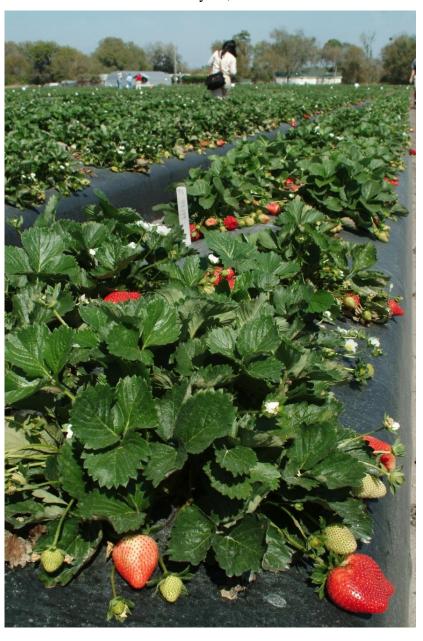
Economic Contributions of Agribusiness and Food Industries in Hillsborough County, Florida

Executive Summary

Sponsored Project Report to Hillsborough County Economic Development Department

Alan W. Hodges, Ph.D., Extension Scientist Thomas J. Stevens, Ph.D., Research Associate

University of Florida-IFAS, Food and Resource Economics Department
Gainesville, Florida
February 18, 2016



Economic Contributions of Agribusiness and Food Industries in Hillsborough County, Florida

Executive Summary

This report presents the findings of an assessment of the economic contributions of agribusiness and food industries in Hillsborough County, Florida, commissioned by the Hillsborough County Economic Development Department. The county has a long heritage of agriculture and related industries dating back to the 1800s. In recent years, the county experienced rapid population growth and development, with population reaching 1.23 million persons, representing a 2.5 fold increase since 1970. The economy of Hillsborough County is closely tied to the national and global economies through its transportation infrastructure and trade, tourism, and finance sectors.

Hillsborough County is noted for production of fruits and berries, nursery and greenhouse products, vegetables and ornamental fish. The county ranked first in the state in strawberry production, valued at \$120 million (2012 Census of Agriculture). The county currently has around 215,000 acres of farmland.

The total economic contributions of Agriculture, Natural Resources and Food (ANRF) industries were evaluated using the IMPLAN regional economic impact modeling software and associated data (Implan Group, LLC), which allows estimation of the indirect and induced multiplier effects of economic activity. A summary of the estimated contributions of ANRF industries in 2013, including multiplier effects, is shown in Table ES1. Total employment contributions were estimated at 168,654 fulltime and part-time jobs, representing 20.7 percent of the county workforce. The total output or revenue contributions were estimated at \$22.46 billion, and value added contributions were estimated at \$11.28 billion, representing 16.0 percent of county Gross Domestic Product (GDP). Labor income contributions (employee wages, salaries, benefits and proprietor income) were \$7.11 billion, and contributions to local, state and federal taxes on production and imports were \$1.05 billion.

The ANRF industries were classified into seven groups: Agricultural Inputs and Services; Crop, Livestock, Forestry and Fisheries Production; Food and Kindred Products Manufacturing; Forest Products Manufacturing; Food and Kindred Products Distribution; Mining; Nature based Recreation. Among these industries, Food and Kindred Products Distribution was by the largest, representing over half of total economic contributions. Food and Kindred Products Manufacturing and Agricultural Inputs and Services were the second and third largest groups, respectively, in terms of output and GDP contributions. Crop, Livestock, Forestry and Fisheries production, generally recognized as production agriculture, contributed 17,525 jobs, \$1.01 billion in output, and \$665 million in GDP. Excluding the Food and Kindred Product Distribution industry group, and certain food manufacturing sectors that do not have a strong linkage to commodity production in the county, total economic contributions were 49,976 jobs, \$7.91 billion in industry output, \$3.43 billion in GDP, and \$199 million in business taxes (subtotal line in Table ES1).

Between 2001 and 2013, employment contributions by ARNF industries peaked in 2006-07, then declined during the global recession due to reduced domestic and international exports, and recovered strongly in 2012-13 (Figure ES1).

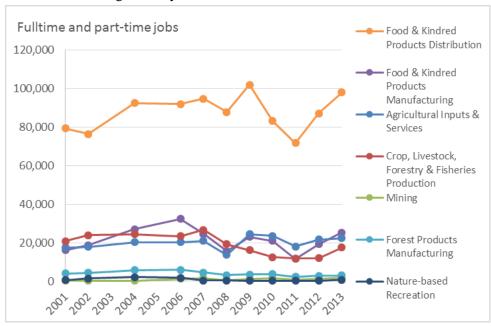
While production agriculture itself no longer constitutes a large share of the county's economy, it still serves as the basis for a much larger industry for food products and related services through the food manufacturing and distribution sectors.

Table ES1. Summary of total economic contributions of agriculture, natural resources, and food industries in Hillsborough County, Florida, 2013

Industry Group / Sector	Employ- ment (Jobs)	Industry Output (\$M)	Value Added (\$M)	Labor Income (\$M)	Other Property Income (\$M)	Business Taxes (\$M)
Crop, Livestock, Forestry & Fisheries Production	17,526	1,005	665	455	182	28
Agricultural Inputs & Services	22,299	4,789	1,910	1,158	638	114
Forest Products Manufacturing	2,972	644	262	174	70	18
Food & Kindred Products Manufacturing: Core Sectors	4,579	1,111	391	238	125	29
Mining	1,799	311	174	92	72	10
Nature-based Recreation	803	47	26	19	6	1
Subtotal	49,976	7,906	3,429	2,137	1,093	<u>199</u>
Food & Kindred Products Manufacturing: All Sectors	25,342	6,484	2,476	1,369	915	191
Food & Kindred Products Distribution	97,913	9,176	5,764	3,846	1,231	687
Total	<u>168,654</u>	<u>22,456</u>	<u>11,278</u>	<u>7,114</u>	<u>3,114</u>	<u>1,049</u>

Employment represent fulltime and part-time jobs; values are denominated in million dollars; estimates include regional multiplier effects.

Figure ES1. Trend in employment contributions of agriculture, natural resources, and food industries in Hillsborough County, Florida, 2001-13



Note: data not available for 2003 and 2005.

Appendix A: Glossary of Regional Economic Terminology

- <u>Direct effects/impacts</u>: Direct impacts represent the initial revenues, value-added, income, or jobs that result directly from an economic activity within a regional economy.
- <u>Employment or Jobs</u>: Represents the total numbers of wage and salaried employees as well as self- employed jobs. This includes full-time, part-time and seasonal workers measured in annual average jobs.
- <u>Indirect effects/impacts</u>: Indirect effects occur when businesses use new revenues originating from outside the region (or reduced import leakages), to purchase inputs (goods and services) from local suppliers. This secondary, or indirect business, generates additional revenues, income, jobs and taxes for the area economy.
- <u>Induced effects/impacts</u>: Induced effects or impacts occur when new dollars from outside the study area (either from increased export sales or reduced expenditures), are introduced into the local economy. Induced economic impacts occur as the households of business owners and employees spend their earnings from these enterprises to purchase consumer goods and services from other businesses within the region. This induced effect generates additional revenues, income, jobs and taxes for the area economy.
- <u>Input-Output (I-O) Analysis</u>: The use of input-output models to estimate how revenues or employment for one or more particular industries, businesses or activities in a regional economy impact other businesses and institutions in that region, and the regional as a whole.
- <u>Input-Output (I-O) Models</u>: A mathematical representation of economic activity within a defined region usingindustry transaction tables or matrices where the outputs of various industries and institutions are used as inputs by other or the same industries.
- <u>Labor Income</u>: All forms of employment compensation, including employee wages and salaries, and proprietor income or profits.
- <u>Local revenues/expenditures</u>: Local revenues or spending represent simple transfers between individuals or businesses within a regional economy. These transactions do not generate economic spin -off or multiplier (indirect and induced) effects.
- <u>Margins</u>: Represent the differences between retail, wholesale, distributor and producers prices. IMPLAN I-O models are calibrated in producer prices. Thus, retail merchandize sales are generally margined to accurately reflect net revenues for the local economy.
- Non-local or "New" revenues/expenditures: When outside or new revenues flow into a local economy either from the sale of locally produced goods and services to points outside the study area, or from expenditures by non-local visitors to the study area, additional economic repercussions occur through indirect and induced (multiplier) effects.

Other Property Type Income: Income in the form of rents, royalties, interest, dividends, and corporate profits.

Output: Revenues or sales associated with an industry or economic activity.

<u>Taxes on Production & Imports or Indirect Business Taxes</u>: Include sales, excise, and property taxes as well as fees and licenses paid by businesses during normal operations. It does not include taxes on profits or income.

<u>Total Impacts</u>: The sum of direct, indirect and induced effects or economic impacts.

<u>Value added</u>: Includes wages and salaries, interest, rent, profits, and indirect taxes paid by businesses. Total Value-added across all industries is equivalent to Gross Regional Product.