

ECONOMIC IMPACT OF ENVIRONMENTAL REGULATION ON THE FLORIDA DAIRY INDUSTRY

Russ Giesy, University of Florida Extension

WHERE HAVE WE BEEN?

I had the opportunity to begin to study the effects of environmental regulations in 1987. We developed predictions of the impact of the new rules on the Okeechobee dairy industry. The result was: *A Economic impact of new environmental regulations on the dairy industry of the Lake Okeechobee Drainage Basin.*[@] At that time there were 42 dairy barns, averaging 860 cows. Predictions; 1) investments in small dairies would increase \$250,000, medium \$319,000, large \$537,000, 2) these increases would not likely be repaid by increased revenues or decreased costs, 3) small dairies would be impacted to a much greater degree and need special consideration, and 4) small dairies were 20% of all dairies with economic impact of \$6.7 million dollars per year.

U.F. FRED reported the cost of complying with the LODB environmental regulations actually averaged \$1.25 million for the dairies that remained in business in the LODB. For those dairies, the impact of the rule was estimated to be \$1.10 per cwt. for ten years.

However, perhaps the greater loss was the dairies lost, especially since the results of the rule were discriminatory, deleting nearly all dairies listed as small in 1987.

WHERE ARE WE?

Do dairies need to have confinement housing with companion cropping systems or will composting/exporting be economical? *A Nutrient handling systems on Florida dairies: identifying costs and returns.*[@] 1999. Eight dairies were studied; (1) they averaged 2.2 cows per crop acre, varying from .9 to 8.9, (2) nutrients collected were 80% of estimated excretion with average recovery of 30% N 55% P and 42% K, (3) initial investment in manure handling systems averaged \$186,238, \$116 per cow, \$81 for composting and \$131 for cropping systems, (4) annual operating and maintenance costs of manure handling systems averaged \$74,219 for composting and \$160,757 for cropping systems and net returns averaged

-\$22,204 for composting and -\$9,917 cropping systems, (5) DBAP data showed that cropping dairies purchased less feed (\$8.20 to \$10.59 per cwt.) and fewer replacements (\$1.67 to \$2.00 per cwt.) while all other costs were higher (total costs \$18.60 to \$17.95 per cwt.). Crop sales and forage inventories helped net farm income per cwt. which was \$.21 for cropping dairies, -.57 for composting/exporting dairies. This is one year-s data which needs to be validated.

Should producers use modified intensive rotational grazing systems to avoid high costs of environmental regulation? *AModified grazing dairies in Florida.*@ 1998. Five of 32 DBAP participants in 1996 were graziers. Conclusions: (1) they had lower capital investments, lower production efficiency, lower costs per cwt., higher net returns per cwt. but lower bottom line profitability because they sold less milk volume, (2) grazing is a viable alternative in Florida, and (3) graziers probably have an advantage over other dairies when milk prices are very low or feed prices are very high but they take on an opportunity cost during periods of other price scenarios.

WHERE ARE WE HEADED?

- \$ As we look forward to new regulations, we need more information about costs of differing manure handling systems on dairies of differing size and structure.**
- \$ We need to be cognizant to the fact that the *Abest fit*@ will be individual for a particular dairy, independent of bias of regulators, educators, consultants.**
- \$ We may need to be particularly sensitive to smaller dairies, since the cost of regulation may unfairly delete all family farms and mom and pop businesses from our industry.**
- \$ We need more incentive programs.**
- \$ Because of inequities in opportunities for cost-sharing, we need more opportunities for those dairies located outside of areas of critical concern.**

*These ideas were shared at the 3/5/99 Florida Manure Lunch. About 15 attendees were representatives of environmental regulatory agencies, consultants and educators.