

## Farm Financial Benchmarking

Benchmarking is rapidly expanding as a powerful new management tool that producers are using to manage risk and improve profitability. The August 2010 issue of *Prairie Farmer*<sup>1</sup> asks, “Just how healthy is your farm? It’s a question more farm businesses are asking as they analyze financial statements and work with lenders to fine-tune their operations. And yet how can you answer that question? For most businesses, the answer is to benchmark the operation. To benchmark means to compare your numbers to those of another, similar business and in agriculture the idea is gaining momentum.”

As an example of how important benchmarking is becoming to producers, Doane’s Strategic Planning Quarterly Summer 2010<sup>2</sup> issue states, “We did a poll last year of possible subjects for in-depth coverage at our [www.doane.com](http://www.doane.com) website. This topic (benchmarking) came in third, outvoted by only two other subjects; both having to do with improved marketing skills.”

Why is the demand for benchmarking growing so much in agriculture? Benchmarking allows producers to evaluate how they are doing compared to other producers, helps them identify where their business can be improved, and helps them provide high quality documentation to their lenders. For example, producers can use benchmarking to evaluate their feed cost per pound of milk produced compared to farms of similar size, or to compare their cost of production for corn to the costs for the most profitable corn producers. Benchmarking lets producers explore what contributed to differences in their cost per bushel versus similar sized producers in their specific geographic area.

Benchmarking is also a valuable tool for lenders, researchers, and policy makers. Lenders can compare a customer’s costs to other producers of the same crops or livestock to help identify credit risks. Benchmarking provides invaluable research databases, the ability to identify best management practices, and provides a powerful resource to evaluate public policy proposals.

Benchmarking is a cutting edge management technique whose continues to increase as improving technology permits the collection and analysis of increasingly comprehensive data. In fact, the key to benchmarking are the databases of actual farm data. Benchmarking databases have almost exclusively been developed from farms and ranches that participate in farm business management education programs and associations (FBM programs). These programs historically have been associated with either a land-grant university or a community/technical college system. Producers generally pay an annual fee of \$500 to \$2,000 to participate in these programs and receive help with record keeping, an annual in-depth financial analysis, and business management training. In return, they contribute their farm financial data to publicly available benchmarking databases. Approximately 20,000 producers currently participate in these programs in about 20 states. Two studies<sup>3 4</sup> show that, on average, participation in these programs increases a farm’s net income seven to eight percent annually.

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<sup>1</sup>Vogt, W., *Benchmark Your Farm, Enhance Its Financial Health*. *Prairie Farmer*, August 2010.

<sup>2</sup>*The Critical Role of “Benchmarking” Your Farm’s Financial Performance*, Doane’s Strategic Planning Quarterly, Summer 2010.

<sup>3</sup>Joerger, R., *Student Perspectives of the Nature, Effectiveness, and Value of the Minnesota Farm Business Management Education Program*. *Journal of Agricultural Education*, 44(1) 56-69, 2003.

Expansion of FBM programs to more states and more types of producers would greatly expand the benchmarking opportunities available to U.S. producers. Facilitating expansion to more states would allow producers to benchmark with farms more similar to their own situation. Data collection from a wider variety of commodities and types of farms would expand benchmarking benefits to a much more diverse agricultural population. Historic state support for farm business management continues to be strained. Creating a national approach to providing this important data to U.S. farms would meet the growing need to provide management expertise support.

To encourage and enable more producers to participate in FBM programs and contribute data to a national benchmarking database, a 75% cost-share could be provided to producers enrolling in a certified farm business management education program, up to a maximum of \$2,500 per producer annually. This cost-share would be available to all types of producers; thus expanding farm program benefits and benchmarking to all U.S. agricultural producers regardless of commodity produced.

This initiative will help U.S. producers improve management abilities, profitability, global competitiveness and sustainability by giving them access to information and expertise to make informed decisions that will help agricultural businesses prosper. Producers who choose to take advantage of the cost-share will have a farm management educator/consultant assigned to their individual farm or ranch. Producers currently receiving this type of service attribute significant increased profits to this type of assistance. Federal investments in agriculture would be leveraged as producers generate increased profits due to the cost-share.

Increased benchmarking capacity and the associated business management training would be particularly beneficial to certain groups of producers. Young and beginning farmers would have increased access to management training and would be able to learn about production costs from the benchmarking database. Socially disadvantaged producers, including African American, Native Americans, Hispanics, and immigrants would receive in-depth farm financial training, marketing education, and the ability to compare their performance to similar producers and to other groups of producers. The growing number of women managing farms would be able to tap into new management resources. Producers considering organic production could evaluate their decision based on the actual costs and returns of existing organic producers. Specialty crop producers would benefit similarly. Producers of the many commodities that do not receive government program support would receive benefits and increased abilities to improve profitability.

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<sup>4</sup> Johnson, Roger G. & Swenson, Andrew L., *Evaluation of North Dakota Farm Business Management Education Program*. Agricultural Economics Report No. 367, Department of Agricultural Economics, North Dakota State University, December, 1996.

**Crop Enterprise Analysis  
(Farms Sorted By Net Return Per Acre)**

**Corn on Cash Rent**

	Avg. Of					
	All Farms	Low 20%	20 - 40%	40 - 60%	60 - 80%	High 20%
Number of fields	2509	459	543	524	455	528
Number of farms	1442	288	288	289	288	289
Acres	182.64	175.55	190.67	183.75	204.70	160.41
Yield per acre (bu.)	179.19	161.34	171.40	182.55	186.67	193.65
Operators share of yield %	100.00	100.00	100.00	100.00	100.00	100.00
Value per bu.	3.68	3.49	3.64	3.67	3.68	3.88
Other product return per acre	0.35	0.25	0.04	0.14	0.39	1.05
Total product return per acre	659.49	563.32	623.15	669.71	687.74	752.69
Hedging gains/losses per acre	0.67	-0.22	0.83	0.41	1.55	0.64
Crop insurance per acre	2.53	3.10	2.49	2.41	1.51	3.31
Other crop income per acre	0.91	1.02	0.57	1.20	0.94	0.87
Gross return per acre	663.60	567.22	627.04	673.73	691.74	757.51
<b>Direct Expenses</b>						
Seed	87.46	87.64	86.53	87.80	88.89	86.45
Fertilizer	152.19	175.76	164.07	155.05	139.42	126.03
Crop chemicals	26.98	30.15	27.15	26.82	26.41	24.54
Crop insurance	19.16	21.43	20.01	20.45	17.63	16.22
Drying expense	34.57	38.16	35.66	34.60	33.34	31.16
Storage	1.69	1.84	2.09	1.59	1.15	1.77
Fuel & oil	21.41	24.27	22.58	20.45	19.38	20.60
Repairs	35.57	41.23	37.72	35.29	33.14	30.56
Custom hire	7.36	11.05	6.48	7.66	6.96	5.01
Hired labor	2.75	2.08	2.44	4.76	2.31	1.98
Land rent	137.23	134.96	136.55	141.50	136.70	135.96
Machinery leases	2.12	2.13	2.48	2.24	1.46	2.25
Utilities	0.91	0.84	0.81	1.14	0.82	0.94
Hauling and trucking	1.26	1.29	1.55	1.30	0.91	1.20
Marketing	1.17	1.31	0.75	1.33	1.41	1.12
Operating interest	10.07	12.87	10.30	11.10	8.57	7.58
Miscellaneous	1.85	1.96	1.35	2.36	2.20	1.39
Total direct expenses per acre	543.75	588.97	558.53	555.43	520.69	494.76
Return over direct exp per acre	119.85	-21.75	68.51	118.30	171.05	262.75
<b>Overhead Expenses</b>						
Custom hire	0.20	0.57	0.18	0.08	0.13	0.08
Hired labor	8.35	9.79	9.27	6.41	9.08	7.24

Machinery leases	4.29	5.14	7.03	2.33	2.27	4.59
Building leases	1.61	1.06	1.61	1.46	3.00	0.80
Farm insurance	5.86	7.29	5.98	5.33	5.84	5.00
Utilities	3.93	5.16	3.96	3.53	3.57	3.60
Dues & professional fees	2.20	2.83	2.45	1.95	1.73	2.09
Interest	7.72	11.21	7.97	7.30	5.88	6.62
Mach & bldg depreciation	35.51	41.22	33.17	35.79	35.86	32.26
Miscellaneous	6.16	7.07	5.84	6.23	6.46	5.28
Total overhead expenses per acre	75.85	91.34	77.46	70.41	73.82	67.56
Total dir & ovhd expenses per acre	619.61	680.31	636.00	625.85	594.51	562.32
Net return per acre	43.99	-113.09	-8.95	47.89	97.23	195.20
Government payments	18.07	17.19	17.76	18.17	18.49	18.74
Net return with govt pmts	62.07	-95.89	8.80	66.05	115.72	213.93
Labor & management charge	42.76	46.28	39.74	43.41	42.29	42.88
Net return over lbr & mgt	19.31	-142.18	-30.94	22.64	73.43	171.05
<b>Cost of Production</b>						
Total direct expense per bu.	3.03	3.65	3.26	3.04	2.79	2.55
Total dir & ovhd exp per bu.	3.46	4.22	3.71	3.43	3.18	2.90
Less govt & other income	3.33	4.08	3.58	3.31	3.06	2.78
With labor & management	3.57	4.37	3.82	3.54	3.29	3.00
Net value per unit	3.68	3.49	3.64	3.67	3.69	3.88
Machinery cost per acre	108.81	130.18	113.60	106.84	98.88	95.78
Est. labor hours per acre	2.55	2.69	2.51	2.57	2.47	2.56

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Data Source(s): MnSCU Farm Business Management, 1343 farms  
 Southwest Minnesota Farm Business Management Association, 79 farms  
 Red River Valley Farm and Ranch Business Management, 20 farms

## Report Summary

**1. Report number** 175611  
**2. Location**  
 State: Minnesota  
**3. Farm Characteristics**  
 Year(s): 2009  
 Crop tenure type: Cash Rent  
 Organic Transition: No  
 No Answer

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**Dairy per Cow Location:Minnesota; Year:2009; Cow:50 - 100; Exclude:Organic**

	My Farm	Group Median	Count	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Milk sales	2,368.85	2,559.92	193	1,772.99	1,990.05	2,148.35	2,353.49	2,471.23	2,620.83	2,765.64	2,905.25	3,081.40	3,474.59
Gross Margin	2,675.69	2,536.14	193	1,497.05	1,930.43	2,144.57	2,301.04	2,430.14	2,625.82	2,779.72	2,928.24	3,155.10	3,454.42
Total feed expense	1,210.05	1,492.42	193	2,064.02	1,809.73	1,706.33	1,607.61	1,526.00	1,463.00	1,347.20	1,258.52	1,131.28	892.20
Breeding Fees	34.04	39.01	186	96.37	68.95	55.91	46.03	41.60	36.15	28.18	23.33	15.08	4.38
Veterinary	106.76	85.50	193	200.32	147.06	125.08	105.86	91.43	79.80	67.67	54.93	37.29	19.25
Livestock supplies	144.85	102.48	190	222.12	168.05	142.86	124.32	111.68	92.31	79.18	65.14	46.64	23.60
Fuel & Oil	39.73	45.38	192	105.17	83.82	67.80	59.33	49.69	42.26	37.28	31.66	24.61	16.99
Marketing	78.29	36.16	185	110.52	65.03	53.21	44.17	39.39	34.94	31.21	28.73	24.71	18.17
Operating interest	1.82	10.44	117	70.70	37.34	25.29	19.56	13.68	9.22	5.96	4.31	2.36	0.75
Total direct expenses	1,725.84	2,118.78	193	3,011.48	2,711.68	2,500.78	2,330.87	2,211.63	2,086.75	1,929.76	1,834.05	1,646.54	1,346.15
Return over direct expenses	949.85	371.44	193	-504.98	-130.43	1.01	170.26	293.41	424.94	540.07	713.02	907.20	1,159.90
Hired labor	21.66	65.63	120	410.91	226.11	150.52	112.01	79.41	53.38	29.61	15.18	2.28	0.00
Real estate taxes	26.57	13.87	165	43.10	28.33	20.12	17.06	14.99	12.38	9.44	7.33	5.45	2.43
Farm insurance	49.74	33.66	189	71.27	52.60	44.90	39.93	35.99	31.22	27.26	22.61	18.53	12.27
Utilities	105.77	84.93	181	160.85	127.84	110.87	96.95	89.67	78.42	65.35	42.95	0.01	0.00
Interest on interm. Debt	79.83	36.31	146	136.53	82.35	64.92	54.55	42.21	29.67	20.24	15.33	8.19	4.23
Interest on long term debt	23.52	75.47	139	253.36	169.56	125.10	93.70	80.40	65.44	51.35	32.26	17.30	7.51
Machinery depreciation	86.12	62.20	191	175.32	122.61	101.02	85.74	71.20	55.82	45.18	32.66	23.70	13.55
Building depreciation	0.00	48.10	150	181.98	105.17	78.32	65.46	50.68	41.37	30.54	23.10	14.32	7.02
Total overhead expenses	406.59	437.14	193	918.96	665.96	583.30	519.30	464.75	422.62	370.83	316.44	254.49	186.07
Total dir & ovhd expense	2,132.42	2,617.79	193	3,639.18	3,234.01	2,965.51	2,824.26	2,691.24	2,569.14	2,389.22	2,251.28	2,086.19	1,745.32
Net return	543.27	-62.72	193	-1,086.16	-644.47	-518.27	-288.98	-150.29	-14.59	131.21	283.66	464.94	689.36
Net return over lbr & mgt	301.90	-356.74	193	-1,307.31	-963.78	-755.19	-570.08	-445.13	-265.10	-143.34	23.31	151.88	386.32
Cost of production	11.45	14.91	193	20.56	18.50	17.03	16.01	15.17	14.61	13.82	12.84	12.36	11.37
Corn Fed (Bu.)	146.36	74.36	166	117.65	105.78	94.12	85.05	78.18	70.61	64.90	54.00	40.86	23.23
Corn Silage Fed (Ton)	4.73	7.47	183	14.03	10.78	9.81	8.66	7.72	7.19	6.53	5.90	5.18	3.49
Hay, Alfalfa Fed (Ton)	3.18	2.16	176	5.25	4.24	3.63	2.95	2.37	1.88	1.39	0.93	0.61	0.37
Haylage, Alfalfa Fed (Ton)	0.00	4.36	90	7.90	6.75	6.03	5.30	4.68	4.08	3.54	2.74	1.81	0.61
Avg. number of head	55.0	72.0	193	53.0	57.5	62.6	66.0	69.3	75.0	80.0	84.0	92.0	98.2
Milk produced per head	18,044	19,751	193	13,451	15,598	16,817	18,144	19,316	20,380	21,201	22,619	23,658	25,435
Culling percentage	32.7	24.2	191	9.0	14.1	17.2	20.7	22.7	25.7	28.8	32.4	35.0	43.9
Turnover rate	34.5	32.8	193	16.6	21.7	25.0	27.9	31.4	34.6	37.7	41.0	45.2	52.7
Percent of barn capacity	110.0	107.0	193	68.8	88.8	96.3	100.0	105.0	109.3	113.0	121.1	137.5	176.4
Feed cost per cwt of milk	6.71	7.61	193	10.28	9.31	8.58	8.25	7.82	7.39	7.06	6.74	6.22	5.01
Feed cost per head	1,210.05	1,492.42	193	2,064.02	1,829.76	1,706.33	1,607.61	1,526.00	1,463.00	1,347.20	1,258.52	1,131.28	892.20
Avg. milk price per cwt.	13.13	12.98	193	12.02	12.24	12.45	12.64	12.88	13.06	13.25	13.48	13.86	14.84