

#### Dairy's Changing Landscape:

The past year has seen the entire landscape of dairy change. Prices paid for milk have dropped, profitability on even the most efficient farms is questionable, at least one cooperative has instituted a quota system, dairy farmers have lost their markets, and more.

#### So what happened that caused such a dramatic change?

Below is just a short list of some of what has affected milk prices:

- The EU discontinued quotas and production is up. This resulted in increased exports.
- The US has helped India establish their dairy industry, and India has become self-sufficient. Check off one major export market.
- The dollar is trading at a very high levels impeding exports. Latest figures show that exports are off by 2% - 3%.
- Cheap oil might seem like an odd reason for milk prices to drop. But if you think about it, this oil makes it less expensive to move a bulky product like milk around the nation or the world. This is adding to the downward pressure on milk prices.
- Finally, a relatively new major player – customer preferences – is becoming more important. While the average person has no idea what an artificial growth hormone is, or what a GMO is, or what organic or pasteurization is, they do know that “they are bad.”

Even given the above, there are many factors that make the future of dairy farming bright. Population growth and worldwide income growth are projected to be substantial in the coming years. And it is important to note that as incomes rise, so does the intake of high value foods, like milk. But there is also no denying the issues faced today.

The key to your success is doing a detailed evaluation of where your farm stands, and how it compares to other dairy farms. This is the purpose of this publication.



# Dairy Profitability Comparison 2015

Specially Prepared For:



## Management Study Comparison 2015

My Farm			Comparable Size Farms			Top 10%					
Avg # Cows			Avg # Cows			Avg # Cows					
Milk Sold /Cow			Milk Sold /Cow			Milk Sold /Cow					
	Dollars	\$/Cow	\$/CWT		Dollars	\$/Cow	\$/CWT		Dollars	\$/Cow	\$/CWT
<b>Revenue</b>											
Milk, Sold	\$424,258	\$4,243	\$18.30	\$369,514	\$3,781	\$18.14	\$621,351	\$4,200	\$18.37		
Livestock Income	62,824	628	2.71	46,106	472	2.26	108,513	733	3.21		
Crop Income	0	0	0.00	11,910	122	0.58	20,751	140	0.61		
Ag Program Payments	43,306	433	1.87	4,742	49	0.23	9,846	67	0.29		
Miscellaneous	3,281	33	0.14	1,726	18	0.08	5,290	36	0.16		
Patronage Refunds	5,001	50	0.22	2,409	25	0.12	4,790	32	0.14		
Other Income	775	8	0.03	10,641	109	0.52	7,077	48	0.21		
<b>Total Revenue</b>	<b>\$539,445</b>	<b>\$5,395</b>	<b>\$23.27</b>	<b>\$447,048</b>	<b>\$4,576</b>	<b>\$21.93</b>	<b>\$777,618</b>	<b>\$5,256</b>	<b>\$22.99</b>		
<b>Production Costs</b>											
Feed Expenses	\$177,709	\$1,777	\$7.66	\$119,315	\$1,221	\$5.86	\$153,430	\$1,037	\$4.54		
Labor Expenses	14,319	143	0.62	27,663	283	1.36	51,986	351	1.54		
Rent - Lease of Real Estate	2,250	22	0.10	10,938	112	0.54	33,772	228	1.00		
Machine Hire (Custom Work)	17,883	179	0.77	22,321	228	1.10	31,722	214	0.94		
Supply Expenses	38,734	387	1.67	22,513	230	1.11	29,799	201	0.88		
Repairs (Machinery)	14,626	146	0.63	21,052	215	1.03	26,536	179	0.78		
Seeds & Plants	3,473	35	0.15	17,924	183	0.88	18,752	127	0.55		
Utilities (Business)	13,579	136	0.59	13,210	135	0.65	15,802	107	0.47		
Vet and Medicine	7,528	75	0.32	9,745	100	0.48	14,720	99	0.44		
Gasoline, Fuel, Oil (Business)	11,322	113	0.49	12,729	130	0.63	14,047	95	0.42		
Chemicals (Sprays or Pestic.)	1,867	19	0.08	8,185	84	0.40	10,728	73	0.32		
Repairs (Real Estate)	2,476	25	0.11	4,066	42	0.20	9,715	66	0.29		
Fertilizer	7,472	75	0.32	14,110	144	0.69	9,714	66	0.29		
Other Production Costs	10,787	108	0.47	18,844	193	0.93	27,271	184	0.81		
<b>Total Production Costs</b>	<b>\$324,025</b>	<b>\$3,240</b>	<b>\$13.98</b>	<b>\$322,615</b>	<b>\$3,300</b>	<b>\$15.86</b>	<b>\$447,994</b>	<b>\$3,027</b>	<b>\$13.27</b>		
<b>Administrative Costs</b>											
Management Labor	\$56,183	\$562	\$2.42	\$54,370	\$556	\$2.67	\$62,082	\$420	\$1.84		
Economic Depreciation	63,750	638	2.75	43,801	448	2.15	53,218	360	1.57		
Marketing Expenses	27,118	271	1.17	26,329	269	1.29	38,838	263	1.15		
Insurance (Business)	13,599	136	0.59	10,600	108	0.52	17,764	120	0.53		
Other Administrative Costs	9,683	97	0.42	11,379	116	0.56	13,621	92	0.40		
<b>Total Administrative Costs</b>	<b>\$170,333</b>	<b>\$1,704</b>	<b>\$7.35</b>	<b>\$146,479</b>	<b>\$1,497</b>	<b>\$7.19</b>	<b>\$185,523</b>	<b>\$1,255</b>	<b>\$5.49</b>		
<b>Interest Expense</b>	<b>\$27,378</b>	<b>\$274</b>	<b>\$1.18</b>	<b>\$13,119</b>	<b>\$134</b>	<b>\$0.64</b>	<b>\$16,807</b>	<b>\$114</b>	<b>\$0.50</b>		
<b>Net Margin</b>	<b>\$17,709</b>	<b>\$177</b>	<b>\$0.76</b>	<b>(\$35,165)</b>	<b>(\$355)</b>	<b>(\$1.76)</b>	<b>\$127,294</b>	<b>\$860</b>	<b>\$3.73</b>		

Disclaimer:

Numerous factors, many beyond the scope of the data in this summary, influence individual results. All data reported reflects past performance and does not predict or forecast future results. The data reported is believed to be accurate, but Pennsylvania Farm Bureau, MSC Business Services makes no warranty or representation, expressed or implied, as to its suitability or fitness for any purpose. The user of this data is cautioned to utilize the data at their own risk, recognizing that Pennsylvania Farm Bureau, MSC Business Services disclaim all liability for any damages, however occurring, to any person or entity as a result of such use.

## Analytical Study Comparison 2015

My Farm			Comparable Size Farms			Top 10%			
<b>Dairy Productivity Factors</b>									
Total # Milk Shipped (CWTs)	2,318,675	2,036,548	3,382,465						
Somatic Cells (1,000s)	200	213	198						
Cow Cull Rate	18%	32%	33%						
Dairy Animal Inventory Change	\$28,200	(\$997)	\$11,152						
Internal Herd Growth	25.00%	1.64%	4.85%						
Replacements per Cow	1.01	0.84	0.89						
Purchased Feed & Crop Exp / CWT	\$6.72	\$8.23	\$7.02						
Net Milk Price / CWT	\$17.13	\$16.85	\$17.00						
Total Cost Prod Milk / CWT	\$17.53	\$20.22	\$14.37						
Pur Feed / Milk Income	34%	28%	25%						
Milk Shipped / Man	2,107,886	946,030	1,136,625						
Total Feed Fed / CWT	\$14.06	\$11.08	\$9.43						
Milk Inc. over T. Feed / Cow	\$982	1,048	1,647						
Return per \$100 Feed Fed	\$149	\$199	\$204						
<b>Ratios</b>									
Return on Assets	2.65%	-1.59%	6.32%						
Current Ratio	3.16:1	3.14:1	2.98:1						
EBITD / Cow	\$1,650	\$884	\$1,884						
Percent Net Worth	55%	57%	58%						
Operating Expense %	92%	107%	84%						
Interest Expense %	5%	3%	2%						
Asset Turnover (years)	3.16	3.90	3.14						
Total Business Prod / Man	\$458,854	\$219,239	\$292,894						
Labor Productivity Ratio	7.16:1	6.08:1	7.97:1						
Total Man Equivalents	1.10	2.48	3.36						
Dairy Debt per Cow	\$4,648	\$3,761	\$4,082						
Cows / Man	91	45	50						
<b>Other Cost Analysis</b>									
Total Fixed Costs / CWT	\$8.12	\$9.03	\$8.91						
Total Variable Costs / CWT	\$14.38	\$17.04	\$15.90						
Direct Crop Expense / Acre	\$57	\$118	\$118						
Crop Margin / Acre	\$191	\$45	\$112						
Value Forage Harv / For Acre	\$658	\$467	\$540						
Value Grain Harv / Grain Acre	\$640	\$419	\$479						
Machine Op Cost / Acre	\$214	\$184	\$213						
Total Mach Op Cost / Acre	\$408	\$279	\$297						

\* Comparable Size Farms

The data in the Comparable Size Farms column is designed to average, as closely as possible, farms with roughly the same number of cows milked as your farm. The data is not from all farms in the MSC Business Services database, but is only from those utilizing conventional feeding systems that have been designated as included in this summary by their Account Supervisor.

\* Top 10%

The Top 10% Farms were chosen based on Net Margin per cwt within the MSC Business Services database. These farms utilize conventional feeding systems and have been designated as included in this summary by their Account Supervisor.