

Economic Importance of the Georgia Dairy Industry

Dairy production in Georgia is concentrated in specific areas of the state. Agricultural regions in Georgia are characterized by geography, soil types, and commodities produced. Concentrations of milk cows can be classified as in the northeast, central, southwest, and southeast. The southeastern region has a group of counties in the upper region and another group in the lower region. Although value of production is not a large percentage of total state farm output, dairy production sales are important in selected regions of Georgia.

Milk cows and production have had declining trends in recent years. Chart 1 indicates that annual Georgia milk production decreased by a total of 6% during 1996-2005. During this period, the number of milk cows in Georgia decreased by 16%. Chart 2 shows that average milk per cow increased by 11% from 1996-2005. Thus, state production declines are due to decreasing cows at a time when dairy farm productivity has been increasing.

Increasing population has maintained Georgia demand for milk as milk production has decreased. Supply shortfalls have been met by increased imports from states such as Texas. While Georgia milk cows declined by 16% since 1996, Texas milk cows decreased by 19%. Similar climactic conditions and production practices in Georgia as in Texas raise the issue that Georgia dairy farmers may be unnecessarily losing market share to other states.

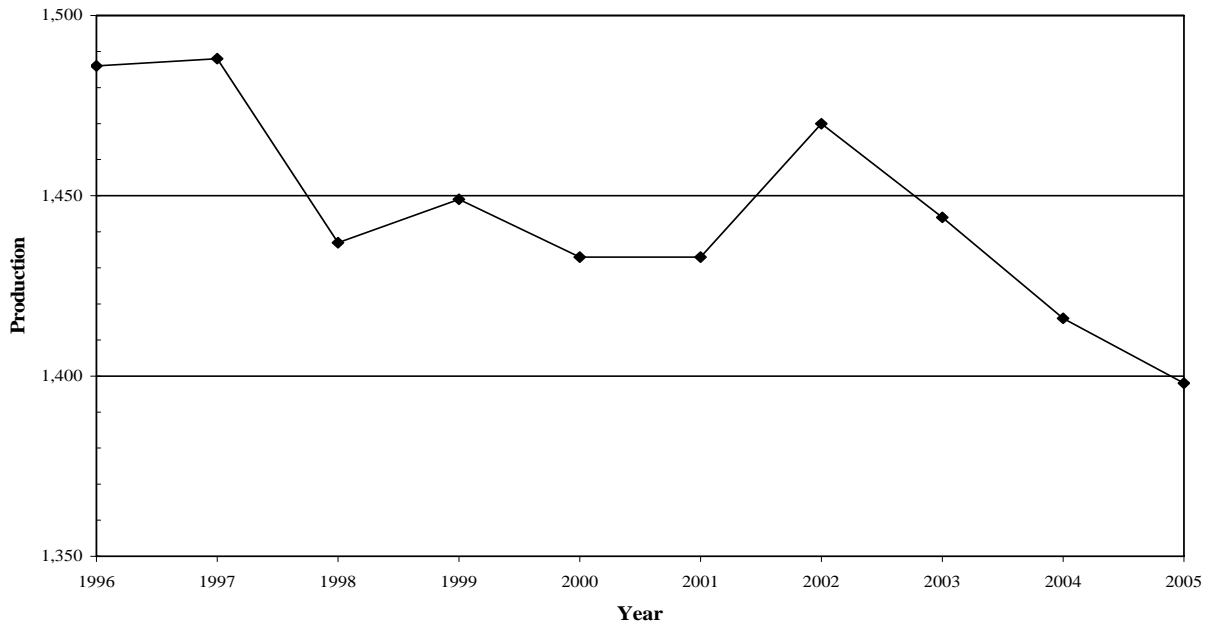


Chart 1. GA Milk Production, Million Pounds, 1996-2005
Source: National Agricultural Statistics Service

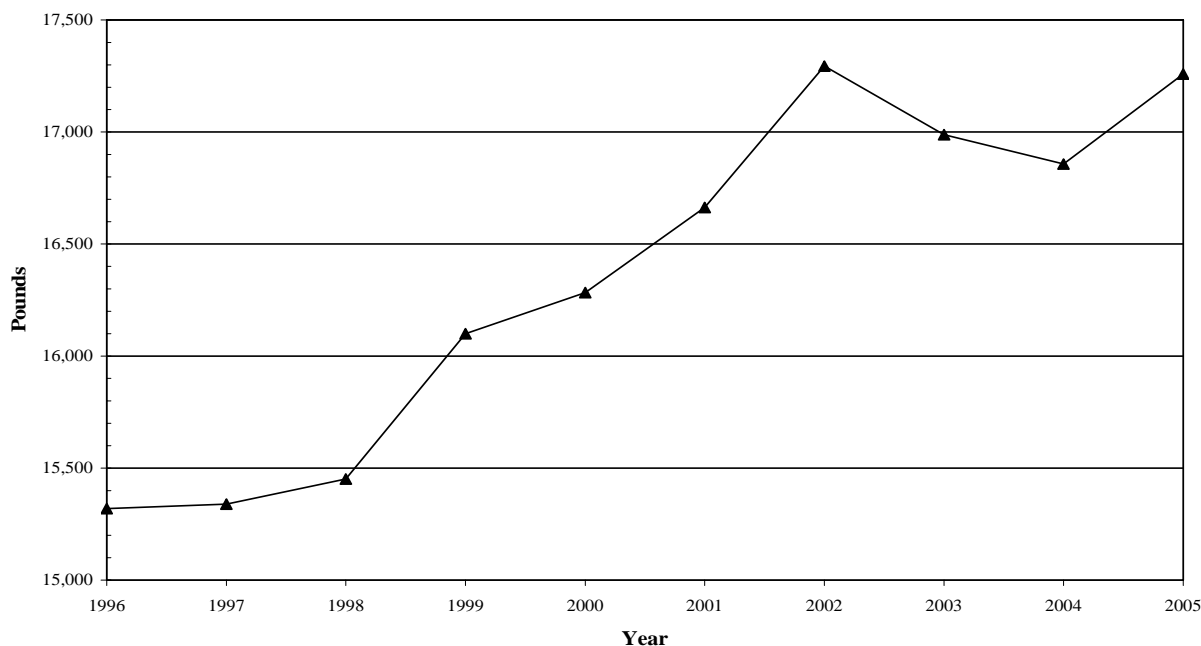


Chart 2. GA Milk Production per Cow, Pounds, 1996-2005.
Source: National Agricultural Statistics Service

Declining milk production affects the states economy on several different levels by negatively impacting the demand for inputs to milk production such as feed and forage, farm equipment, supplies, and veterinary services. As production falls below the necessary level or “critical mass” needed to maintain these supporting industries at a local level, dairy farmers must turn to distant, often higher cost, suppliers which in turn reduces net profit and hastens declining production. In recent years, Georgia has failed to produce enough milk to meet its demand for fluid consumption, leading to ever increasing imports from outside the region and raising the possibility that the state could begin to realize declines in its milk bottling industry.

As Georgia dairy production declines, economic impact losses occur throughout the state. Declining inputs for dairy cows lead to decreases in sales for agribusinesses. Losses continue as agribusinesses need fewer support services and employee income decreases. This report quantifies the economic impacts that the dairy industry, consisting of milk production and direct processing of fluid milk, has on the Georgia economy. Impact results will show the potential gain due to an expanding industry. Also, the results will show the cumulative losses in the state economy due to a declining dairy industry.

Economic Impacts of Georgia Dairy Production

The 2005 Georgia Farm Gate Report indicates that Georgia dairy production had a value of \$258.1 million in 2005. The economic impacts of production are presented in Table 1. Dairy direct output and additional sales related to production total \$509.8 million. Dairy production generates income of \$11.3 million dollars for 4,061 full-time and part-time jobs. Additional sales in industries related to dairy production lead to total income of \$88.9 million for 6,824 jobs. Thus, for every dollar of income generated at the dairy farm, an additional \$6.88 of income is

generated for Georgia employees and proprietors involved in impacted business. Economic activity that begins with dairy production creates \$11.1 million in state tax revenues and \$10.3 million in local tax revenues for counties and municipalities throughout the state. Table 2 shows how output, income, and employment is distributed among major industrial sectors.

Table 1. Dairy Production: Annual Impact

	Direct Effect	Total Effect
Output (\$)	258,096,208	509,820,648
Labor Income (\$)	11,286,218	88,925,001
Employment	4,061	6,824
State Taxes (\$)		11,084,727
Local Taxes (\$)		10,297,776

Table 2. Dairy Production: Annual Impact to Major Sectors

	Output (\$)	Labor	
		Income (\$)	Employment
Agriculture	348,229,408	37,993,156	5,523
MC ¹	2,627,348	1,099,448	28
Utilities	7,958,023	1,671,477	12
Manufacturing	18,770,744	3,092,125	56
Transportation, Warehousing	13,370,453	5,725,598	132
Trade	26,281,942	11,505,548	266
FIRE ²	41,338,047	9,073,939	231
Services	41,635,129	18,010,096	560
Government	9,609,554	753,614	16
TOTAL	509,820,648	88,925,001	6,824

¹Mining and Construction

²Finance, Insurance, and Real Estate

Economic Impact of Fluid Milk Manufacturing

Value of fluid milk manufacturing in Georgia for 2005 is estimated from 2003 *IMPLAN* output data by the Minnesota *IMPLAN* Group. Table 3 indicates an estimated direct output of \$80.0 million leads to additional sales in related businesses that total \$118.3 million. Direct income from fluid milk manufacturing is \$7.1 million for 150 full-time and part-time jobs. Income due to additional sales related to milk manufacturing creates a total income impact of \$19.3 million for

431 jobs. Fluid milk manufacturing generates \$1.6 million in state tax revenues and \$1.2 million in local tax revenues.

Table 3. Fluid Milk Manufacturing: Annual Impact

	Direct Effect	Total Effect
Output (\$)	80,000,000	118,268,204
Labor Income (\$)	7,139,194	19,280,757
Employment	150	431
State Taxes (\$)		1,612,990
Local Taxes (\$)		1,220,947

Economic Losses due to Declining Milk Production

Impacts in Table 3 can be utilized to estimate economic losses that occur as dairy production declines in Georgia. The Georgia Farm Gate Report of \$258.1 million of direct output in Table 1 corresponds to 82,289 head of milk cows. Table 4 shows calculations in terms of per 1,000 cows for the total effects reported in Table 1. Averages indicate total impacts for every 1,000 cows on Georgia dairy farms. Georgia milk cows have declined by an average of 1,600 cows per year during the previous 10 years. Average annual effects in Table 1 are losses in the Georgia economy each year from 1996-2005. Total output losses of \$9.9 million per year cost Georgia employees and proprietors \$1.7 million in income. These income losses occur as 133 jobs are lost due to decreasing milk cows. Georgia loses \$215,528 per year in state tax revenues and \$200,227 per year in revenues for local governments. Losses in Table 4 do not include losses to the fluid milk manufacturing sector that would arise if dairy production losses lead to decreases processing capacity.

**Table 4. Dairy Production: Total Annual Impact,
per 1,000 Milk Cows and Annual Average**

	1,000 Cow Effect	Average Annual Effect
Output (\$)	6,195,490	9,912,783
Labor Income (\$)	1,080,643	1,729,028
Employment	83	133
State Taxes (\$)	134,705	215,528
Local Taxes (\$)	125,142	200,227

Summary

Georgia milk production is declining as the state loses an average of 1,600 milk cows per year. Increasing productivity among Georgia dairy producers indicate that decreases in milk production at a time when state population is increasing is a public policy issue. Georgia workers lose \$1.7 million per year in income due to declining milk cows. The state treasury loses \$215,528 per year in tax revenue and local governments lose \$200,227 per year in tax revenue.