Agriculture's Contribution to The Wisconsin Economy: Crop Farming

As noted in the most recent analysis of the Contribution of Agriculture to the Wisconsin Economy (Deller, 2019) observes that, while widely viewed as the Dairy State, Wisconsin agriculture is highly diverse. Specialty crops ranging from ginseng to animal production used to produce fur clothing speaks to this diversity. One large component of Wisconsin agriculture is crop production. Over the past 50 year, crops accounted for about one in every five dollars of farm revenue and has been historically lower than the national average (Figure 1). This speaks to the importance of livestock (dairy) to Wisconsin farm revenue. But over this time period, the growth in dependency in crops for revenues has increased an average of 2.9% per year. In the year period crops accounted for about 11.5% by over the past few years it has averaged almost 25%.

These crops tend to be dominated by corn and soybeans with 24,384 and 18,296 farms reporting some level of production (Table 1). But unlike the farms in the tradition "corn and bean belt" Wisconsin crop farms tend to be of more modest size as measured by acreage with about three quarters reporting having less than 500 acres (Table 2). This scale of operation is also reflective of the amount of revenues received (Table 3). The majority, about 70%, report revenues from corn and soybeans as less than \$250,000.

The economic contribution of farms that produce oil seeds and grains is relatively modest when compared to dairy and other livestock production (Table 4). Once the multiplier effects



Figure 1: Chare of Total Wisconsin Farm Revenue from Crops



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Table 1: Number of Crop Producing Farms (2017)									
·	Corn	Wheat	Soybeans	Sorgrum	Barley	Other Grains			
Number of Farms	24,384	3,864	18,296	71	462	3,818			
Distribution of Farms	47.9%	7.6%	35.9%	0.1%	0.9%	7.5%			

Care must be taken when considering the number of livestock (e.g., dairy) farms that grow their own crops for feed. Farmers growing their own feed is generally lost in this analysis.

Table 2: Cropping Farms by Size (Acres, 2017)

	Corn	Soybeans			Table 3: Cropping Farms by Size (Sales, 2017)						
1.0 TO 9.9	302	1.2%	144	0.8%		Corn	S	oybeans	;		
10.0 TO 49.9	2,023	8.3%	1,531	8.4%	LESS THAN 1,000 \$	357	1.5%	145	0.8%		
50.0 TO 69.9	956	3.9%	713	3.9%	1,000 TO 2,499	472	1.9%	269	1.5%		
70.0 TO 99.9	1,758	7.2%	1,188	6.5%	2,500 TO 4,999	593	2.4%	426	2.3%		
100 TO 139	2,231	9.1%	1,573	8.6%	5,000 TO 9,999	1,019	4.2%	808	4.4%		
140 TO 179	2,066	8.5%	1,518	8.3%	10,000 TO 24,999	2,699	11.1%	2,160	11.8%		
180 TO 219	1,926	7.9%	1,344	7.3%	25,000 TO 49,999	2,923	12.0%	2,189	12.0%		
220 TO 259	1,638	6.7%	1,202	6.6%	50,000 TO 99,999	3,957	16.2%	3,068	16.8%		
260 TO 499	<i>5,9</i> 45	24.4%	4,509	24.6%	100,000 TO 249,999	5,213	21.4%	3,966	21.7%		
500 TO 999	3,522	14.4%	2,843	15.5%	250,000 TO 499,999	3,414	14.0%	2,535	13.9%		
1,000 TO 1,999	1,388	5.7%	1,173	6.4%	500,000 TO 999,999	2,067	8.5%	1,563	8.5%		
2,000 OR MORE	629	2.6%	558	3.0%	1,000,000 OR MORE	1,670	6.8%	1,167	6.4%		

are taken into account oilseed and grain farming contributes over 37,400 jobs to the Wisconsin economy, \$5.4 billion in industrial sales or revenue, just under \$1.3 billion in labor income (wages, salary and proprietor income) and almost \$2.1 billion in total income (labor income plus other sources of income such as dividends, interest and rent). This level of economic activity is also associated with almost \$55.8 million in state and local government revenues.

		Ind	ustry Sales	Employment	Labor Income (MM\$)		Total Income (MM\$)	
			(MM\$)	Employment				
Direct Effect		\$	2,875.9	19,751	\$	418.7	\$	586.2
Indirect Effect		\$	1,648.8	11,440	\$	574.1	\$	989.4
Induced Effect		\$	843.8	6,205	\$	277.1	\$	490.5
Total Effect		\$	5,368.5	37,398	\$	1,269.9	\$	2,066.0
	Multiplier		1.867	1.893		3.033		3.525

For this analysis we use an input-output model of the Wisconsin economy. One can think of this model as a "spreadsheet of the economy" where buyers (demand) are across the columns of the spreadsheet and sellers (supply) are down the rows. Any individual cell of the spreadsheet captures the amount of money flowing from the seller to the buyer. Because supply must equal demand we can trace changes in one part of the economy (an interaction between supply and demand) throughout the whole of the economy. These changes are often referred to as the multiplier effects.

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