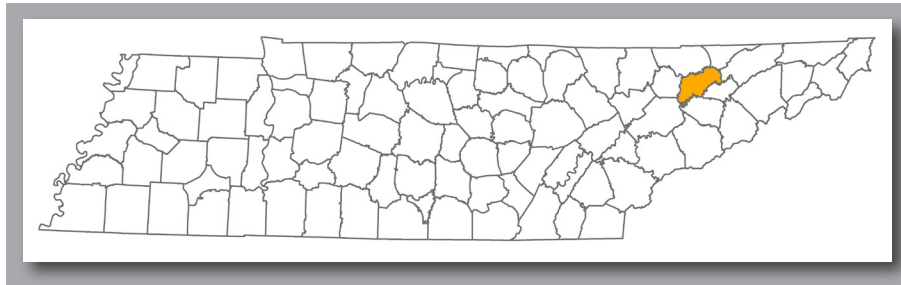


Contribution of Agriculture to the GRAINGER COUNTY Economy

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2018



This publication provides estimates of the total (multiplier-based) economic impact of agriculture in Grainger County.² This analysis accounts for the total effect of county agriculture throughout the local economy. Economic impact is measured in terms of: 1) output or revenue (the value of sales of all local goods and services) and 2) employment.³

DEFINITIONS

Agriculture: Crop and livestock production (i.e., farming); food and fiber processing, such as ice cream plants and textile mills; farm inputs, such as fertilizer plants and feed mills; and forestry-based products, such as sawmills and paper mills.

Multiplier Effect: Impact on the non-agricultural part of the economy. Examples of the multiplier effect include farmers and other agricultural businesses purchasing local inputs (e.g., utilities), and local spending by agricultural workers and owner-operators.

Output: Revenue (value of sales) of all local goods and services.

For Grainger County in 2015:

1) Total direct agricultural output is estimated at \$220.4 million. With multiplier effects, agricultural output has a total estimated economic impact of \$287.8 million. This means, for every dollar of direct output from agriculture, the total economic impact on the county's economy is \$1.31 (i.e., the 287.8 divided by the 220.4) (Figure 1, "Output").

2) There are 1,515 workers employed in county agriculture. With multiplier effects, an estimated 2,273 jobs are generated by county agriculture, or one direct agricultural job leads to 1.50 jobs (i.e., 2,273 divided by 1,515) in the county (Figure 1, "Employment").

¹Contact Author: dhughe17@utk.edu, 865-974-7463. For an explanation of the model used, see Hughes 2018. For state-level impacts, see Menard et al., 2016.

²Additional information regarding county farming can be found in the most recent (2012) Agricultural Census at the following: [Grainger County](#)

³See Hughes (2018) for an explanation of the model used. See Menard et al. (2016) for state-level impacts.

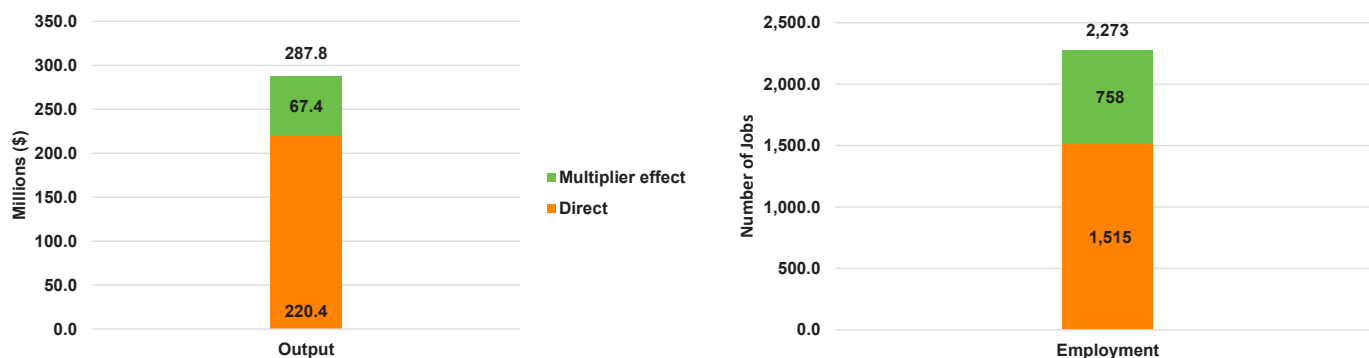


Figure 1. Agriculture’s impact on Grainger County output and employment, 2015.

The *output multiplier* is \$1.31. A dollar of output in agriculture leads to \$1.31 in county-level output (i.e., the dollar plus the \$0.31 multiplier effect).
 The *employment multiplier* is 1.50. A job in agriculture leads to 1.50 in county-level jobs (i.e., the job plus the 0.50 multiplier).

References

J. Menard, B.C. English, and K. Jensen. "Tennessee Ag Stats 2015." AIM-AG, Agricultural and Resource Economics. University of Tennessee Institute of Agriculture. 2016.
 Hughes, D. "A Primer in Economic Multipliers and Impact Analysis Using Input-Output Models." University of Tennessee Extension, W 644. 2018.

Acknowledgments

Appreciation is extended to the following organizations for their support and assistance: Farm Credit Mid-America; Tennessee Cattlemen’s Association; Tennessee Department of Agriculture; Tennessee Farm Bureau; and the Tennessee Soybean Promotion Board. We would also like to thank Rob Holland, Extension Specialist and Director, Center for Profitable Agriculture; Kevin Rose, Extension Agent and Giles County Director; Jacob Boone, Extension Agent and Hancock County Director; Jeff Lannom, Extension Agent and Weakley County Director; and University of Tennessee Extension for their financial support and time.



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