Contribution of Agriculture to the Fentress 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 **Fentress County** based on 2021 data.<sup>1</sup> 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.<sup>2</sup>

## **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 Fentress County in 2021:

1) Total direct agricultural output is estimated at **\$114.6 million**. With multiplier effects, agricultural output has a total estimated economic impact of **\$152.8 million**. These results mean



<sup>&</sup>lt;sup>1</sup> Additional information regarding county farming can be found in the most recent (2017) Agricultural Census.

<sup>&</sup>lt;sup>2</sup> See Hughes (2018) for an explanation of the model used.

that for every dollar of direct output from agriculture, the total economic impact on the county's economic \$1.33 (i.e., the 152.8 divided by the 114.6) (Figure 1, "Output"). 2) 790 workers are employed in county agriculture. With multiplier effects, an estimated 1,054 jobs are generated by county agriculture, or one direct agricultural job leads to 1.33 jobs (i.e., 1,054 divided by 790) in the county (Figure 1, "Employment").

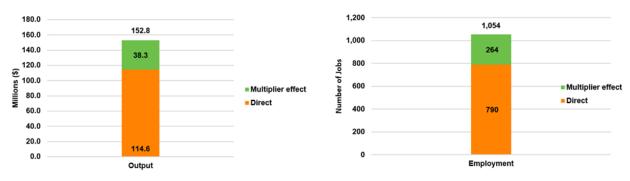


Figure 1. Agriculture's impact on Fentress County Output and Employment 2021.

The *output multiplier* is **\$1.33**. A dollar of output in agriculture leads to **\$1.33** in county-level output (i.e., the dollar plus the **\$0.33** multiplier effect).

The *employment multiplier* is **1.33**. A job in agriculture leads to **1.33** in county-level jobs (i.e., the job plus the **0.33** multiplier).

## References

Hughes, D. 2018. "A Primer in Economic Multipliers and Impact Analysis Using Input-Output Models." University of Tennessee Extension Bulletin Publication W 664. June. <u>https://extension.tennessee.edu/publications/Documents/W644.pdf</u>

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