Contribution of Agriculture to the Clay County Economy

David W. Hughes, Professor and Greever Chair, dhughe17@utk.edu, 865-974-7463
Department of Agricultural & Resource Economics
2023

This publication provides estimates of the total (multiplier-based) economic impact of agriculture in Clay County based on 2021 data. 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.

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 Clay County in 2021:

1) Total direct agricultural output is estimated at $97.1 million. With multiplier effects, agricultural output has a total estimated economic impact of $125.4 million. These results mean that for every dollar of direct output from agriculture, the total economic impact on the county’s economy is 1.29 (i.e., the 125.4 divided by the 97.1) (Figure 1, “Output”).

2) 413 workers are employed in county agriculture. With multiplier effects, an estimated 625 jobs are generated by county agriculture, or one direct agricultural job leads to 1.51 jobs (i.e., 625 divided by 413) in the county (Figure 1, “Employment”).

Additional information regarding county farming can be found in the most recent (2017) Agricultural Census.

See Hughes (2018) for an explanation of the model used.
Figure 1. Agriculture’s impact on Clay County Output and Employment 2021.

The output multiplier is $1.29. A dollar of output in agriculture leads to $1.29 in county-level output (i.e., the dollar plus the $0.29 multiplier effect).

The employment multiplier is 1.51. A job in agriculture leads to 1.51 in county-level jobs (i.e., the job plus the 0.51 multiplier).

References

Acknowledgments
We would like to thank Brad Wilson, IT Analyst III, Department of Agricultural and Resource Economics, and Alaina C. Boyd, Extension Assistant, and Rob Holland, Extension Specialist & Director, both with the Center for Profitable Agriculture, for their assistance with this report.