

Department of Agricultural and Resource Economics and Center for Profitable Agriculture

Tennessee Dairy Farms Make Important Contribution to Local Economies

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Introduction

Tennessee dairies can be an important economic engine for their local economies. In response to an industry request, we estimated the contribution of a dairy farm to a major dairy county in East Tennessee. We used an input-output model of the county economy (based on the IMPLAN economic model building system), data provided by the US Department of Agriculture, Economic Research Service, and data from a Washington State University Study (regarding cow and calf culling rates) in estimating the contribution. Andrew Griffith, Aaron Smith (both Extension specialists in the Department of Agricultural and Resource Economics), and Rachel Eatherly also provided helpful expertise for our analysis.

We made the following set of assumptions regarding the dairy operation:

- 1) A well-managed herd,
- 2) Herd size of 750 milking cows,
- 3) 72 pounds of milk per day per cow, adjusted for 300 milking days, and
- 4) A cow culling rate of 28.7 percent.

What Is the Local Economic Impact of a Dairy Herd?

The results of our analysis are as follows:

- 1) 73 on- and off-farm jobs in the local economy as a result of the dairy,
- 2) \$1.867 million in income for local workers and the farmer owner(s) of the dairy, and
- 3) \$2.402 million in contribution to gross county product (the same as gross domestic product, but at the county as opposed to national level).

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We also estimated the output multiplier of the dairy farm on the local economy. This value measures the total impact on the local economy from one dollar of revenue generated by the dairy farm. We estimated the output multiplier on the local economy to be \$1.45, or the one dollar in total revenue from the dairy operation lead to an estimated 45 cents in additional economic activity in the local economy.

Our Conclusion

Tennessee dairy operations make important contributions to their local economies. This contribution spreads throughout the local economy.



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