



The University of Georgia

Center for Agribusiness and Economic Development

College of Agricultural and Environmental Sciences

The Expected Economic Impact of a New Cotton Gin in the Mitchell County Area of Georgia

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An economic impact analysis shows the effect of a new venture on the economy. The economic impact of a new cotton gin in the Mitchell County area of Georgia will be two fold. First the gin will create new economic output and employment in the area through ginning and warehouse fees. These sales will generate additional sales as the plant purchases inputs and the new employees spend their earnings. Further, the suppliers to the plant will increase the purchase of their inputs, thus increasing demand for those items. So the second impact is that the increased sales and employment will then ripple through the economy generating new dollars, jobs, and tax revenues. An input-output model can capture and quantify both the initial impacts of a new cotton gin as well as the secondary or “spin-off” effects of a new gin.

The input-output model, IMPLAN (Impact Analysis for PLANning) was utilized for this project. IMPLAN can predict the effects of a new venture on output (sales), employment and tax revenue. IMPLAN models can be constructed for a state, a region or a county. Input-output models work by separating the economy into its various sectors, such as agriculture, construction, manufacturing and so forth. An IMPLAN model will show each sector and industry in the specific region’s economy. The model can capture how a change in one industry (for example, cotton ginning) will change output and employment in other industries. The changes in the initial industry (cotton ginning) are labeled direct effects, and the changes in the other industries are called indirect effects. The direct and indirect effects are summed to reveal the total economic impact.

For the analysis of this new cotton gin, economic impacts of two different operating levels are measured. The first scenario is the 21,000 bales ginned per year scenario. Currently, this is the minimum level which producer-owners expect to deliver and gin. The second scenario is the 35,000 bales per year scenario. At this level, the cotton gin will run at full capacity. Both of these scenarios were analyzed and measured on two levels --- a six-county area, consisting of Baker, Colquitt, Decatur, Grady, Mitchell and Thomas Counties and, then the state of Georgia as a whole.

The first analysis is the economic impact of the new cotton gin on the six-county market area using the 21,000 bales per year scenario. As shown in Table 1, the direct effect of the new cotton gin at this level of operation is nearly \$1.3 million. This \$1.3 million generates another \$522,500 inside the six-county market area, for a total combined impact of more than \$1.8 million. Total employment in the area would be expected to increase by 32 jobs (7 plus the initial 25 employed by the gin) due to a new cotton gin operating at the start-up level. With new economic activity in the area due to the gin, tax revenues, state and local non-education, would be supplemented by more than \$61,000.

Table 1: Impact of New Cotton Gin on Six-County Market Area
(21,000 bales ginned/year)

	Direct	Indirect	Total
Output	\$1,289,400	\$522,530	\$1,811,930
Employment	25	7	32
Tax Revenue	NA	NA	\$61,258

In the second analysis, Table 2 highlights the economic impacts of the 21,000 bales per year scenario on all of Georgia's economy including the 6 county areas. The cotton gin will again have a direct effect of nearly \$1.3 million, rippling through the state's economy to create an additional \$760,000 in the state. This combines to a total of more than \$2 million. Indirectly, 8 additional jobs will exist in Georgia because of the cotton gin. Also, state and local tax revenue levels would be nearly \$82,000 higher.

Table 2: Impact of New Cotton Gin on Georgia's Economy
(21,000 bales/ginned/year)

	Direct	Indirect	Total
Output	\$1,289,400	\$760,114	\$2,049,514
Employment	25	8	33
Tax Revenue	NA	NA	\$81,864

In the next two analyses, the impact of the new cotton gin at 35,000 bales per year (full capacity) is analyzed; first in the six-county market area and then in Georgia. As shown in Table 3, the direct effect of new cotton gin is now more than \$2.1 million. This \$2.1 million generates another \$677,000 inside the six-county market area, totaling a combined impact of more than \$2.8 million. Employment is up in the six-county market area by 33 jobs due to the jobs created by the new cotton gin. Also, tax revenues, state and local non-education, are supplemented by more than \$70,000.

Table 3: Impact of New Cotton Gin on Six-County Market Area (35,000 bales ginned/year)

	Direct	Indirect	Total
Output	\$2,149,000	\$677,391	\$2,826,391
Employment	25	8	33
Tax Revenue	NA	NA	\$70,682

Table 4 highlights the economic impact of the new cotton gin on Georgia's economy as a whole. The facility will again have a direct effect of \$2.1 million, rippling through the economy to create an additional \$873,000 in the state. This combines to a total of more than \$3 million. Indirectly, 10 additional jobs will exist in Georgia because of the new cotton gin. Also, state and local tax revenue levels would be \$110,000 higher.

Table 4: Impact of New Cotton Gin on Georgia's Economy (35,000 bales ginned/year)

	Direct	Indirect	Total
Output	\$2,149,000	\$872,988	\$3,021,988
Employment	25	10	35
Tax Revenue	NA	NA	\$110,061

In conclusion, a new cotton gin of the magnitude considered above will have a significant impact on both the economy of the six-county area and of Georgia. Two important assumptions must be noted for an impact analysis of this nature. First, a new gin in the area will not imperil the operations of existing gins. If a new gin simply displaces a gin in another area, the impact on the local economy may be improved but the gains will come at the expenses of another area. Secondly, a new gin is not assumed to lead to new cotton production in the area. The impact analysis presented here relates only to the gin itself and not to the cotton needed to supply the gin. If a new cooperatively owned gin in the area provides incentives to expand cotton production, the impact on the area's and state's economic activity will likely be even greater than presented here. This is provided that any new cotton production does not replace a crop which generates more economic activity than cotton. A successful, new- generation cooperative gin would be expected to provide to its owner members incentives to increase production in the form of a more secure market with gin and warehouse profits accruing back to the cotton producer owners. Increased production could take the form of either more acreage planted to cotton or an increased production per acre through, for instance, the increased use of irrigation.

The Center for Agribusiness & Economic Development



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