

The Wisconsin Goat Dairy Profitability Project

2007 and 2008 Results For a Select Group of Wisconsin Goat Dairies

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A collaborative project of the Wisconsin Department of Agriculture, Trade and Consumer Protection, Wisconsin Technical College System, University of Wisconsin-Extension, Iowa State University Extension, and Southwest Badger Resource Conservation and Development Council

Report Authors*: Paul Dietmann, WI Department of Agriculture, Trade and Consumer Protection
Dr. Larry Tranel, Iowa State University Extension



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The Study

We have included eleven goat dairy operations in the study in 2008, which is one more than 2007. The criteria used to select the farms included: 1) Each has been milking goats for a minimum of five years; 2) Each is achieving the majority of their farm income from the dairy goat operation; 3) The dairy goat operation is the primary source of income for the farm household. According to a 2006 survey conducted by the Wisconsin Agricultural Statistics Service (WASS), there were 165 dairy goat herds in the state. Thus, the eleven operations in our study in 2008 represent approximately 7% of the total number of dairy goat herds in Wisconsin. The average size of a herd in our study was 215 goats, which is significantly higher than the WASS survey average of 118 does per herd. Average production per doe in our study was 1,236 pounds, which was lower than the average of 1,416 pounds per doe among the herds in the WASS survey.

Purpose of the Study

There are several purposes for this study. First, there was a need to begin creating a set of benchmarks against which goat dairy operations could gauge their own financial performance. Second, agricultural lenders, county extension agents, farm management instructors and other professionals need to have data they can use to help new or existing dairy goat producers develop financial projections and business plans. Third, there is a need for policy makers to gain a better understanding of the economics of goat dairy production and its potential impact on the state's agricultural economy. Finally, processors of goat milk need to get a clearer picture of the costs of production on-farm in order to establish a fair, sustainable price for goat milk.

Limitations of the Study

Even though the number of herds included in our study represent approximately 7% of the herds in the state, eleven farms is a very small data set. The data we collected in this initial phase of the study is only from two calendar years: 2007 and 2008. These were years in which feed costs and other variable farm expenses were relatively high and volatile, while the price of milk was steady to slightly increasing, and the price of breeding

stock declined. We used fair market value-based balance sheets rather than cost-basis balance sheets. The fair market values listed for assets could vary considerably depending on where the farm was located in the state as well as the person who assembled each balance sheet. In turn, this has some impact on the resulting profitability. While we have faith in the validity of the data and the results, this report should be read with an understanding of its rather limited scope.

Methodology

Project investigators gathered beginning and ending balance sheets, Schedule F tax records, as well as cash flow information for the 2007 and 2008 calendar years from each of the cooperating farms. The data from all farms was combined and analyzed by Dr. Larry Tranel, Dairy Field Specialist with Iowa State University Extension. The results are expressed as averages per farm and per doe for the eleven farms in the study and for the top four most profitable farms in the study.

The study primarily looks at the profitability of these operations and not at their net cash flows. To that end, our focus was on the asset side of the balance sheet and we attempted to isolate only the farm assets that were being utilized for the dairy goat enterprise. Because the farms in the study varied in terms of how their operations were being financed, we did not include interest paid on farm debt when calculating net farm income. Instead, an equity charge of 6% of the fair market value of the assets being utilized in the dairy goat enterprises was applied.

To help calculate the return to unpaid labor and management, each farm was asked to estimate the number of hours of unpaid labor that went into the dairy enterprise. Each was also asked to estimate the value of that labor relative to the local job market.

Although cash flow was not the primary focus of this study, we did collect some information related to cash flow including new borrowings during the year, capital purchases and sales, family living expenses, and other data. However, a cash flow analysis was not done since comprehensive cash flow data was not available on each farm.

Why Profitability Rather than Cash Flow?

Profitability and cash flow are related to each other but they give us very different information about the financial performance of a farm operation. For example, a farm can be “profitable” and yet have a negative cash flow. We sometimes see this situation when an otherwise healthy farm business has debt that is incorrectly structured or when too much cash is being drawn out of the business in relation to income. On the other hand a farm can have a strong, positive cash flow and yet be unprofitable. We often see this with a farm that has been owned for a long period of time, it has appreciated in value, debts have been paid off, and family living expenses are relatively low. The investment in the farm (the market value of the assets listed on the balance sheet) end up being very high compared to the net income being generated by the farm, but the cash outflow is also low.

“Profitability” considers how an investment made in a particular enterprise is able to generate returns for the investor. In an agricultural enterprise such as a goat dairy, profitability includes five components: 1) Net Farm Income From Operations; 2) Rate of Return on Assets; 3) Rate of Return on Equity; 4) Operating Profit Margin and 5) Asset Turnover Ratio. Profitability calculations are made using a farm’s annual income statement, and its beginning and ending balance sheets. The income statement includes both cash and non-cash income and expense items. On the income side we include the sale of milk and other farm products, and we also include changes in feed or market livestock inventories. On the expense side we typically include all cash farm expenses including interest paid on farm debt (but not the principal payments made against that debt), and include non-cash expenses such as depreciation and unpaid labor costs. Again, in our study we applied an

equity charge rather than interest paid on farm debt to take the financing variability from one operation to the next out of the analysis.

“Cash flow” looks at a business’ ability to bring in enough dollars to meet all of its cash expense obligations, income tax liabilities, principal and interest payments on term debts, and the owner’s cash withdrawals from the business. It really does not help us make investment decisions regarding the business. It simply indicates whether or not it is likely there will be any money left over at the end of the year.

Cash flow can vary widely from farm to farm depending on the level of debt, structure of the debt, family living expenses, income tax liabilities and a number of other factors. Profitability is a much better way to compare the financial performance of one farm to another, or to look at the overall financial health of a particular sector of agriculture.

Summary of the Results

As mentioned above, 2007 and 2008 were difficult years for many dairy goat producers. Our study showed that all of the financial measures we considered were, on average, very low for producers in the study. Even so, we were somewhat surprised to find that four farms in our study in 2008 were profitable compared to only two profitable farms in 2007. The average break-even cost of production for the herds in our study was significantly higher than the average market price for goat milk.

Pounds of milk sold per doe in 2008 showed a wider spread between the average of the herds in the study and the top four herds: 1,288 pounds of milk per doe in the average herd and 1,510 pounds per doe in the top four herds. In 2007, production was 1,375 pounds/doe for the average herd and 1,427 pounds/doe for the top two.

The average rate of return on assets for the four profitable herds in 2008 was 6.8%, which is respectable although much lower than the 17.3% we saw in the two profitable herds in 2007. The operating profit margin for the top performers was fairly good at 20.3%. The Asset Turnover Ratio was 45.9% in the profitable herds in 2008 versus 74.8% in 2007. (Asset Turnover Ratio = gross value of farm production/average farm assets.) The main reason for the profitability differences in the top herds from 2007 to 2008 is that capital investment per doe was significantly higher in the second year. These four farms are producing milk cost-effectively but the income is spread over more capital assets.

For the average herd in the study in 2008, the rate of return on assets, rate of return on equity, and operating profit margin were all more negative than in 2007. The average Asset Turnover Ratio was 27.4% which is fairly good but lower than in 2007. The long term survivability of these operations without a significant positive change in their financial situations is of high concern.

The capital investment per doe in 2008 was \$2,071 for the four profitable farms and \$3,028 for the average farm. The spread in 2008 was much narrower than in 2007 when the profitable farms’ capital investment was only about 1/3 of the average farm’s capital investment (\$1,144/doe compared to the average of \$3,086). Some of this difference could be explained by the variability in which assets are valued on each farm’s balance sheets or the allocation of those assets to the dairy goat enterprise. For example, the most profitable farms reported a smaller number of productive crop acres (35 acres) compared to the average farm (82 acres). The difference points to the importance of keeping the capital investment on the farm as low as possible.

The most profitable farms reported half the amount of sales of breeding livestock as the average farm in 2008. The four profitable farms also had more than three times the increase in inventory of breeding livestock on their balance sheets as the average herd.

The labor earnings per hour, which includes both paid and unpaid hours of labor, was \$7.80 for the top four herds. However, the average herd's labor earnings were -\$7.55/hour. Thus, return to labor is of high concern in these operations. The most profitable farms employed considerably less hired labor: \$8 of hired labor per doe, per year versus the average herd's annual hired labor cost of \$38 per doe. Hired labor cost was much lower in 2008 for both the profitable and the average herd compared to 2007, when costs were \$22 and \$57 per doe, respectively.

The average goat dairy received \$33.07 per hundredweight for milk in 2008, which is higher than the \$32.30/cwt average we saw in 2007. However, the average cost of production (including an expense for the value of unpaid labor) was \$53.94/cwt in 2008 compared to \$49.01/cwt in 2007. The top four received \$32.44 per hundredweight for milk income at a cost/cwt of \$31.31. Thus, their net profit, after labor and equity charges are applied, was \$1.13 per hundredweight. Thus, goat dairies could be profitable in the economic environment of 2008 but a high degree of attention to detail in production and financial management was crucial.

The margin of error for this data set would be considered high relative to measure of capital due to non-uniform judgments of the fair market valuation of assets. The margin of error for inventory adjustments would be considered medium as inventory data did not always coincide with the January 1st-December 31st tax data timeframe. The margin of error for this data set would be considered medium to low for issues of labor costs as the estimation is often not based on recorded data. The margin of error for the cash incomes and expenses for this data set would be considered very low and as accurate as the Schedule F data from which this data was garnered.

Please review the 2008 tables below for a more detailed comparison between the average herd in our study and the top four. Pay particular attention to the "***Critical Factors" marked in Tables 5 (2008) and 6 (2008), which identify some of the key differences that were responsible for the greater profitability of the top four herds in the study.

Conclusions and Implications

The average low level of profitability in 2007 and 2008 for the producers in our study is of great concern to us and should be of grave concern to the dairy goat industry in our state. The current financial situation is simply not sustainable. The producers in our study are some of the best in the business. If they are not able to achieve adequate levels of profitability, the industry is in trouble.

Beyond the economic factors in 2007 and 2008 that created significant challenges for the goat dairy producers in our study, there are some fundamental issues in the goat dairy industry that are detrimental to its financial health. These issues include:

- 1) **Lack of quality, dependable genetics in the industry.** Bovine dairy genetic lines have been developed over a long period of time, and top-quality genetics are widely available to any producer in the industry. For example, nearly any Holstein cow on the market has the genetic potential to produce 18,000 pounds of milk per lactation or more under adequate management. By contrast, an average dairy doe on the market might have the genetic potential to produce 600 pounds or 1,800 pounds of milk per lactation. The buyer typically has no way of determining the doe's potential until she joins the buyer's milking herd.
- 2) **Lack of reliable, verifiable production record systems.** Although Dairy Herd Improvement Association (DHIA) testing is available for dairy goat herds, most producers find such testing to be cost-prohibitive. Thus, very few have third-party verified production records with which to make management decisions or to use when marketing breeding stock.

- 3) **Low barriers to entry for new producers.** Compared to a bovine dairy, it is relatively inexpensive and is commonly perceived as being less challenging from a management perspective to start a goat dairy. Dairy goats are not very expensive and their size makes them easier to handle than cows. They require less land and less housing space. Milking facilities can be relatively simple. Low barriers to entry make dairy goats an attractive option for many novice producers. With many people entering the industry, there has been a surplus of milk available on the market, which has kept milk price low.
- 4) **Willingness of new producers to “subsidize” the dairy goat enterprise with unpaid labor and/or off-farm income.** New producers often have a source of off-farm income or have underutilized labor available on the farm to be used in the dairy goat enterprise. These producers often do not have a good sense of their true costs of production and are unaware if their enterprises are unprofitable. Even if they are aware of the financial picture, some are unconcerned about profit. They enjoy working with their goats whether they generate a profit or not. The presence of these producers in the market creates a more challenging climate for producers who are trying to earn a living by milking goats.
- 5) **Tenure among goat dairy producers tends to be relatively short.** According to the 2006 WASS survey, 59% of the producers in the state had been selling milk for five years or less. Anecdotal evidence suggests that many producers enter and exit the business in less than five years. This “churning” of producers inhibits the ability of the industry to mature. It inhibits the development of good herd genetics, limits the number of experienced producers who are available to mentor new entrants in the business, and makes it difficult to develop support businesses related to the dairy goat industry. Finally, the market values of breeding stock may be kept artificially high due to demand from new producers.
- 6) **Lack of adequate markets for cull animals.** There are outlets for cull animals but, in general, there is little competition in the market. There is very little demand for certain classes of cull animals such as buck kids. When producers are forced to make the economic decision to euthanize these animals soon after birth, it represents the waste of a potential resource. The industry needs to devote energy to developing new markets for culls.
- 7) **Milk prices are significantly lower than the average costs of production for some of the best producers in the business.** For some of the reasons mentioned above, there has historically been a surplus of goat milk available in the market. Procurers of goat milk need to increase their pay prices, develop new or better incentives for quality milk, offer stronger incentives for winter milk, and otherwise support the most proficient dairy goat producers in the upper Midwest. Increased competition for milk appears to have boosted prices a bit in 2008 but not enough to offset increased milk production costs. If procurers fail to take adequate action to support goat milk producers, they run the risk of losing their milk supply.

In sum, dairy goat producers face challenges on the production, financial and marketing sides of the business. Current and prospective producers, and the agri-businesses that work with them, need to be aware of these issues to better assist the adolescent dairy goat industry to grow and more firmly establish itself in Wisconsin agriculture. At the same time, producers and processors need to reduce the risks of production and marketing to more confidently establish sustainable market prices.

Table 1 (2007). Production Parameters and Cash Income Analysis

Average 10 Farms	Per Doe 10 Farms	Misc 10 Farms	Dairy Goat Records, 2007	Top 20% 2 Farms	Top 20% Per Doe
79	0.39		Productive Crop Acres	6.5	0.03
201	1.00		Average Number of Goats	200	
\$ 605,816	\$ 3,014		Total Assets on Farm	\$ 360,225	\$ 1,801
\$ 32.30			Milk Price	\$ 31.79	
3,457	17.20		Milk Hundred weight Equiv.	2974	14.87
2,872	14.29		Milk Hundredweights	2854	14.27
\$ 93,371	\$ 465		Milk Sales	\$ 90,104.50	\$ 451
\$ 1,168	\$ 6		Cull Doe Sales	\$ 1,100.00	\$ 6
\$ 5,249	\$ 26		Kid Sales	\$ -	\$ -
\$ 3,479	\$ 17		Crop Sales	\$ 1,563.00	\$ 8
\$ 9,878	\$ 49		Other Income	\$ 1,221.00	\$ 6
\$ 113,145	\$ 563	/cwt.eq.	Total Cash Income	\$ 93,988.50	\$ 470

Table 2 (2007). Cash Expense Analysis

Average 10 Farms	Per Doe 10 Farms	Misc 10 Farms	Dairy Goat Records, 2007	Top 20% 2 Farms	Top 20% Per Doe
\$ 2,244	\$ 11	\$0.65	Veterinary, Medicine	\$ 1,086.50	\$ 5
\$ 8,510	\$ 42	\$2.46	Dairy Supplies	\$ 9,065.00	\$ 45
\$ 17	\$ 0	\$0.00	Breeding Fees	\$ -	\$ -
\$ 35,333	\$ 176	\$10.22	Feed Purchased	\$ 28,623.00	\$ 143
\$ 6,401	\$ 32	\$1.85	Repairs	\$ 10,955.00	\$ 55
\$ 4,015	\$ 20	\$1.16	Seed, Chem, Fert	\$ -	\$ -
\$ 3,495	\$ 17	\$1.01	Fuel, Gas, and Oil	\$ 1,099.00	\$ 5
\$ 4,768	\$ 24	\$1.38	Utilities	\$ 3,380.00	\$ 17
\$ 813	\$ 4	\$0.24	Interest Paid (in equity charge)	\$ -	\$ -
\$ 11,546	\$ 57	\$3.34	Labor Hired	\$ 4,452.00	\$ 22
\$ 3,199	\$ 16	\$0.93	Rent, Lease and Hire	\$ 182.50	\$ 1
\$ 2,044	\$ 10	\$0.59	Property Taxes	\$ 1,642.00	\$ 8
\$ 2,397	\$ 12	\$0.69	Farm Insurance	\$ 1,405.00	\$ 7
\$ 7,449	\$ 37	\$2.16	Other Cash Expense	\$ 7,027.00	\$ 35
\$ 92,231	\$ 459	\$26.68	Total Cash Expense	\$ 68,917.00	\$ 345
\$ 20,913	\$ 104	\$6.05	Net Cash Income	\$ 25,071.50	\$ 125
\$ (2,803)	\$ (14)	-\$0.81	Inventory Change	\$ 15,155.00	\$ 76
\$ 18,111	\$ 90	\$5.24	Net Farm Income	\$ 40,226.50	\$ 201
\$ 35,411	\$ 176	\$10.24	Equity@ 6%	\$ 13,835.36	\$ 69
\$ (17,301)	\$ (86)	-\$5.01	Return to Labor	\$ 26,391.15	\$ 132

Table 3 (2007). Inventory Adjustment and Labor Analysis

Average 10 Farms	Per Doe 10 Farms	Misc 10 Farms	Dairy Goat Records, 2007	Top 20% 2 Farms	Top 20% Per Doe
\$ 921	\$ 5	\$0.27	Inventory Adjustments--Feed	\$ 3,620.00	\$ 18
\$ (700)	\$ (3)	-\$0.20	Supplies and Other	\$ -	\$ -
\$ 5,781	\$ 29	\$1.67	Breeding Livestock	\$ 22,800.00	\$ 114
\$ 6,002	\$ 30	\$1.74	Income Change	\$ 26,420.00	\$ 132
\$ -	\$ -	\$0.00	Prepaid Expenses	\$ -	\$ -
\$ 7,860	\$ 39	\$2.27	Accounts Payable	\$ 6,750.00	\$ 34
\$ 6,635	\$ 33	\$1.92	Machinery & Equipment	\$ 26,400.00	\$ 132
\$ 2,267	\$ 11	\$0.66	Land and Buildings	\$ 20,000.00	\$ 100
\$ 50	\$ 0	\$0.01	Other Adjustments	\$ -	\$ -
\$ (1,093)	\$ (5)	-\$0.32	Expense Change	\$ (39,650.00)	\$ (198)
\$ 12,307	\$ 61	\$3.56	Capital Purchases Minus Sales Adj.	\$ 50,915.00	\$ 255
\$ 12,577	\$ 63	\$3.64	Depreciation COST	\$ 21,408.50	\$ 107
\$ 6,575	\$ 33	\$1.90	Depreciation FM Value	\$ 5,750.00	\$ 29
\$ 31,464	\$ 157	\$9.10	Unpaid Labor Cost	\$ 18,000.00	\$ 90
\$ 3,860	19.20 hrs/doe		Unpaid Labor Hours	4,500.00	\$ 23
1.49	Total Labor		Labor Full Time Equivalent	1.50	
\$ (8.89)			Labor Earnings Per Hour	\$ 7.16	

Table 4 (2007). Full Cost of Production Analysis

Average 10 Farms	Per Doe 10 Farms	Misc 10 Farms	Dairy Goat Records, 2007	Top 20% 2 Farms	Top 20% Per Doe
\$ 32.30			Gross Income per Cwt. Eq.	\$ 31.79	
\$ 49.01			Gross Expense per Cwt. Eq.	\$ 28.61	
\$ (16.71)			Net Income per cwt.	\$ 3.18	
\$ 113,145	\$563		Cash Income--	\$ 93,989	\$ 470
\$ 9,252	\$46		Adjusted Income	\$ 26,420	\$ 132
\$ 122,397	\$609		Total Income	\$ 120,409	\$ 602
\$ 92,231	\$459		Cash Costs (w/o interest)	\$ 68,917	\$ 345
\$ 12,055	\$60		Adjusted Costs	\$ 11,265	\$ 56
\$ 66,875	\$333		Overhead Costs	\$ 31,835	\$ 159
\$ 171,161	\$852		Total Costs	\$ 112,017	\$ 560
\$ (48,764)	-\$243		RETURN OVER COSTS	\$ 8,391	\$ 42

Table 5 (2007). Efficiency Analysis Per Doe, Per FTE and Per Acre

Average 10 Farms	Per Doe 10 Farms	Misc 10 Farms	Dairy Goat Records, 2007	Top 20% 2 Farms	Top 20% Per Doe
\$ 95,637			Adj. Gross Return per FTE Labor.....	\$ 85,193	
\$ (18,414)			Return to All Labor per FTE Labor.....	\$ 23,788	
191			Number of Does per FTE Labor.....	150	
2,384			Cwts. of Milk Sold per FTE Labor.....	2081	
1,375			Pounds of Milk Sold per Doe.....	1427	
0.39			Productive Crop Acres per Doe.....	0.03	
\$ 234			Capital Cost per Doe.....	\$ 98	
\$ 214.10			All Labor Costs per Doe.....	\$ 112	
\$ 283			Fixed Cost per Doe (DIRTI)	\$ 168	
\$ 3,086			Capital Invested per Doe.....	\$ 1,144	
\$ 3,187			Net Farm Income per Crop Acre.....	\$ 20,974	
36,393			Lbs. Milk Produced per Crop Acre.....	143771.25	
\$ 13,868			Adj. Gross Cash Income/Crop Acre.....	\$ 55,846	
\$ 2,110			Machinery Investment/Crop Acre	\$ 5,885	
\$ 237			Fuel, Gas and Oil Cost/Crop Acre.....	\$ 404	
\$ 354			Repair Cost per Crop Acre.....	\$ 1,273	
\$ 35			Fert/Chem/Seed Cost/Crop Acre.....	\$ -	
21%			Livestock over Total Investment %	39%	
75%			Cash Exp./Cash Inc.w/o Labor&Int.....	69%	
24%			All Labor as Percent of Total Costs.....	19%	
33%			Fixed Cost as Percent of Total Cost.....	26%	

Table 6 (2007). Financial Ratio Analysis

Average 10 Farms	Per Doe 10 Farms	Misc 10 Farms	Dairy Goat Records, 2007	Top 20% 2 Farms	Top 20% Per Doe
\$ 18,111			**Net Farm Income From Operations	\$ 40,227	
-0.9%			**Rate of Return on Assets.....	17.3%	
-1.1%			**Rate of Return on Equity.....	17.3%	
-18.2%			**Operating Profit Margin.....	19.6%	
29.4%		<i>Goat TRANS 2007</i>	**Asset Turnover Ratio.....	74.8%	
81.1%		<i>by Dr. Larry Tranel</i>	**Operating Expense Ratio.....	61.6%	
6.9%		<i>Dairy Field Specialist</i>	**Depreciation Expense Ratio.....	4.3%	
11.1%			**Net Farm Income Ratio.....	34.0%	
6.0%			Estimated % Interest Paid	6.0%	
IOWA STATE UNIVERSITY					

*The authors have used their best judgment in the development and analysis of the software and the data garnered from it and shall not be liable for use of this data.

DATA TABLES, 2008

Table 1 (2008). Production Parameters and Cash Income Analysis, 2008

Average 11 Farms	Per Doe	Misc	Dairy Goat Records 2008	Top 40% 4 Farms	Top 40% Per Doe
82	0.38		Productive Crop Acres	35.25	0.18
215	1.00		Average Number of Goats	197.25	
\$600,570	\$2,787		Total Assets on Farm	\$404,712	\$2,052
\$33.07			Milk Price	\$32.44	
3,801	17.64		Milk Hundred weight Equiv.	3,898	19.76
2,662	12.36		Milk Hundredweights	2,878	14.59
\$88,177	\$409		Milk Sales	\$93,070	\$472
\$1,668	\$8		Cull Doe Sales	\$559	\$3
\$5,353	\$25		Kid Sales	\$2,500	\$13
\$2,505	\$12		Crop Sales	\$957	\$5
\$17,568	\$82		Other Income	\$15,690	\$80
\$115,270	\$535	/cwt.eq.	Total Cash Income	\$112,775	\$572

Table 2 (2008). Cash Expense Analysis, 2008

Average 11 Farms	Per Doe	Misc	Dairy Goat Records 2008	Top 40% 4 Farms	Top 40% Per Doe
\$1,293	\$6	\$0.34	Veterinary, Medicine	\$930	\$5
\$8,628	\$40	\$2.27	Dairy Supplies	\$8,204	\$42
\$32	\$0	\$0.01	Breeding Fees	\$88	\$0
\$37,805	\$175	\$9.95	Feed Purchased	\$42,599	\$216
\$5,090	\$24	\$1.34	Repairs	\$3,012	\$15
\$5,130	\$24	\$1.35	Seed, Chem, Fert	\$3,896	\$20
\$6,569	\$30	\$1.73	Fuel, Gas, and Oil	\$2,810	\$14
\$5,617	\$26	\$1.48	Utilities	\$5,149	\$26
\$0	\$0	\$0.00	Interest Paid (in equity charge)	\$0	\$0
\$8,100	\$38	\$2.13	Labor Hired	\$1,664	\$8
\$5,207	\$24	\$1.37	Rent, Lease and Hire	\$3,883	\$20
\$2,103	\$10	\$0.55	Property Taxes	\$2,022	\$10
\$2,737	\$13	\$0.72	Farm Insurance	\$2,489	\$13
\$7,440	\$35	\$1.96	Other Cash Expense	\$3,078	\$16
\$95,753	\$444	\$25.19	Total Cash Expense	\$79,822	\$405
\$19,518	\$91	\$5.14	Net Cash Income	\$32,954	\$167
(\$2,080)	(\$10)	-\$0.55	Inventory Change	\$10,420	\$53
\$17,438	\$81	\$4.59	Net Farm Income	\$43,374	\$220
\$35,207	\$163	\$9.26	<u>Equity @ 6%</u>	\$23,004	\$117
(\$17,769)	(\$82)	-\$4.68	Return to Labor	\$20,369	\$103

Table 3 (2008). Inventory Adjustment and Labor Analysis, 2008

Average 11 Farms	Per Doe	Misc	Dairy Goat Records 2008	Top 40% 4 Farms	Top 40% Per Doe
\$6,248	\$29	\$1.64	Inventory Adjustments--Feed	\$2,890	\$15
(\$91)	(\$0)	-\$0.02	Supplies and Other	\$0	\$0
\$2,400	\$11	\$0.63	Breeding Livestock	\$8,994	\$46
\$7,494	\$35	\$1.97	Income Change	\$12,459	\$63
(\$391)	(\$2)	-\$0.10	Prepaid Expenses	\$1,226	\$6
\$3,821	\$18	\$1.01	Accounts Payable	\$687	\$3
\$327	\$2	\$0.09	Machinery & Equipment	-\$938	(\$5)
(\$4,455)	(\$21)	-\$1.17	Land and Buildings	-\$5,250	(\$27)
\$36	\$0	\$0.01	Other Adjustments	\$0	\$0
\$8,302	\$39	\$2.18	Expense Change	\$5,649	\$29
(\$1,141)	(\$5)	-\$0.30	Capital Purchases Minus Sales Adj.	-\$8,110	(\$41)
\$12,355	\$57	\$3.25	Depreciation COST	\$17,434	\$88
\$8,034	\$37	\$2.11	Depreciation FM Value	\$7,375	\$37
\$29,991	\$139	\$7.89	Unpaid Labor Cost	\$19,966	\$101
\$3,463	16.07 hrs/doe		Unpaid Labor Hours	\$3,375	17.11
1.34	Total Labor		Labor Full Time Equivalents	1.13	
-\$7.55			Labor Earnings Per Hour	\$7.80	

Table 4 (2008). Full Cost of Production Analysis, 2008

Average 11 Farms	Per Doe	Misc	Dairy Goat Records 2008	Top 40% 4 Farms	Top 40% Per Doe
\$33.05			Gross Income per Cwt. Eq.	\$32.44	
\$53.92			Gross Expense per Cwt. Eq.	\$31.31	
-\$20.87			Net Income per cwt.	\$1.13	
\$117,438	\$545		Cash Income--	\$112,775	\$572
\$3,178	\$15		Adjusted Income	\$12,459	\$63
\$120,615	\$560		Total Income	\$125,234	\$635
\$97,912	\$454		Cash Costs (w/o interest)	\$79,822	\$405
\$7,161	\$33		Adjusted Costs	(\$2,461)	(\$12)
\$65,319	\$303		Overhead Costs	\$42,835	\$217
\$170,392	\$791		Total Costs	\$120,196	\$609
-\$49,777	-\$231		RETURN OVER COSTS	\$5,038	\$26

Table 5 (2008). Efficiency Analysis Per Doe, Per FTE and Per Acre, 2008

Average 11 Farms	Per Doe Misc	Dairy Goat Records 2008	Top 40% 4 Farms	Top 40% Per Doe
\$118,077		Adj. Gross Return per FTE Labor.....	\$139,112	
-\$15,877		Return to All Labor per FTE Labor.....	\$26,637	
225		Number of Does per FTE Labor...	213	
2,715	**Critical Factor	Cwts. of Milk Sold per FTE Labor	3,172	
1,288	**Critical Factor	Pounds of Milk Sold per Doe.....	1,510	
0.40		Productive Crop Acres per Doe..	0.20	
\$232	**Critical Factor	Capital Cost per Doe.....	\$165	
\$185		All Labor Costs per Doe.....	\$116	
\$283		Fixed Cost per Doe (DIRTI)	\$206	
\$3,028	**Critical Factor	Capital Invested per Doe.....	\$2,071	
\$1,345		Net Farm Income per Crop Acre.	\$6,707	
29,675		Lbs. Milk Produced per Crop Acre	64,348	
\$11,429		Adj. Gross Cash Income/Crop Acre..	\$25,207	
\$2,128		Machinery Investment/Crop Acre	\$3,678	
\$274		Fuel, Gas and Oil Cost/Crop Acre....	\$363	
\$142		Repair Cost per Crop Acre.....	\$137	
\$121		Fert/Chem/Seed Cost/Crop Acre.....	\$260	
22%		Livestock over Total Investment	28%	
85%		Cash Exp./Cash Inc.w/o Labor&Int....	71%	
22%		All Labor as Percent of Total Costs..	18%	
32%		Fixed Cost as Percent of Total Cost..	30%	

Table 6 (2008). Financial Ratio Analysis, 2008

Average 11 Farms	Per Doe Misc	Dairy Goat Records 2008	Top 40% 4 Farms	Top 40% Per Doe
\$15,542	**Critical Factor	**Net Farm Income From Operatio	\$47,874	
-2.5%	**Critical Factor	**Rate of Return on Assets.....	6.8%	
-2.5%	**Critical Factor	**Rate of Return on Equity.....	7.2%	
-26.8%	**Critical Factor	**Operating Profit Margin.....	20.3%	
27.4%	**Critical Factor	**Asset Turnover Ratio.....	45.9%	
86.2%	**Critical Factor	**Operating Expense Ratio.....	58.6%	
9.7%		**Depreciation Expense Ratio.....	5.5%	
4.3%		**Net Farm Income Ratio.....	36.0%	
IOWA STATE UNIVERSITY				
Cooperative Extension				

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