

Contribution of Agriculture to Wisconsin

Agricultural Activity's Contribution to Wisconsin Total Income 2012

Agriculture has historically been considered a backbone of the Wisconsin economy. Over time, however, other components, such as the service producing sectors including tourism-recreation and business services to name a few, have grown more important. This raises the question, how much does agriculture contribute to the modern Wisconsin economy. Using data from 2012, the most current year available, we seek to provide insights into that fundamental question.

Using an input-output model of the Wisconsin economy and several sub-regions to capture the multiplier effects we find that agriculture, both on-farm and food processing activities, contributes about \$30.1 billion to total income which is 10.9% of total income within Wisconsin. In 2007 (Deller and Williams 2009) agriculture contributed \$20.2 billion, which means that the contribution of agriculture increased by \$9.9 billion, an increase of 42.9%. This is a nominal increase in the contribution of agriculture to total income, or the effects of inflation have not been considered.

All Agriculture (No Forestry)

	Total Income	(%)
Wisconsin	\$30,106.4	10.9%
North West	\$1,252.6	13.3%
North Central	\$1,859.7	13.5%
North East	\$678.0	13.9%
West Central	\$2,406.8	12.2%
Central	\$1,589.9	12.6%
East Central	\$6,197.5	11.9%
South West	\$1,337.7	15.3%
South Central	\$4,333.1	8.5%
South East	\$4,316.2	2.5%

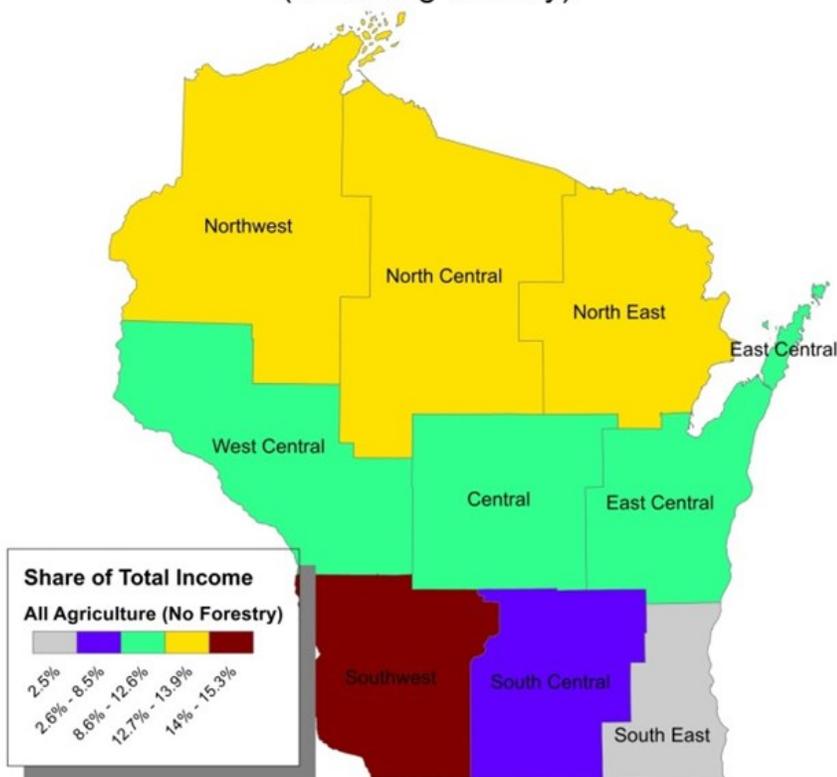
Total Income includes labor income (wages, salary and proprietor income) plus other sources of income such as dividends, interest and rent and some transfer payments such as social security. Within the framework of input-output modeling, total income is akin to gross domestic product.

Agriculture (on-farm and food processing) contributes almost \$6.2 billion in total income to the East Central region of Wisconsin, which is 11.9% of the region's total. In both the South Central and South East regions, the latter of which is dominated by the Milwaukee Metropolitan area, agriculture contributes \$4.3 billion to total income, which is 11.9% and 2.5% of each region's total, respectively. The region that is most dependent on agriculture for total income is the South West region at 15.3%, or \$1.3 billion.

It is important to keep in mind that agriculture is defined here as both on-farm activities and food processing. The latter includes things such as cheese and beer brewing as well as commercial bakeries and meat processing.

As we have seen in other fact sheets in this series, depending on the region of interest, food processing can be the dominant economic force. As such, when we think about agriculture we must think in terms of a vertically related economic cluster where on-farm and food processing are intertwined and dependent upon each other. In other words, on-farm and food processing in Wisconsin are two sides to the same economic coin. Comprehensive policies aimed at fostering agriculture as a viable economic cluster within Wisconsin must take a broader view of agriculture.

Share of Total Income from All Agriculture (excluding forestry)



Methods of Analysis

In this study we use an input-output model of the economy at the state level and the nine sub-regions of Wisconsin defined by National Agricultural Statistic Service (NASS). Input-output models can be viewed as a “spreadsheet” of the economy where buyers or demand move across the columns of the spreadsheet and sellers or supply move down the rows. An individual cell of the spreadsheet captures the dollar flow from sellers (supply) and buyers (demand). A key to the model is that the economy is in “equilibrium” or demand equals supply. In this framework we can trace how changes in one sector ripples throughout the entire economy. These ripples are widely known as the “multiplier effect”. For this study these multipliers are custom to the region we are examining and reflect the economy in 2012.