

FACTORS AFFECTING PERSONNEL COSTS

R.Giesy, Dr. M.DeLorenzo, M.Hoekema, Dr.M.Sowerby, D.Solger
R.Tervola, T.Seawright, P.Miller, C.Vann & P.Joyce
University of Florida Extension

Many dairy managers tell us that their greatest challenge is providing a consistently productive labor force to their dairy at a reasonable cost. In an effort to be helpful, we looked to DBAP for information about how participating dairies controlled labor costs. From their data, we sought answers to these questions. How much opportunity did managers have to affect/control labor costs? What factors affected labor costs?

A. How much opportunity did managers have to affect/control labor costs? First, we can establish that labor costs are a major expenditure. The average personnel costs of 32 DBAP dairy participants in 1996 was \$2.46 per cwt. or 13.3% of milk revenues and 12.1% of total revenues. Second, significant variation existed. Table 1 shows the range was from \$1.10 to \$3.73 per cwt. This was about 5% to over 21% of total revenues. Some dairies were much more labor efficient than others.

Table 1. Variation in cost of providing labor of Florida DBAP participating dairies.

	MINIMUM	AVERAGE	MAXIMUM
Salaries per cwt.	\$1.10	\$2.10	\$3.73
Payroll tax, etc. per cwt.	\$.00	\$.30	\$1.11
Other benefits per cwt.	\$.00	\$.06	\$.28

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B. What factors were responsible for this variation? There are many factors.

- \$ Activity, more activities necessitate more labor. We looked at size of the business and number of enterprises (dairy, cropping, replacements, etc.).
- \$ Efficiency, we compared cows per full time worker and milk sold per worker.
- \$ Substitution of machinery & equipment for labor or vice-versa.
- \$ Design of facilities for housing, feeding, milking and handling cows.
- \$ Supervision of personnel; recruiting, training, motivating and rewarding.

Of these factors, DBAP provides insight into (1) activity and (2) efficiency.

1. Activity. The DBAP data for 1995 suggested that milking herd size affected labor costs. Small dairies (less than 350 cows) had the lowest labor costs at \$2.31 per cwt. Medium sized dairies (600-999) averaged highest at \$3.06 and large dairies (2500+) had average labor costs of \$2.68. The average of all dairies was \$2.74.

Number of enterprises affected labor costs. As shown in table 2, dairy operations that, in 1996, only milked cows had salaries which averaged \$1.84 per cwt. The average of dairies that raised replacements was slightly higher at \$1.89. The dairies that had both replacements and cropping enterprises had the highest costs at \$2.27 on average. Note that those are salaries only. **The data indicates that there was more variation within groups (due to management differences) than between groups (herd size and number of enterprises).**

Table 2. Variation in salaries per cwt. by number of enterprises.

	Dairy enterprise only	Dairy + heifers	Dairy + heifers + crops
Number of DBAP dairies	6	9	13
Average salaries per cwt.	\$1.84	\$1.89	\$2.27
Lowest salaries per cwt.	\$1.20	\$1.10	\$1.34
Highest salaries per cwt.	\$2.27	\$3.10	\$3.73

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2. Efficiency. Table 3 shows a tremendous difference in how efficiently dairies utilized personnel. Milk per worker, probably the best efficiency indicator, ranged from about 387,000 lbs. to more than 1.5 million lbs. **The more labor efficient dairies sell four times more milk per worker than the least efficient.**

Table 3. Labor efficiency factors on DBAP dairies.

	LOWEST	AVERAGE	HIGHEST
Cows per worker (FTE)	26	53	105
Milk sold per worker (lbs.)	387,145	835,428	1,526,324

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Summary

Certainly, the cost of providing labor to the dairy farm is a major expenditure and controlling it is a major management challenge. DBAP data shows that there was a considerable variation between dairies and that suggests that management plays a role. The level of activity (herd size and number of enterprises) of the business was shown to influence labor costs of DBAP dairies. However, there was more difference due to management than due to herd size or number of enterprises. Also, our data showed that the most efficient dairies sold four times more milk per worker.

Thanks to DBAP participating dairies for sharing their data which makes this kind of

information available to everyone. How does your dairy compare?