

Western organic dairies in economic distress.

C.A. Daley, R. Burroughs, R. Mathews, A. Dykstra, and D. Heffner

While the conventional dairy industry is rallying, organic dairy producers are feeling serious economic hardship. Economic distress is often cyclical in the dairy industry. Many western organic dairies, however, have experienced negative returns 4 of the last 5 years, according to a recent economic analysis by Genske and Mulder.¹ With escalating production costs coupled to a static pay price, producers are forced to absorb those additional costs, in many cases creating a continuous flow of red ink. The question becomes, how long can they hold on? A sure sign of trouble is when a producer has to borrow money to pay their overdue feed bill. Sad as that may sound, since 2009 five organic dairies have permanently closed their doors, while another four report serious economic crisis and the verge of bankruptcy.

Producers often suffer these economic hardships in silence, afraid to admit the shortfall. Some fear being labeled a “failure” or a “poor manager” by those less familiar with the economic realities of western organic milk production. Californians were hit particularly hard this year due to drought, limited feed and water supplies, and are now bracing themselves for a hot summer ahead. It would seem 2014 has all the makings for another year of red ink.

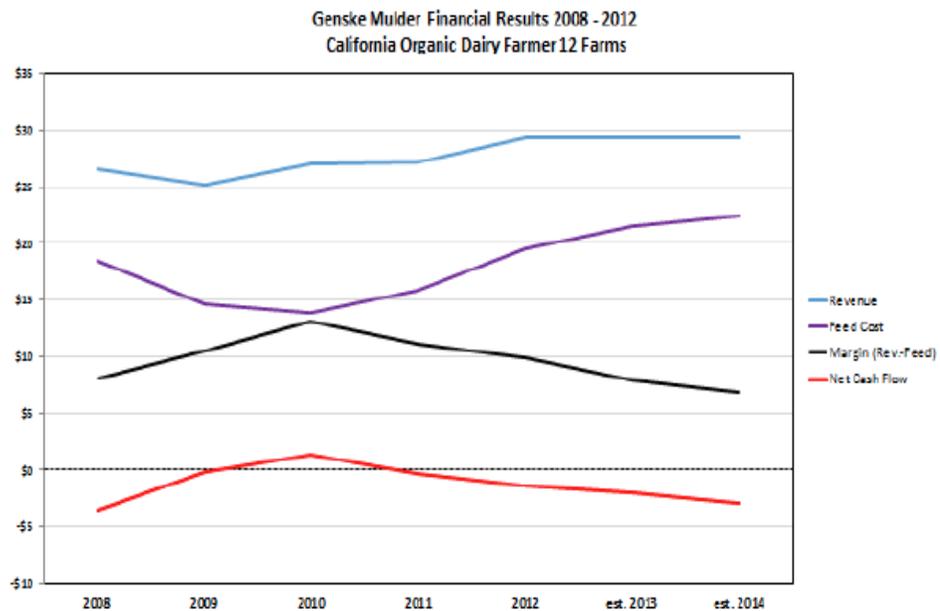
Genske & Mulder analysis

Genske & Mulder analyzed 12 organic dairies in the west, specifically focused on the 2008 – 2012 time span. The analysis revealed a negative average net cash flow for all 12 dairies in 4 of the 5 years analyzed, suggesting serious financial trouble. Of particular note was the steep increase in feed costs since 2010, which are responsible for the sharp drop in margins and net cash flow. The report also shows some alarming statistics with respect to debt ratio that is cause for great concern. Banks require a \$1.25 in cash flow for every \$1.00 of debt payment (interest + principal). The average debt coverage ratio for 2010 through 2012 was only 0.97, meaning the average dairy, in this analysis, did not meet their loan contract. If they are still in business, it’s only because their bankers are willing to waive that contract, at least in the short term.

As alarming as that may be, the average net loss for the 12 dairies over the course of the five-year study was \$437,944 per dairy. The cumulative loss for all dairies over the same time-period was \$5,225,334. These dairies are bleeding assets. Obviously, this is not a sustainable situation.

¹ Genske & Mulder CPA 2008-2012 – Financial Analysis of 12 California Organic Dairy Farms. Genske & Mulder are a California accounting firm specializing in dairies.

Overall, the rest of the organic dairy food chain is doing well. Organic fluid milk sales have been strong in 2014, up 13.5% from last year and in stark contrast to the 1.1% decline in demand for conventional milk.



According to AMS Organic Dairy Market News, the weighted average advertised price for a half gallon of organic milk has ranged from \$3.19 to \$3.80 during 2014. The lowest retail price of \$2.50 per half gallon is for an in-store brand sold by a supermarket chain in the Southwest. The retail price at the high end has been \$4.99 per half gallon. See Table 1 below for the Organic Half Gallon Milk Prices for 2010 through week 22 of 2014. This data from AMS Organic Market News seems to indicate minimal retail price movement during a period of significantly rising production costs.

Year	Weighted Average Range	Low Retail Price	High Retail Price	Yearly Average Weighted/Low/High
2010	\$2.75 to \$3.75	<u>\$2.49</u>	\$4.49	\$3.17/\$2.66/\$3.95
2011	\$2.55 to \$4.01	<u>\$2.49</u>	\$4.59	\$3.33/\$2.89/\$3.99
2012	\$2.68 to \$3.93	<u>\$2.50</u>	\$4.99	\$3.43/\$2.79/\$4.41
2013	\$3.21 to \$3.75	<u>\$2.50</u>	\$5.00	\$3.54/\$2.81/\$4.65
2014	\$3.19 to \$3.80	\$2.50	\$4.99	\$3.44/\$2.78/\$4.29

The Retailer Owners Institute and the Economic Research Service (ERS) report that most retailers operate at a 2% net profit. Depending on existing conditions in the marketplace, retailers have total flexibility to either cut costs (purchase a lower cost product wholesale) or raise retail prices. Retailers have a system in place that ensures profitability – it’s just good business practice.

Major processors are also in a positive cash flow, with some reporting record sales growth, program and product line expansion, increased philanthropic giving, and employee bonuses. Processors have a system in place that makes sure they operate at a profit – it's just good business practice.

The only component of the organic dairy food chain currently in economic peril is the farmer. Producers have already culled herds, reduced labor costs, changed feeding strategies, and forward contracted purchased feeds. They have worked to develop more on-farm feed production by enhancing their grazing practices and improving pasture quality and yield. Yet they struggle to make ends meet. When you've exhausted all options for optimizing operational efficiency and still find it difficult to pay your bills, including a living wage to yourself, your operation is NOT sustainable. Many organic dairies have family members working on the dairy for no pay at all. Our business acumen needs to change.

Organic milk production is an expensive process. There are inherent costs associated with organic pasture-based operations that make it impossible to compare efficiencies to the conventional paradigm. By design, organic dairies are more expensive to own and operate. They are smaller, graze their cows, and don't use easy fixes like antibiotics, pesticides or synthetic fertilizers that could damage the environment or compromise food quality or safety. With few exceptions, organic dairies are family owned and operated,

To ensure a high quality, sustainable organic milk supply, the organic food chain needs to fairly compensate organic dairy producers for these added production costs,

WODPA Economic Survey

Since the release of the Genske and Mulder analysis, there has been much discussion and many more questions posed. For instance, how wide spread is the economic instability? Is this just in the Central Valley, or is it consistent throughout the west?

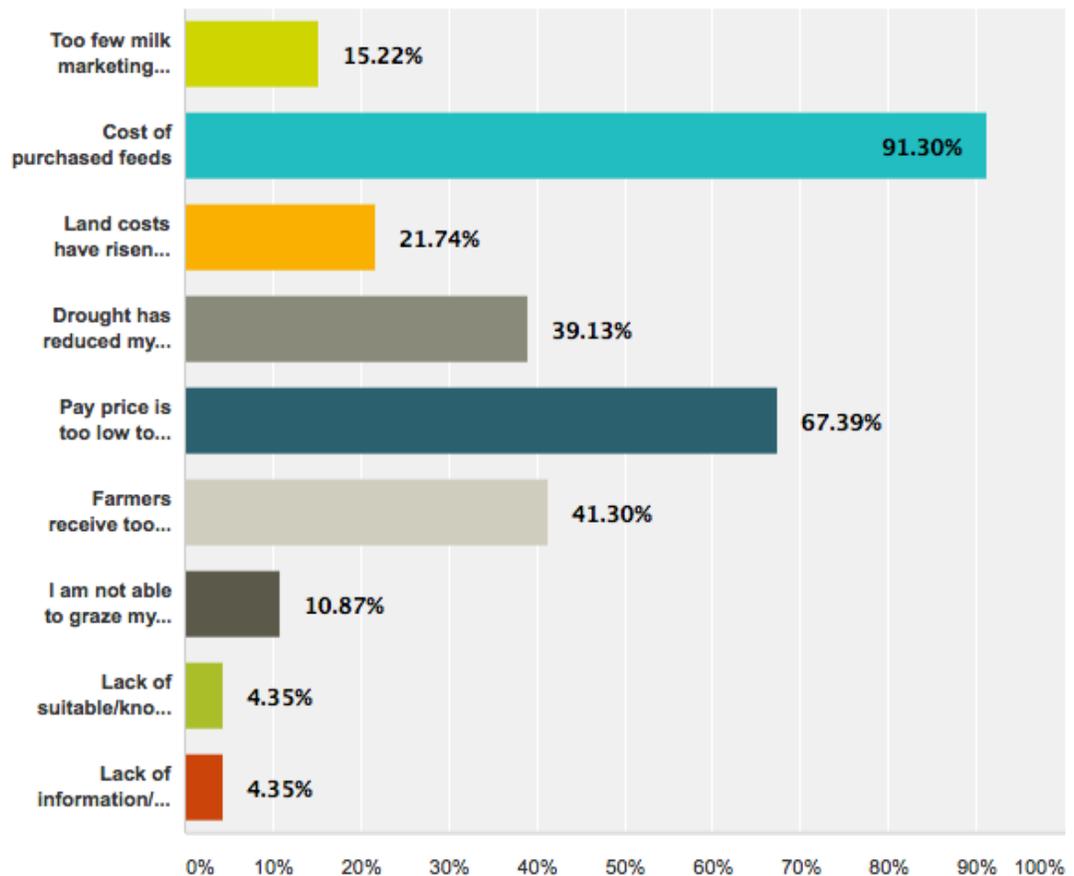
To better understand how wide spread this economic distress is among organic dairy producers in the Western Region, WODPA developed an economic assessment survey. The survey was emailed to 152 Western organic dairies. Producers from forty-eight dairies (32 percent of those contacted) responded to the call for information in April of 2014. Producers were asked 15 questions. The results are as follows:

1. How are you doing financially (Specifically 2008 - 2013)?

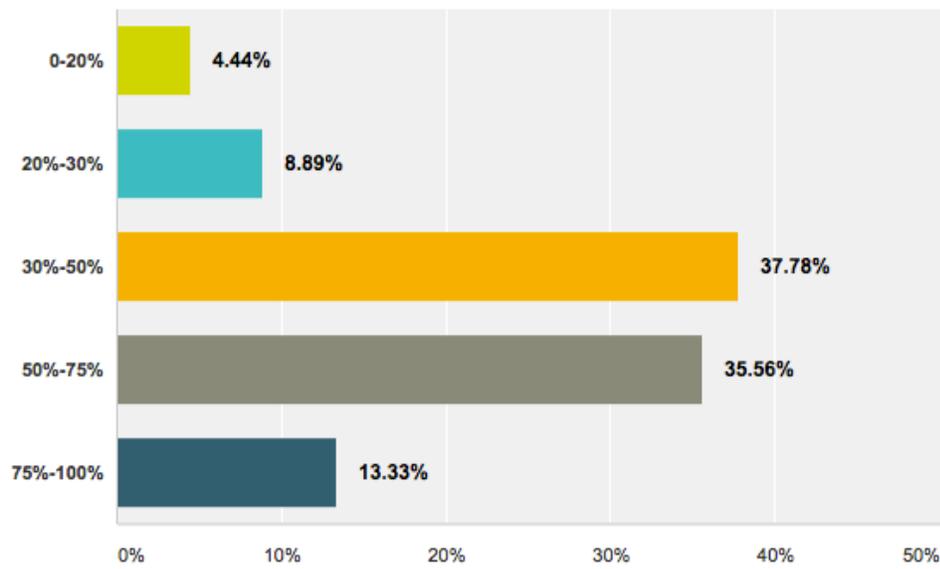
Thirty-nine percent are going backwards financially, indicating that they cannot cover their production costs. Thirteen percent are in serious financial trouble. Four percent are making plans to get out of the business altogether.

2. **What factors limit your ability to make a profit in this business?** The overwhelming response to this question (91 percent of respondents) was the rising costs of purchased feeds. The National Organic Grain and Feedstuffs report for May 2014 shows prices for organic corn and soy remain strong, no signs of weakening. Hay prices continue to rise due to limited supplies. The biggest challenge facing producers in 2014 may well be locking in organic hay and grain at a price that provides a positive net return.

The second most common limitation to producer profit was indirectly tied to the rising cost of feed. Sixty-seven percent felt the pay price was too low to cover their production costs. In third place, 41 percent of respondents felt that they garner too small a percent of the retail dollar. In a close fourth position, 39 percent believe the drought is a major factor limiting their overall profitability.



3. **What percent of feed do you produce "on farm" within one year?** Most of the respondents (73%) said that they grow 30-75% of their own feed on-farm, 13% grow 75-100%. Theoretically, producers should be able to grow their own feed for less money. However, there was no correlation between producers who grow more of their own feed and economic success for the 48 dairies responding. For example, of the 5 dairies in serious economic distress 4 reported growing 50-75%



of their own feed. Half of the dairies making plans to exist the business were also in this 50–75% category. This data suggests that the percent of home-grown feed production is not a good predictor of economic success.

4. ***How much concentrate do you feed on average/cow/day?*** There has been much discussion among organic dairy producers on the subject of grain. *How low can you go? Do low grain herds make more money than high grain herds?*

Six percent of respondents reported feeding no grain. Twenty percent of respondents feed less than 6 lbs of grain/cow/day, 33% feed between 6 and 12 lbs, 33% feed between 12 and 20 lbs, and 6% feed more than 20 lbs. (See Table 2). For example, the zero grain dairies varied from making their best money ever to going backwards financially to in serious financial trouble.

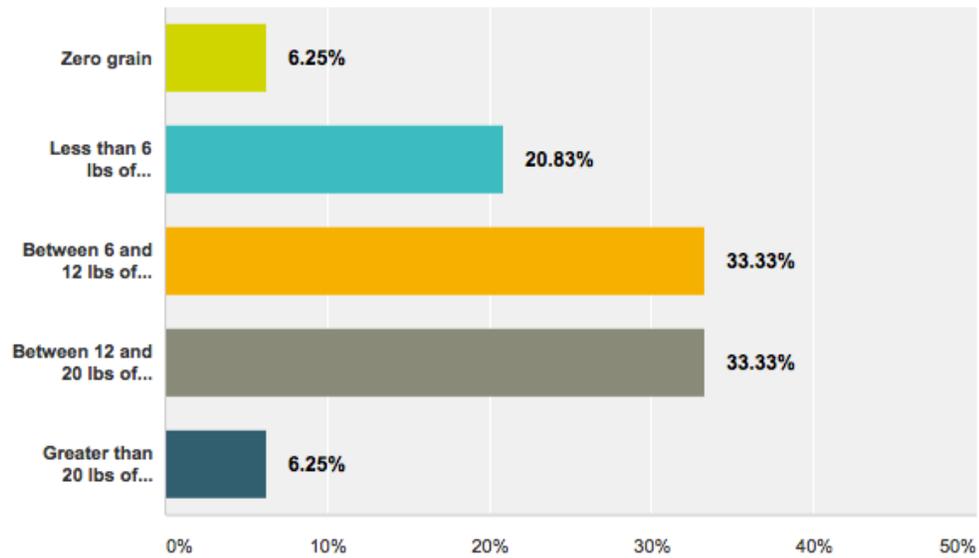


Table 2.

	Best \$ Ever	Doing OK	Barely Making it	Going backwards	In serious trouble	Exiting the business
Zero Grain	2%	0%	0%	2%	2%	0%
Less than 6 lbs	4%	6%	2%	4%	0%	0%
Between 6 and 12	4%	8%	10%	10%	2%	2%
Between 12 and 20 lbs	0%	13%	10%	6%	4%	0%
More than 20 lbs	0%	0%	2%	2%	0%	2%

5. **How much did you pay (\$/ton) for concentrate in 2008 vs. 2013?** There was a significant range in costs, due to regional differences among dairies. Overall, producers are paying 63% more for their concentrate.

Average cost of Concentrate/Ton	Year
\$378/T	2008
\$617/T	2013
Difference = \$239/T	% increase = 63.2%

6. **How much did you pay (\$/ton) for alfalfa hay in 2008 vs. 2013?** There was a 45.5 % increase in hay costs over the last five years.

Average cost of Alfalfa/Ton	Year
\$220/T	2008
\$320/T	2013
Difference = \$100/T	% increase = 45.5%

7. How much has your feed cost/cow/day changed between 2008 and 2013?

The average feed cost/cow/day has increased 55% over the last five years.

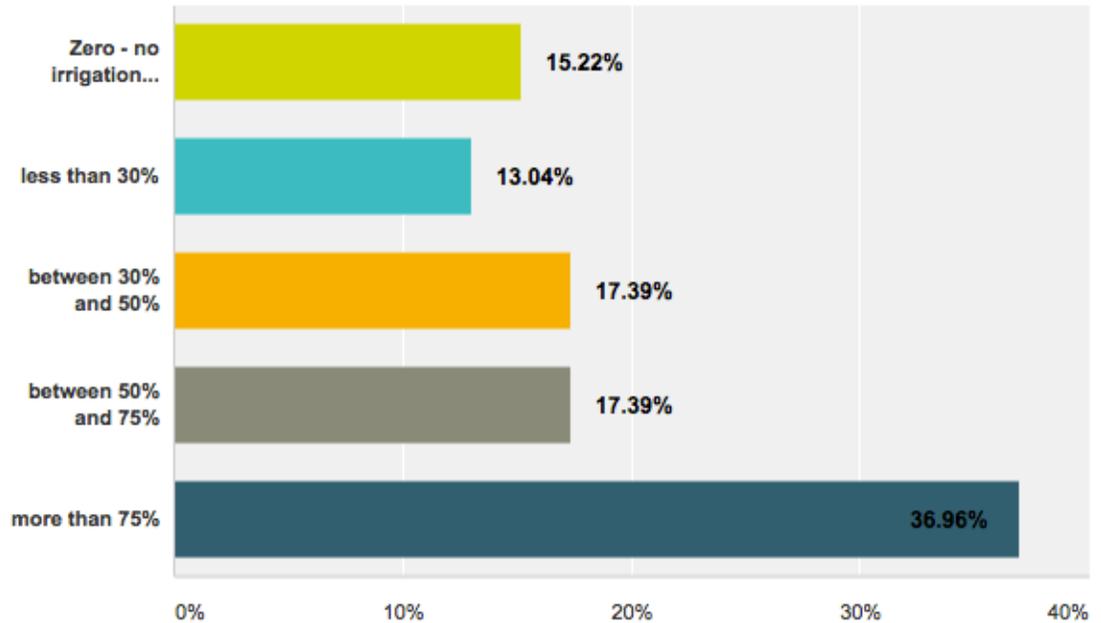
Average feed cost/cow/day	Year
\$6.71	2008
\$10.40	2013
Difference = \$3.69	% increase = 55%

8. How has grazing affected your business? Sixty-four percent of respondents replied that grazing is the best thing they do to improve profitability. Nearly 18 % responded that grazing reduces their milk production but improves their net profit per cow while 11% said it reduces production and profitability.

Answer Choices	Responses
▼ Grazing is the best thing I do on my dairy to improve profitability	64.44%
▼ Grazing has no impact on my profitability	6.67%
▼ Grazing reduces my milk production and my profitability	11.11%
▼ Grazing reduces my milk production but improves my net profit per cow	17.78%
▼ I honestly don't know what impact grazing has on my bottomline	0.00%
Total	

9. How much of your on-farm feed production is dependent upon irrigation water?

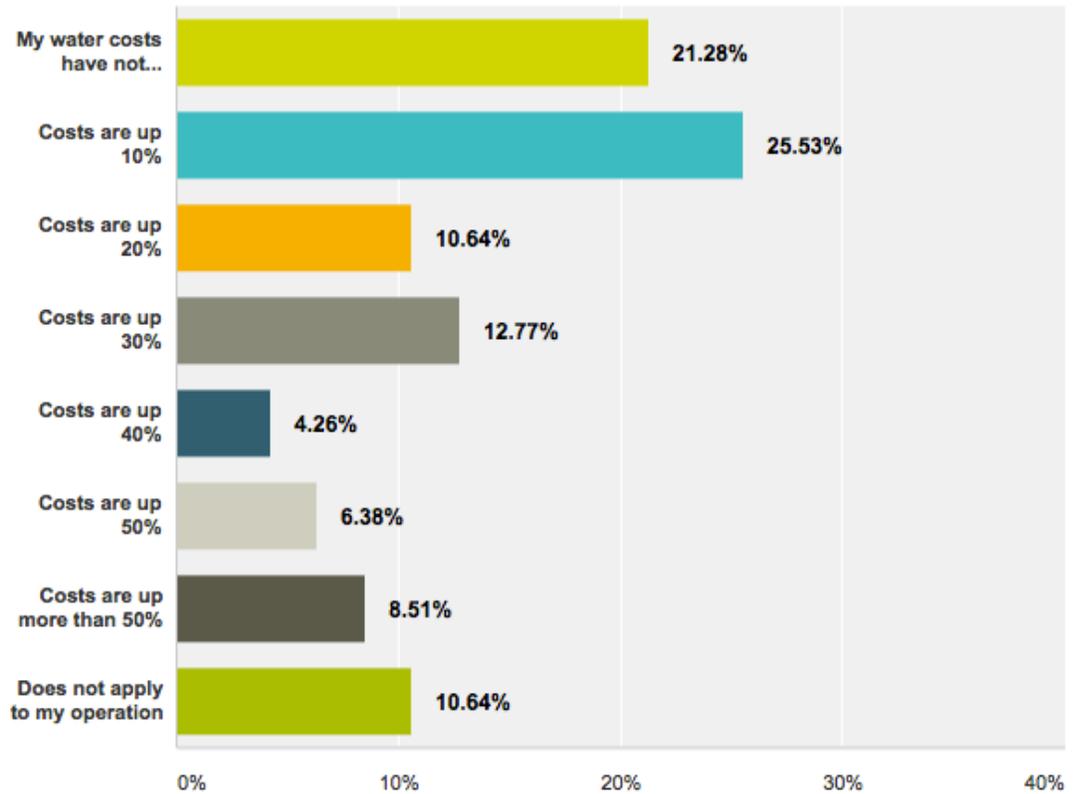
Eighty-five percent of respondents rely upon irrigation water for their on-farm feed production. Thirty-seven percent replied that 75% or more of their on-farm feed is dependent upon irrigation water.



10. *How much has your water supply changed from 2008 to 2013?* Twenty-five percent of respondents will be impacted by water allocation reductions this year, primarily due to drought. Thirteen percent have had their allocation reduced by more than 50%. Others have deep irrigation wells or are in regions less impacted by water shortages. The survey did not ask any questions about water monitoring programs or the condition of their respective aquifers. In general, aquifer recharge is not meeting water demand.

Answer Choices	Responses
▼ No change	75.56%
▼ Water allocation has been reduced 10% to 20%	2.22%
▼ Water allocation has been reduced 20% to 30%	4.44%
▼ Water allocation has been reduced 30% to 40%	4.44%
▼ Water allocation has been reduced 40% to 50%	0.00%
▼ Water allocation has been reduced more than 50%	13.33%
▼ Water allocation has been increased	0.00%
Total	

11. *How much have your water costs changed from 2008 to 2013?* In general, water costs are up throughout the west, only 21% report no change in water costs. Fifteen percent of respondents have experienced a 50% or greater increase in water costs.



12. *What have you done in the last 3 years to improve your profitability?*

Producers have been working hard to improve profitability on-farm, doing what they can to reduce costs. The number one practice producers have implemented has been soil remediation and/or reseeded pastures to improve forage quality (70% of respondents). In addition, 62% of respondents have retooled their grazing management to optimize pasture productivity. Fifty-five percent of respondents have increased their on-farm feed production.

Answer Choices	Responses
▼ Fed more grain to boost milk production	23.40%
▼ Fed less grain to improve pasture consumption (DMI from pasture forages)	36.17%
▼ Improved forage quality in pastures through soil amendments and/or reseeded	70.21%
▼ Hired a soil consultant	12.77%
▼ Hired a pasture consultant	6.38%
▼ Hired a nutritional consultant	23.40%
▼ Hired a business consultant	4.26%
▼ Improved grazing management	61.70%
▼ Reduced herd size	19.15%
▼ Eliminated staff	27.66%
▼ Produced more on-farm feed	55.32%
▼ Participated in Government programs, i.e., EQIP, etc.	23.40%
▼ Invested in solar power or other innovative technology to improve efficiency	6.38%
Total Respondents: 47	

13. How has your pay price changed over the course of the last five years?

Based on responses received, pay price has increased just \$3.88 over the past 5 years or 14.8%. As noted earlier feed costs alone, during the same period, have increased by 55%. Clearly there is a significant disconnect between production costs and pay price.

Average pay price	Year
\$26.22	2008
\$30.10	2013
Difference = \$3.88	% increase = 14.8%

To demonstrate the shortfall between rising feeds costs and a near static pay price, WODPA calculated the feed cost/milk income ratio for a herd averaging 45 lbs. per day. WODPA used the respondent provided average feed costs and average pay price to calculate the feed cost/milk income ratio. Assuming feed costs in 2008 were \$6.71/cow/day and the average pay price for milk was \$26.22/cwt, the feed cost to milk income ratio was 57%, meaning 57% of the milk check went to pay for feed. All other expenses had to be paid from the remaining 43%.

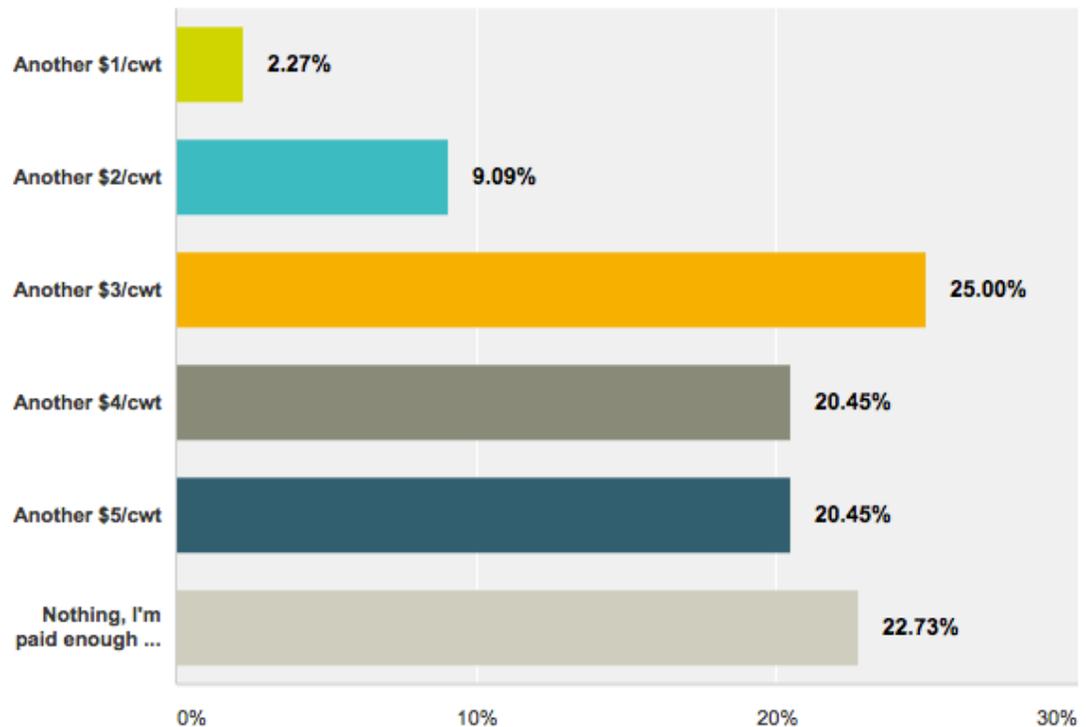
In 2013, feed costs were up a reported 55% resulting in an average feed cost/day/cow of \$10.40. Milk income improved 14% over that same time

period to \$30.10. The resulting feed cost/milk income ratio is 77%. This means that all other costs associated with milk production had to be paid from the remaining 23% of the milk check.

This means respondents had 47% less revenue in 2013 than 2008 to pay their non feed production costs which should include a living wage for themselves. As the responses to question 12 shows, producers have aggressively pursued operational changes to improve profitability. Despite these efforts producers are still contending with a revenue deficit.

Year	Feed cost/cow 65% increase	Milk income/cow 14% increase	How much of the milk check goes to feed
2008	\$6.71	\$11.80	57%
2013	\$10.40	\$13.55	77%

14. ***What do you need to make this a profitable business? (i.e., to cover the production costs, debt service, depreciation, return on investment, health care, and living expense).*** Responses to this question were highly variable with a predominance of producers (66%) needing \$3 to \$5 more/cwt to make a living. Only 23% stated that they are paid enough to cover the items listed.



15. ***What is your general feeling for your future in the organic dairy business today?*** Thirty-seven percent of respondents are disappointed, tired,

defeated or see no future in the organic dairy business. Seventeen percent are guarded while another 21% are hopeful that things can turn around soon. Only 25% are actually excited about the opportunities in organic dairy production.

Answer Choices	Responses
Excited about the opportunities	25.00%
Hopeful that things can turn around soon	20.83%
Guarded - not enthusiastic nor am I disillusioned	16.67%
Disappointed - it appears the Organic Dairy Business is not sustainable after all	25.00%
Tired, defeated, I want to be done	2.08%
I see no future for me or my children	10.42%
Total	

Summary

AMS Organic Market News, Organic Half Gallon Milk Prices data for 2010 through week 22 of 2014 seems to indicate minimal retail price movement during a period of significantly rising production costs.

Major processors are in a positive cash flow, with some reporting record sales growth, program and product line expansion, increased philanthropic giving, and employee bonuses.

WODPA conducted an economic assessment survey of Western organic dairies. Thirty-two percent of the dairies contacted responded to the survey conducted in April of 2014.

Sixty-one percent of respondents are struggling financially, reporting that they are *"just barely getting by"* or worse over the course of the last 5 years.

Ninety-one percent of the respondents reported that the rising costs of purchased feeds are limiting their ability to make a profit. During the period 2008 through 2013 the price of concentrate increased 63%, and alfalfa hay increased 45.5%. During the same period the average feed cost/cow/day increased 55%.

During the last three years 70% of respondents have implemented soil remediation and/or reseeded of pastures to improve forage quality. In addition, 62% of respondents have retooled their grazing management to optimize pasture productivity. Fifty-five percent have increased their on-farm feed production.

Seventy-three percent of respondents grow 30-75% of their own feed on-farm while another 13% grow 75-100%. There was no correlation, however, between producers who grow more of their own feed and economic success. Further, the correlation between grain feeding and economic status shows very little relationship.

Sixty-four percent of respondents replied that grazing is the best thing they do to improve profitability.

Eighty-five percent of respondents rely upon irrigation water for their on-farm feed production. Thirty-seven percent replied that 75% or more of their on-farm feed is dependent upon irrigation water. Twenty-five percent of respondents have been impacted by water allocation reductions during the period 2008 through 2013. Thirteen percent have had their allocation reduced by more than 50%. Fifteen percent of respondents have experienced a 50% or greater increase in water costs.

Sixty-seven percent felt the pay price was too low to cover their production costs. Based on responses received, pay price has increased just \$3.88/cwt over the past 5 years or 14.8%. Sixty-six percent of respondents stated that they need \$3 to \$5 more/cwt to make a living. Only 23% stated that they are paid enough.

WODPA used the respondent provided average feed costs and average pay price to calculate the feed cost/milk income ratio. In 2008 that ratio was 57%, meaning 57% of the milk check went to pay for feed. All other expenses had to be paid from the remaining 43%. In 2013 that ratio was 77%. Thus all other costs associated with milk production had to be paid from the remaining 23% of the milk check. This means respondents had 47% less revenue in 2013 than 2008 to pay their non feed production costs which should include a living wage for themselves.

Thirty-seven percent of respondents are disappointed, tired, defeated or see no future in the organic dairy business. Seventeen percent are guarded while another 21% are hopeful that things can turn around soon. Only 25% are actually excited about the opportunities in organic dairy production.

Conclusion

There is a serious economic crisis occurring throughout the organic dairy community that runs throughout the western region. The most vulnerable are the young farmers and those who have leveraged themselves to stay in business. It's time to build a strategy around sound business practices that will ensure profitability for all producers.

Join WODPA this October at its conference in Rohnert Park, California for a facilitated discussion around gaining control over profitability. The goal will be to:
1) build upon the WODPA survey to establish and clearly define limitations to

profitability, and 2) set forth a workable strategy and action plan to address each of these issues. The ultimate goal is to improve producer profit.