Agriculture:
Central Minnesota's Sleeping Giant

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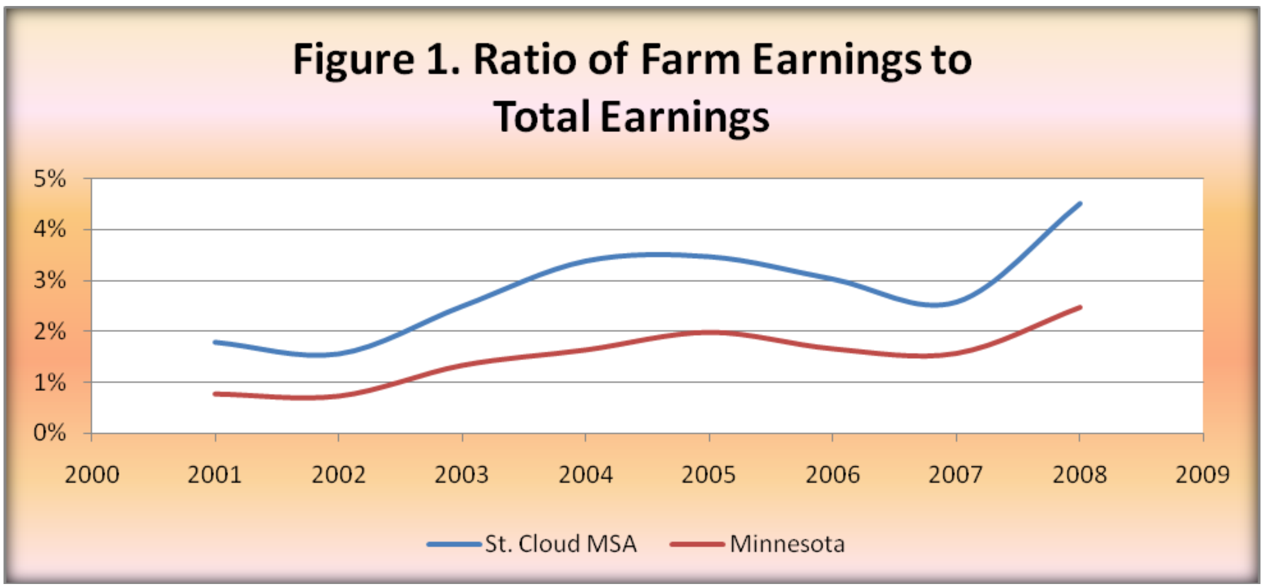
From the raw numbers, agriculture appears to command a tiny presence within the St. Cloud MSA. In 2001, farm earnings (the sum of wages, salaries, benefits, and proprietors' income) made up less than 2 percent of total area earnings. In 2008, farm earnings became 4.5 percent of total area earnings. Further, in 2008, farm earnings increased by 64 percent from 2007 for the state, but for St. Cloud MSA, farm earnings increased by 82 percent just between those two years. The growth in the ratio in farm earnings to total earnings shown in Figure 1, demonstrates the increase in importance of the agricultural economy in Stearns and Benton Counties since 2001, as well as the consistently stronger importance of agriculture in the St. Cloud Area compared to the state overall.



Source: Bureau of Economic Analysis, CA 05, Personal income and detailed earnings by industry. http://www.bea.gov/regional/reis

Stearns County ranks first in Minnesota for the total value of agricultural products sold in 2007, and in the value of livestock, poultry and their products, specifically dairy. Stearns supplies 15 percent of the total dairy products produced in Minnesota. In addition, the county produces a greater amount of oats for grain, corn for silage and forage than any other county in Minnesota.

Farming in the St. Cloud MSA is becoming more efficient. As shown in Table 1, between 2000 and 2008, the percent change between 2000 and 2009 in bushels per acre for corn and soybeans increased by over 50 percent in Benton County. Corn yields per acre increased in Stearns County by over 30 percent, compared to only a 20 percent expansion in bushels of corn per acre in Minnesota. The bushels per acre of soybeans in Minnesota dropped slightly, but increased by nearly 40 percent in Stearns County.

Table 1. Percent change in yields (bushels per acre), 2000 to 2009.			
	Minnesota	Benton	Stearns
Corn	20.0%	51.0%	31.5%
Soybeans	-2.4%	52.0%	37.1%

Source: U.S. Department of Agriculture. *Statistics by Subject*; http://www.nass.usda.gov/Statistics_by_Subject/index.php?sector=CROPS.

However, the amount of farm receipts and yield per acre is only part of the story. The full impact of an industry is the amount of additional local spending necessary to produce the products. An increase in sales acts like a stone thrown into a calm pond. The initial sales create ripple effects in the local economy, often spreading out for several iterations.

Production incorporates three types of expenditure. *Direct spending* is the amount of goods sold within a specific industry. *Indirect spending* accounts for the purchases of intermediate goods. For instance, a farmer running a dairy farm will purchase fodder and silage from other farmers as well as farm implements from local dealers. Purchases like this are part of the indirect effects.

Finally, *induced spending* accounts for the purchases of farm workers, as well as employees of the establishments that sell goods and services to farmers. When employees purchase goods and services at the mall, go to movies, or make doctor appointments, that spending is categorized as induced spending. In 2007, the total value of all agricultural products sold in St. Cloud was $633 million, but the agricultural sector supports nearly $1.2 billion in local spending. The overall multiplier for the agricultural industry is about 1.87, meaning that an additional 87 cents is spent locally to create one dollar of outside sales.

To the extent that the various commodities enjoy different levels of support locally, their multipliers differ. The multiplier associated with grains, oilseeds, beans and peas is 1.82, but for poultry and eggs is only 1.64. Raising cattle and calves creates a relatively large multiplier of 2.34, taking into account silage and fodder purchases as well as veterinary services.

Table 1. Economic Impact of Agriculture on the St Cloud Economy				
Item	**Direct ($1,000)**	**Indirect ($1,000)**	**Induced ($1,000)**	**Total Impact ($1,000)**
Market Value of Agricultural Products Sold ($1,000)				
Total value of agricultural products sold	633,307	266,347	287,096	1,186,750
Value of Sales by Select Commodity Group ($1,000)				
Milk and other dairy products from cows	261,542	69,128	162,623	493,293
Poultry and eggs	156,515	54,336	46,507	257,358
Cattle and calves	78,463	74,588	30,861	183,911
Grains, oilseeds, dry beans, and dry peas	77,428	26,634	37,030	141,092

Sources: US Department of Agriculture, 2007 Census of Agriculture; IMPLAN.

Direct sales of dairy products amount to 39 percent of total agricultural products sold in the St. Cloud MSA but their total impact accounts for 42 percent of the total impact. Table 2 shows the largest beneficiaries of a $1 million increase in sales of dairy products, from $261 million to $262 million. The largest beneficiary, of course would be the dairy industry. However, the wholesale trade industry would have the second largest impact, followed by real estate. The slight increase in employment would increase the demand for residential housing, and would increase the demand for more PreK-12 teachers. In total, 21 industries would notice an increase in output topping $10,000 due to this slight of an increase in dairy sales.

Table 2. Impact of a $1 Million Increase in Sales for the Dairy Industry in the St. Cloud MSA

Industry	Direct	Indirect	Induced	Total Impact
1. Dairy cattle and milk production	$1,000,000	$3,879	$1,148	$1,005,028
2. Wholesale trade businesses	0	41,891	34,803	76,694
3. Real estate establishments	0	29,629	22,382	52,012
4. Construct new residential permanent site single and multi-family buildings	0	0	44,883	44,883
5. All other crop farming	0	43,190	382	43,572
6. State and local government: Education employment & payroll)	0	0	36,567	36,567
7. Construct new nonresidential commercial and health care structures	0	0	33,913	33,913
8. Monetary authorities and depository credit intermediation services	0	15,865	11,850	27,714
9. Cattle ranching and farming	0	21,733	1,480	23,212
10. Food services and drinking places	0	1,659	19,294	20,953
11. Transport by truck	0	12,300	8,639	20,939
12. Private hospitals	0	11	20,820	20,831

Source: IMPLAN

Agriculture is the economic base of Central Minnesota. Even a slight expansion of this base affects numerous secondary industries. Agriculture in general, and dairy production in particular, stands as St. Cloud’s sleeping giant.

Information provided by Dr. Mary Edwards, Professor Ameritus, St. Cloud State University, winter of 2011.