%	41.5%	56.6%
<u>Liquidity</u>						
Current assets	283,608	23,865	77,162	138,210	248,350	704,716
Current liabilities	133,463	16,797	42,810	61,239	120,105	327,268
Ending current ratio	2.12	1.42	1.8	2.26	2.07	2.15
Ending working capital	150,145	7,068	34,352	76,972	128,245	377,448
End working capital to gross inc	16.70%	8.90%	18.10%	20.90%	17.80%	15.50%
Term debt coverage ratio	2.24	1.48	1.41	1.72	1.93	2.64
Replacement coverage ratio	1.98	1.31	1.24	1.47	1.7	2.36
<u>Solvency (cost)</u>						
Number of farms	403	11	78	123	94	96
Total farm assets	1,442,351	180,277	459,981	775,530	1,332,657	3,359,556
Total farm liabilities	672,559	120,647	246,836	399,550	675,265	1,435,411
Total assets	1,543,261	218,135	535,018	896,177	1,452,205	3,445,981
Total liabilities	693,019	137,857	260,956	420,816	695,299	1,460,936
Ending net worth	850,242	80,279	274,063	475,361	756,906	1,985,044
Net worth change	109,171	5,876	19,355	48,816	84,355	296,577
Farm debt to asset ratio	47%	67%	54%	52%	51%	43%
Total debt to asset ratio	45%	63%	49%	47%	48%	42%
<u>Solvency (market)</u>						
Number of farms	403	11	78	123	94	96
Total farm assets	1,781,178	277,211	643,198	1,069,340	1,651,307	3,930,829
Total farm liabilities	806,458	145,549	295,606	489,773	808,937	1,707,836
Total assets	1,893,385	342,919	725,333	1,206,420	1,776,930	4,028,720
Total liabilities	829,838	168,419	311,958	514,342	832,076	1,735,885
Ending net worth	1,063,548	174,500	413,376	692,078	944,853	2,292,835
Net worth change	125,595	1,915	27,457	60,949	106,064	322,622
Farm debt to asset ratio	45%	53%	46%	46%	49%	43%
Total debt to asset ratio	44%	49%	43%	43%	47%	43%
<u>Nonfarm Information</u>						
Net nonfarm income	12,631	22,562	16,346	14,046	12,413	6,624
Farms reporting living expenses	80	2	15	33	22	7
Total family living expense	46,400	-	38,653	47,395	48,111	60,874
Total living, invest, & capital	55,735	-	39,810	55,278	69,036	56,990
<u>Crop Acres</u>						
Total acres owned	178	30	133	166	172	252
Total crop acres	338	29	144	201	314	731
Total crop acres owned	127	19	75	111	124	205
Total crop acres cash rented	209	10	69	89	184	526
Total crop acres share rented	2	-	0	1	6	-

Financial Standards Measures
Farm Business Management Education Programs
Minnesota State Colleges and Universities
(Dairy Farms Sorted by Gross Farm Income)

	<u>Avg. Of All Farms</u>	<u>50,001 - 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>Over 1,000,000</u>
Number of farms	403	11	78	123	94	96
<u>Liquidity</u>						
Current ratio	2.12	1.42	1.8	2.26	2.07	2.15
Working capital	150,145	7,068	34,352	76,972	128,245	377,448
Working capital to gross inc	16.7%	8.9%	18.1%	20.9%	17.8%	15.5%
<u>Solvency (market)</u>						
Farm debt to asset ratio	45%	53%	46%	46%	49%	43%
Farm equity to asset ratio	55%	47%	54%	54%	51%	57%
Farm debt to equity ratio	0.83	1.11	0.85	0.85	0.96	0.77
<u>Profitability (cost)</u>						
Rate of return on farm assets	9.8%	3.9%	4.5%	7.6%	8.4%	11.7%
Rate of return on farm equity	14.2%	1.1%	4.6%	10.4%	12.0%	17.0%
Operating profit margin	20.2%	11.8%	14.6%	20.4%	20.2%	20.6%
Net farm income	156,055	14,745	35,948	73,336	129,038	403,908
EBIDTA	227,931	24,336	57,336	112,462	194,388	572,964
<u>Repayment Capacity</u>						
Capital debt repayment capacity	179,615	15,728	38,335	79,130	145,684	476,851
Capital debt repayment margin	99,420	5,122	11,220	33,194	70,348	296,142
Replacement margin	88,773	3,722	7,506	25,365	60,015	274,777
Term debt coverage ratio	2.24	1.48	1.41	1.72	1.93	2.64
Replacement coverage ratio	1.98	1.31	1.24	1.47	1.70	2.36
<u>Efficiency</u>						
Asset turnover rate (cost)	48.5%	33.1%	30.8%	37.4%	41.5%	56.6%
Operating expense ratio	74.7%	69.3%	69.7%	69.4%	73.0%	76.5%
Depreciation expense ratio	4.5%	4.7%	5.5%	5.2%	5.0%	4.1%
Interest expense ratio	3.6%	6.4%	5.6%	5.4%	4.5%	2.8%
Net farm income ratio	17.3%	18.6%	19.0%	19.9%	17.9%	16.6%

**Average Dollars Spent by a Minnesota Dairy Farm totals \$915,857
in 2011**



State Database Dairy Cow Enterprise (Sorted by Herd Size)	Sorted by Average Number of Dairy Cows					
	Average	Up to 50 Cows	51 to 100 Cows	101 to 200 Cows	201 To 500 Cows	Over 500 Cows
	***** Per Cow *****					
Number Of Farms	464	80	176	115	67	26
Milk sold (hd)	4,364.11	3,360.45	3,800.08	4,057.68	4,521.15	4,950.58
Dairy Calves sold (hd)	40.54	34.72	34.34	34.81	37.86	52.37
Transferred out (hd)	40.60	64.94	51.21	50.22	50.58	13.09
Cull sales (hd)	232.72	214.81	235.34	210.10	210.02	273.64
Other income	25.55	46.19	34.87	27.31	10.62	29.92
Purchased (hd)	-41.50	-82.12	-43.04	-56.59	-44.52	-19.77
Transferred in (hd)	-58.39	-131.32	-108.78	-63.98	-65.08	-5.18
Inventory change (hd)	48.47	15.59	22.60	60.44	56.06	52.75
Dairy repl net cost	-528.49	-329.11	-460.77	-505.44	-506.80	-639.66
Gross margin	4,123.61	3,194.14	3,565.85	3,814.56	4,269.87	4,707.74
Direct Expenses						
Protein Vit Minerals (lb.)	599.65	443.10	530.54	589.44	561.62	711.28
Complete Ration (lb.)	314.47	217.40	182.06	218.77	456.50	347.02
Corn (bu.)	291.00	305.48	341.72	293.73	273.01	272.70
Corn Silage (lb.)	301.75	238.82	274.14	269.50	294.22	360.88
Hay, Alfalfa (lb.)	161.71	218.25	264.05	199.89	142.14	78.84
Haylage, Alfalfa (lb.)	143.92	104.73	106.76	135.09	157.25	166.76
Other feed stuffs (lb)	139.17	166.42	137.44	186.69	101.48	136.07
Breeding fees	44.58	34.00	43.93	36.20	48.32	49.43
Veterinary	109.34	94.69	91.48	98.38	124.92	115.95
BST	35.60	7.67	10.34	21.15	37.05	65.37
Supplies	180.59	168.53	165.87	151.57	194.29	200.79
Fuel & oil	99.69	77.00	84.91	100.13	101.28	110.38
Repairs	138.78	112.93	139.32	126.81	137.72	152.68
Custom hire	54.68	19.76	32.09	37.95	53.09	88.56
Hired labor	221.52	37.94	62.17	118.07	273.72	377.81
Utilities	32.05	41.27	27.03	23.60	44.31	28.40
Hauling and trucking	42.23	75.13	60.95	45.56	39.09	26.13
Marketing	50.39	37.27	37.21	40.54	49.06	69.55
Bedding	65.34	29.14	52.75	56.47	74.48	76.56
Total direct expenses	3,026.46	2,429.53	2,644.75	2,749.54	3,163.55	3,435.15
Return over direct expense	1,097.15	764.60	921.09	1,065.02	1,106.32	1,272.58
Overhead Expenses						
Hired labor	142.74	41.20	70.78	151.91	183.42	155.75
Building leases	41.26	12.20	13.84	22.24	56.11	63.00
Utilities	57.47	77.39	83.50	68.56	44.91	41.93
Interest	95.55	78.37	97.13	111.22	99.27	81.26
Mach & bldg depreciation	136.18	83.38	128.14	144.22	129.82	149.03
Miscellaneous	101.43	102.16	103.31	97.46	99.98	104.68
Total overhead expenses	574.64	394.70	496.70	595.62	613.50	595.65
Total dir & ovhd expenses	3,601.10	2,824.24	3,141.45	3,345.16	3,777.05	4,030.81
Net return	522.51	369.90	424.39	469.40	492.82	676.93
Labor & management charge	206.05	349.23	305.87	242.64	165.07	134.07
Net return over lbr & mgt	316.45	20.67	118.52	226.76	327.75	542.86
Cost of Production per CWT						
Total direct expense per cwt.	13.74	14.54	13.90	13.78	13.71	13.59
Total dir& ovhd expense per cwt.	16.35	16.90	16.51	16.77	16.37	15.95
With other revenue adjustments	17.56	18.07	17.86	18.11	17.58	17.03
With labor and management	18.50	20.16	19.46	19.33	18.29	17.56
Est. labor hours per unit	40.82	44.23	42.00	37.43	42.07	41.00
Other Information						
Avg. number of Cows	156.0	38.2	72.6	138.9	299.5	788.0
Milk produced per Cow	22,020	16,708	19,026	19,946	23,071	25,268
Culling percentage	28.1	27.6	29.3	26.9	27.1	29.4
Turnover rate	36.3	38.0	37.9	35.0	35.2	37.1
Cow death loss percent	7.7	9.1	7.5	7.2	7.9	7.6
Percent of barn capacity	108.1	92.1	106.4	107.1	112.0	109.2
Feed cost per day	5.35	4.64	5.03	5.19	5.44	5.68
Feed cost per cwt of milk	8.86	10.14	9.65	9.49	8.61	8.21
Feed cost per Cow	1,951.66	1,694.20	1,836.70	1,893.11	1,986.22	2,073.55
Avg. milk price per cwt.	19.96	20.29	20.11	20.47	19.75	19.72

Selected Dairy Enterprise Factors from the Farm Business Management Program Database

Herd Size	State Ave.	up to 50 cows	51-100 cows	101-200 cows	201-500 cows	over 500 cows
Number of Farms	464	80	176	115	67	26
Ave # of Cows	156.0	38.2	72.6	138.9	299.5	788.0
Milk Prod. Per Cow	22,020	16,708	19,026	19,946	23,071	25,268
Feed Cost per Cwt	\$8.86	\$10.14	\$9.65	\$9.49	\$8.61	\$8.21
Interest per Cwt	\$0.43	\$0.47	\$0.51	\$0.56	\$0.43	\$0.32
Vet per Cwt	\$0.50	\$0.57	\$0.48	\$0.49	\$0.54	\$0.46
Hired Labor per Cwt	\$1.65	\$0.47	\$0.70	\$1.35	\$1.98	\$2.11
Deprec/Lease per Cwt	\$0.81	\$0.57	\$0.75	\$0.83	\$0.81	\$0.84
Milk Price per Cwt	\$19.96	\$20.29	\$20.11	\$20.47	\$19.75	\$19.72
Dir & Ovhd Cost per Cwt	\$16.35	\$16.90	\$16.51	\$16.77	\$16.37	\$15.95
Return over Dir & Ovhd per Cow	\$523	\$370	\$424	\$469	\$493	\$677
Herd Profit over Dir&Ovhd	\$81,512	\$14,130	\$30,811	\$65,200	\$147,600	\$533,421
Labor&Mgt per Cwt	\$0.94	\$2.09	\$1.61	\$1.22	\$0.72	\$0.53
Net per Cow after Labor&Mgt	\$316	\$21	\$119	\$227	\$328	\$543
Herd Profit over Labor&Mgt	\$49,368	\$790	\$8,605	\$31,497	\$98,161	\$427,774

