

The Scope of Agribusiness in the Commonwealth of Pennsylvania

Final Report
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Conducted by:

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Small Business Development Center

and

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INTRODUCTION

The purpose of this study is to determine the size, scope and impact of the agribusiness industry in the Commonwealth of Pennsylvania.

THE STUDY IS DESIGNED TO ANSWER THE FOLLOWING QUESTIONS:

1. How many agribusinesses are there?
2. What is their economic impact, in terms of sales and employment?
3. What is the role of small businesses in the agribusiness industry, in terms of sales and employment?
4. What is the impact of agribusiness in Pennsylvania by county, in terms of sales and employment?
5. In what subsets of the agribusiness industry do small firms have the greatest impact, in terms of sales and employment?

THE FOLLOWING STEPS WERE FOLLOWED FOR THIS STUDY:

1. Obtain the definition of agribusiness in consultation with the PA Department of Agriculture
2. Determine NAICS codes for agribusinesses
3. Inventory agribusiness in Pennsylvania statewide and for each county by:
 - Total number of businesses, sorted by size, sales and employment
 - Total sales sorted by size and employment
 - Total employment sorted by size and sales

THE ACTIONS TAKEN TO COMPLETE THIS STUDY INCLUDED:

1. Finalize a definition for Agribusiness.
2. Convert the data from the Economic Research Service (ERS) input/output codes to SIC to NAICS so the census data could be accessed.
3. Determine the major sectors that would be included in this study.
4. Enter data into the database for analysis.
5. Analyze the data.
6. Create a sortable database.
7. Prepare the Final Report.

The transitional period from SIC code business classifications to NAICS has resulted in a variation among the agencies on how they report data. A major challenge of this study was to convert the industry data for the industries reported by the Economic Research Services (ERS) to be in the agribusiness sector to the equivalent census data codes which are reported in NAICS. It was necessary to do a conversion between the SIC codes

reported by ERS and NAICS codes. We expect that as the ERS and other agencies adapt to NAICS reporting, this task will be less difficult in the future.

Previously, there have been studies on PA agribusiness that perform an economic analysis based on inputs and outputs which provide multipliers to project growth in various sectors (Penn State, USDA). This study utilized NAICS codes to obtain the dollar value, number of firms and number of jobs by county, where possible.

The goal of this study is to identify how large the agribusiness sector is in Pennsylvania in employment and business size sorted by industry using NAICS codes. This information is further sorted in terms of value, showing the role both employment and business size play in the agribusiness sector.

Because of the large volume of data, this study identifies the county data in groups of the top 10 counties for the major sectors of agribusiness and top 5 counties for the industry subsectors. Complete county data is available by accessing the online searchable database developed for this study at www.duq.edu/sbdc .

DEFINITION OF AGRIBUSINESS

After reviewing various sources, the definition of Food and Fiber published by the U.S. Economic Research Service (ERS) has been accepted by the Pennsylvania Department of Agriculture Deputy Secretary as the definition of agribusiness. This study utilizes this definition as the basis for data collection. The following is the definition of agribusiness.

“The food and fiber system comprises the economic activities of the farms and the firms that assemble, process, and transform raw agricultural commodities into final products for distribution to U.S. and foreign consumers. The food and fiber system includes all economic activity that supports farm production and the conversion of raw farm products to consumable goods—for example, machinery repair, fertilizer production, farming itself, food processing and manufacturing, transportation, wholesale and retail trade, distribution of food and apparel, and eating establishments. The income and employment generated within the food and fiber system is the income earned and jobs provided by these firms.”

Source: Economic Research Service, USDA

DATA LIMITATIONS

The U.S. Department of Agriculture's Economic Research Service (ERS) reported the 1997 data at the Pennsylvania state level using Input/Output codes bridged to the Standard Industrial Classification codes (SIC). This study utilized this data, extending the codes to the North American Industry Classification System (NAICS) for the major components of the Food and Fiber System: Agriculture, Manufacturing, Wholesale, Retail, Food Services.

Due to the relatively few firms in each NAICS category, the census data does not report the value for the business at the county level for the majority of the data set. This limited the study to reporting county and regional data by establishments and number of employees.

OVERVIEW OF AGRIBUSINESS IN PENNSYLVANIA

Agribusiness, defined by the Food and Fiber System, consists of the economic activities of the farms and the firms that assemble, process, and transform raw agricultural commodities into final products for distribution to U.S. and foreign consumers. The Food and Fiber System includes all economic activity that supports farm production and the conversion of raw farm products to consumable goods—for example, machinery repair, fertilizer production, farming itself, food processing and manufacturing, transportation, wholesale and retail trade, distribution of food and apparel, and eating establishments. The income and employment generated within the Food and Fiber System is the income earned and jobs provided by these firms. ¹

In 1997, Pennsylvania had 1,044,000 workers and ranked 6th in U.S. employment for the Food and Fiber System. This number has decreased over the past two decades. Table 1 illustrates the rank ordering of states most active in the Food and Fiber System and shows a comparison between years 1981 and 1997. Pennsylvania lost 24,000 jobs related to the Food and Fiber System during this period.

Table 1
MOST ACTIVE STATES RANKED BY YEAR

State	1997 Employment	1997 Ranking	1981 Employment	1981 Ranking	1981-97 Percent Change
California	2,701.3	1	2,160.2	1	25.1
Texas	1,639.5	2	1,405.9	3	16.6
New York	1,351.7	3	1,472.0	2	-8.2
Florida	1,286.2	4	858.8	7	49.8
Illinois	1,112.3	5	1,044.2	5	6.5
Pennsylvania	1,044.3	6	1,066.2	4	-2.2

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Figure 1 shows the Food & Fiber System employment proportions of total civilian employment for each state. 17.5 % of Pennsylvania's population is engaged in the Food and Fiber System.

¹ Lipton, Katherine L. "The Food and Fiber System: Contributing to the U.S. and World Economies" *Economic Research Service Department of Agriculture*. Agriculture Information Bulletin No. 742. 28 pp, August 1998 <http://www.ers.usda.gov/publications/aib742/>

Figure 1
TOTAL CIVILIAN EMPLOYMENT BY STATE

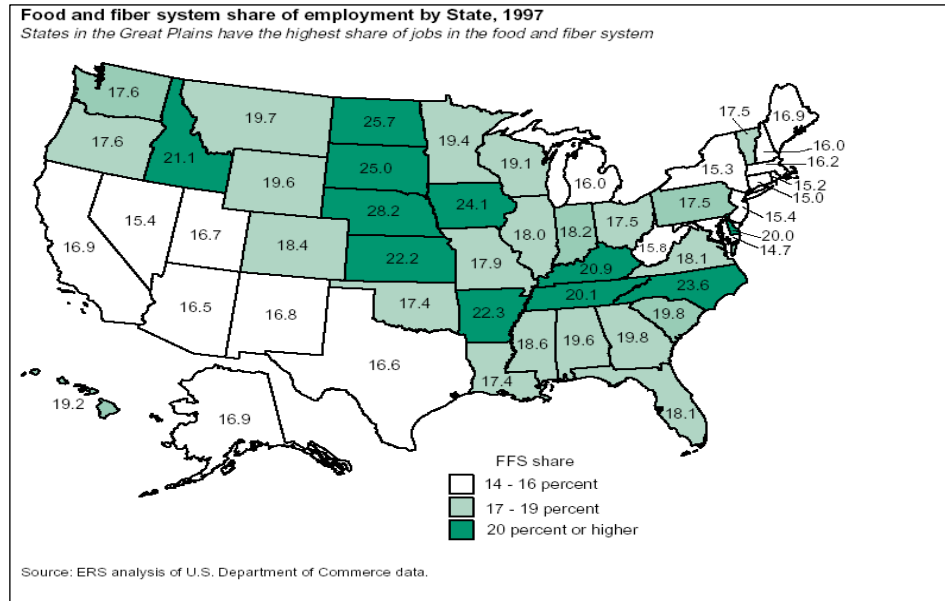


Table 2 presents employment data for the Food and Fiber System and the agricultural production sectors. It is interesting to note that Pennsylvania depends on agriculture as the basis for production of many products and ranks 6th in employment of total agribusiness workers among the top states. Pennsylvania’s employment in the agriculture sector itself is not in the top ten states.

Table 2
TOP TEN STATES WITH MOST FOOD AND FIBER SYSTEM WORKERS
AND STATES WITH MOST FARM WORKERS

States with the Most Food and Fiber System Workers			States with the Most Farm Workers		
	1997	1981		1997	1981
1	California	California	1	California	California
2	Texas	New York	2	North Carolina	Texas
3	New York	Texas	3	Texas	North Carolina
4	Florida	Pennsylvania	4	Iowa	Minnesota
5	Illinois	Illinois	5	Nebraska	Michigan
6	Pennsylvania	Ohio	6	Illinois	Wisconsin
7	Ohio	Florida	7	Kansas	Iowa
8	North Carolina	North Carolina	8	Minnesota	Illinois
9	Michigan	Michigan	9	Kentucky	Missouri
10	Georgia	New Jersey	10	Wisconsin	Kansas

Source: ERS analysis of U.S. Department of Commerce

SECTOR BREAKDOWN WITHIN AGRIBUSINESS IN PENNSYLVANIA

Agribusiness, defined by the Food and Fiber System, in Pennsylvania is \$46.4 billion and creates 1,044,000 jobs. It also represents 4.6% of the total Food and Fiber System in the U.S.

The largest Food and Fiber sectors are Agriculture, Manufacturing, Wholesale, Retail, and Food Services.

The largest dollar value sector of Pennsylvania Food and Fiber is Manufacturing with \$13.5 billion, followed by Retail with \$8.7 billion, and Food Services with \$5.7 billion.

The largest job creator in Pennsylvania Food and Fiber is Retail with 307,152 jobs, followed by Food Services with 264,212 jobs, and Manufacturing with 196,453 jobs.

The following table illustrates the major components of Pennsylvania's Food and Fiber System.

Table 3
MAJOR INDUSTRIES OF THE PENNSYLVANIA FOOD AND FIBER SYSTEM

Industry	Jobs	Value (millions)	# of Establishments
Agriculture	39,140	\$952.07	45,457
Manufacturing	196,453	\$13,521.90	3,994
Wholesale	71,900	\$4,994.24	3,642
Retail	307,152	\$8,723.36	22,489
Finance, Insurance, Real Estate	20,342	\$3,223.51	7,275
Food Services & Drinking Places	264,212	\$5,707.58	22,254
Total	899,199	\$37,123	105,111

The following charts illustrate the various components of each major agribusiness sector and corresponding NAICS code.

Manufacturing

NAICS	Description
311	Food mfg
313	Textile mills
314	Textile product mills
315	Apparel manufacturing
337	Furniture & related product mfg
3121	Beverage mfg
3221	Pulp, paper & paperboard mills
3222	Converted paper product mfg
3251	Basic chemical mfg
3253	Pesticide, fertilizer & other ag chemical mfg
3254	Pharmaceutical & medicine mfg
3331	Ag, construction & mining machinery mfg

Food Services

NAICS	Description
722	Food services & drinking places

Retail Trade

NAICS	Description
442	Furniture & home furnishing stores
445	Food & beverage stores
446	Health & personal care stores
448	Clothing & clothing accessories stores
4226	Chemical & allied products whsle
4228	Beer, wine, distilled alcoholic beverage whsle
4229	Miscellaneous nondurable goods whsle

Wholesale Trade

NAICS	Description
4212	Furniture & Home furnishing whsle
4221	Paper & paper product whsle
4222	Drugs & druggists' sundries whsle
4223	Apparel, piece goods & notions whsle
4224	Grocery & related product whsle
4225	Farm product raw material whsle
42182	Farm & garden machinery & equip. whsle

Top 10 PA Counties for Major Agribusiness Establishments

The following chart depicts the 10 counties with the greatest number of establishments. The data was accumulated by isolating the NAICS code for the agribusiness components of each section mentioned above.

The top Pennsylvania County for major agribusiness establishments is Philadelphia with 6,545 establishments, followed by Allegheny with 5,984 establishments. (A complete listing is available by downloading the database at www.duq.edu/sbdc.)

County Name	Total Establishments
Philadelphia	6,545
Allegheny	5,984
Montgomery	4,183
Bucks	2,768
Delaware	2,283
Chester	1,742
Berks	1,538
Luzerne	1,021
Westmoreland	834
Lancaster	416

Top 10 PA Counties for Employment in Major Agribusiness Establishments

The top PA County for employment in major agribusiness sectors is Allegheny with 96,859 employees, followed by Philadelphia with 60,748 employees. The majority of establishments are quite small, less than 4 employees.

County Name	Number of Employees	Busn. with 1-4 Employees	Busn. with 5-9 Employees	Busn. with 10-49 Employees	Busn. with 50-249 Employees	Busn. with 250-999 Employees	Busn. with 1,000 or more Employees
Allegheny	96,859	2,396	1,224	1,913	429	21	0
Philadelphia	60,748	1,870	769	960	186	23	2
Montgomery	86,145	1,783	882	1,180	299	34	5
Lancaster	51,289	794	454	741	185	27	0
Bucks	35,671	931	434	569	153	9	0
Delaware	34,554	1,073	448	638	117	6	1
York	32,591	560	313	473	113	10	2
Chester	31,123	711	346	561	130	6	0
Lehigh	27,948	683	345	440	114	9	0
Westmoreland	22,114	618	288	423	95	1	1

Approximately 10% of PA's employees in the top 10 counties for agribusiness are employed by firms with less than 10 employees and 81% by firms with less than 250.*

*NOTE: As seen in the charts, the data for employment is grouped by ranges of employees. An approximate determination of the percentage of employees working in various sizes of businesses can be determined by utilizing the mean of the categories and comparing it with the total.

PENNSYLVANIA AGRIBUSINESS BY REGION

Since there are 67 counties in Pennsylvania and a listing by county would make reading this study difficult, we decided to group the counties by region in consultation with the PA Department of Agriculture. A separate, searchable, database is available in which individual county data can be viewed. (www.duq.edu/sbdc)

The largest Agribusiness region is the Southeast with 474,204 employees and 26,274 establishments. **It is interesting to note that the majority of business establishments for all regions are small.** In all of the regions, the largest segment of agribusiness is in the 1-4 employee range followed by 10-49, 5-9, and 50-249.

When using the methods described in the last section it was found that an average of 15% of the state's (all regions) employment is with companies with less than 10 employees and 84% are with firms with less than 250 employees. It is interesting that the percentage of employment by the smallest firms increases when all counties with a smaller number of agribusiness firms are included, rather than just the top 10 counties.

	Total Establishments	Number of Employees	Estbl. with 1-4 Employees	Estbl. with 5-9 Employees	Estbl. with 10-49 Employees	Estbl. with 50-249 Employees	Estbl. with 250-999 Employees	Estbl. with 1,000 or more Employees
Southeast	26,274	474,204	11,705	5,298	7,361	1,738	158	14
Southwest	10,753	169,839	4,451	2,230	3,308	735	33	1
Northwest	6,065	110,573	2,661	1,312	1,670	382	37	3
South Central	5,790	113,360	2,178	1,223	1,718	418	40	3
Northeast	3,729	56,588	1,554	841	1,118	201	15	0

Northwest: Armstrong, Cameron, Clarion, Clearfield, Crawford, Elk, Erie, Forest, Jefferson, McKean, Mercer, Potter, Venango, Warren

Southwest: Allegheny, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, Westmoreland

South Central: Adams, Bedford, Blair, Cambria, Centre, Cumberland, Franklin, Fulton, Huntingdon, Mifflin, Somerset, York

Northeast: Bradford, Carbon, Clinton, Columbia, Lackawanna, Luzerne, Lycoming, Monroe, Pike, Schuylkill, Sullivan, Susquehanna, Tioga, Wayne, Wyoming

Southeast: Berks, Bucks, Chester, Dauphin, Delaware, Juniata, Lancaster, Lebanon, Lehigh, Montgomery, Montour, Northampton, Northumberland, Perry, Philadelphia, Snyder, Union

Percentage by Region

Figure 2 illustrates the percentage of agribusiness in each Pennsylvania region by number of establishments. Half (50%) are in the Southeast region followed by one-fifth (20%) in the Southwest, 12% in the Northeast, 11% in South Central, and 7% in the Northwest.

Figure 2

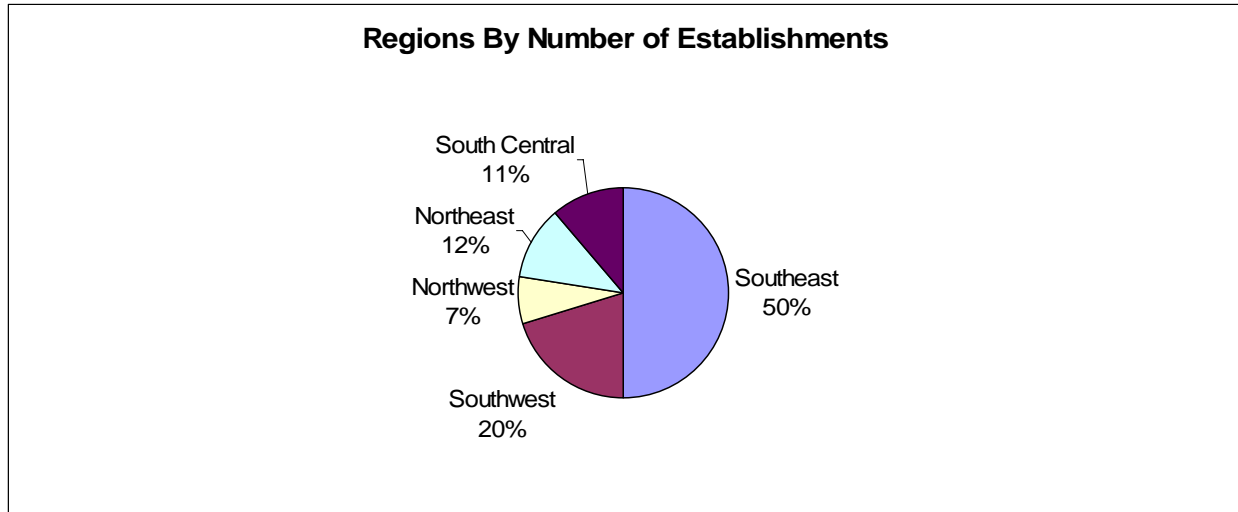


Figure 3 illustrates the percentage of agribusiness in each Pennsylvania region by number of employees. The Southeast region has the most employees with 52%, followed by 18% in the Southwest, 12% in both the Northeast and South Central, and 6% in the Northwest.

Figure 3

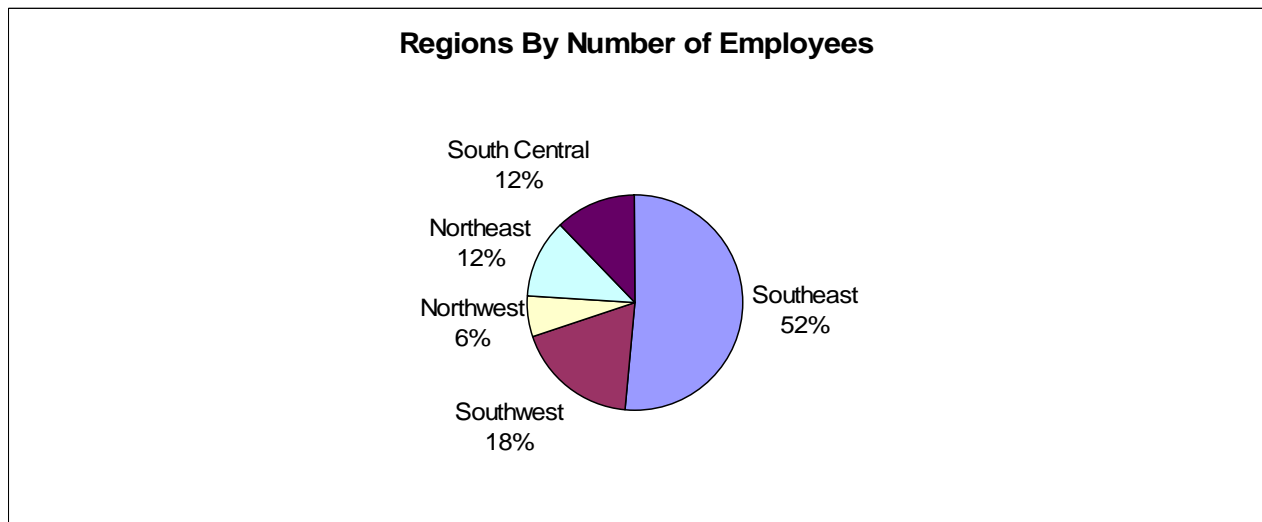
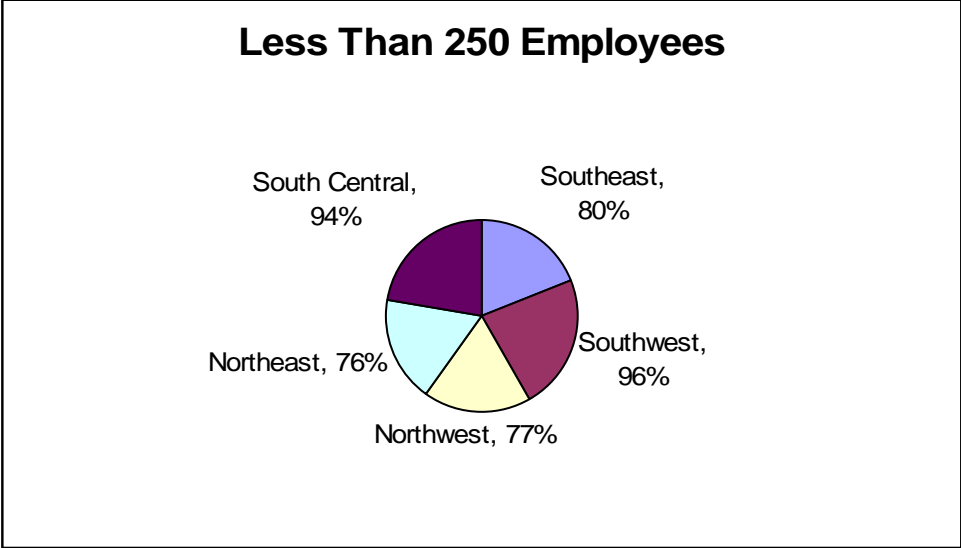


Figure 4 illustrates what percentage of total employees by region are working with small business (less than 250 employees). The Southwest region has the most employees with 96% of its work force hired by small business, followed by 94% in the South Central, 80% in the Southeast, 77% in the Northwest, and 76% in the Northeast.

Figure 4



The Top 10 PA Counties for Establishments by Major Agribusiness Sectors

In terms of number of establishments, Lancaster is the top county in the agriculture sector with 4,556 total establishments. Philadelphia is the top county in establishments for manufacturing, retail trade, and food services with 426, 2,660 and 2,793 establishments respectively. Allegheny County led wholesale trade with 647 establishments.

a) Agriculture Establishments

County Name	Total Establishments
Lancaster	4,556
York	1,698
Berks	1,586
Chester	1,424
Washington	1,307
Franklin	1,304
Bradford	1,279
Erie	1,123
Crawford	1,069
Westmoreland	1,035

c) Wholesale Trade Establishments

County Name	Total Establishments
Allegheny	647
Montgomery	635
Philadelphia	629
Bucks	489
Chester	338
Lancaster	294
Delaware	247
Lehigh	218
Berks	151
Westmoreland	142

b) Manufacturing Establishments

County Name	Total Establishments
Philadelphia	426
Lancaster	352
Allegheny	297
Montgomery	283
Bucks	157
Berks	169
Chester	159
York	147
Lehigh	144
Luzerne	116

d) Retail Trade Establishments

County Name	Total Establishments
Philadelphia	2,660
Allegheny	2,279
Montgomery	1,704
Bucks	1,077
Delaware	986
Lancaster	845
Chester	612
Berks	566
York	542
Westmoreland	534

e) Food Services and Drinking Places Establishments

County Name	Total Establishments
Philadelphia	2,793
Allegheny	2,736
Montgomery	1,535
Bucks	955
Delaware	946
Lancaster	710
Luzerne	675
Westmoreland	654
Berks	639
Chester	632

A complete listing is available by accessing the database at www.duq.edu/sbdc.

The Top 10 PA Counties for Employment in Major Agribusiness Industries

In terms of employment, Chester was top in the agriculture sector with 6,720 employees. Montgomery County was the top county in manufacturing with 20,578 employees and Wholesale Trade with 26,464 employees. Allegheny County led Retail Trade with 65,700 employees in retail and food services with 45,699 employees.

a) Agriculture Employment

County Name	Number of Employees
Chester	6,720
Lancaster	5,943
Berks	4,651
Adams	4,288
Franklin	2,968
Erie	2,484
York	2,197
Bucks	1,800
Indiana	1,691
Lebanon	1,355

b) Manufacturing Employment

County Name	Number of Employees	1-4 Employees	5-9 Employees	10-49 Employees	50-249 Employees	250-999 Employees	1,000 or more Employees
Montgomery	20,578	107	48	101	34	13	4
Lancaster	18,427	123	50	108	54	17	0
Philadelphia	17,444	148	70	174	57	13	1
Lancaster	14,844	103	50	95	53	14	0
York	10,304	39	22	44	40	8	1
Berks	8,726	49	31	55	30	11	0
Allegheny	7,824	122	47	118	31	4	0
Bucks	8,116	73	49	63	36	3	1
Lehigh	6,363	51	33	47	20	5	0
Chester	6,090	61	27	45	26	4	0

c) Wholesale Trade Employment

County Name	Number of Employees	1-4 Employees	5-9 Employees	10-49 Employees	50-249 Employees	250-999 Employees	1,000 or more Employees
Montgomery	26,464	357	99	134	34	10	1
Philadelphia	26,312	262	140	178	41	7	1
Allegheny	21,072	274	132	197	40	4	0
Bucks	12,808	278	74	116	19	2	0
Dauphin	10,848	40	24	36	14	5	1
Lancaster	10,466	133	52	86	19	4	0
Delaware	9,058	139	45	49	13	0	1
Berks	6,996	70	20	49	11	1	0
Lehigh	6,858	101	46	57	13	1	0
Chester	6,762	194	64	65	15	0	0

d) Retail Trade Employment

County Name	Number of Employees	1-4 Employees	5-9 Employees	10-49 Employees	50-249 Employees	250-999 Employees	1,000 or more Employees
Allegheny	65,700	891	611	648	120	9	0
Philadelphia	56,962	1431	542	597	87	3	0
Montgomery	55,620	658	467	470	99	10	0
Bucks	33,298	475	250	285	63	4	0
Lancaster	29,110	299	235	251	54	6	0
Delaware	29,016	407	231	302	43	3	0
Chester	21,600	234	143	192	42	1	0
York	17,740	201	165	146	28	1	1
Lehigh	16,652	205	129	149	42	1	0
Berks	15,378	226	159	149	30	2	0

e) Food Services and Drinking Places Employment

County Name	Number of Employees	1-4 Employees	5-9 Employees	10-49 Employees	50-249 Employees	250-999 Employees	1,000 or more Employees
Allegheny	45,699	1,108	434	952	238	4	0
Philadelphia	32,059	1,625	435	590	139	4	0
Montgomery	23,925	657	269	477	131	1	0
Bucks	14,255	382	217	284	72	0	0
Lancaster	13,239	237	117	297	59	0	0
Delaware	12,143	491	148	255	51	1	0
Lehigh	10,739	225	99	207	42	1	1
Chester	10,551	222	110	254	45	1	0
York	9,808	254	97	241	38	0	0
Westmoreland	9,789	260	117	230	47	0	0

The Top 5 PA Counties for Agribusiness Components by Sector

The following charts indicate the top five Pennsylvania counties for the various components of each major sector. For each sector, the top 5 counties in terms of number of employees and establishments are presented. The data indicates the diversification of industries across PA.

Manufacturing

Food – Employment

NAICS	Code Description	County Name	Number of Employees
311	Food Manufacturing	Lancaster	8,919
311	Food Manufacturing	Montgomery	7,344
311	Food Manufacturing	Philadelphia	7,224
311	Food Manufacturing	Dauphin	5,019
311	Food Manufacturing	York	4,296

Food – Establishments

NAICS	Code Description	County Name	Total Establishments
311	Food Manufacturing	Philadelphia	164
311	Food Manufacturing	Allegheny	121
311	Food Manufacturing	Lancaster	113
311	Food Manufacturing	Montgomery	92
311	Food Manufacturing	Bucks	74

Beverage – Employment

NAICS	Code Description	County Name	Number of Employees
3121	Beverage Manufacturing	Philadelphia	1,000-2,499
3121	Beverage Manufacturing	Allegheny	500-999
3121	Beverage Manufacturing	Lehigh	721
3121	Beverage Manufacturing	Cambria	250-499
3121	Beverage Manufacturing	Erie	250-499

Beverage – Establishments

NAICS	Code Description	County Name	Total Establishments
3121	Beverage Manufacturing	Allegheny	12
3121	Beverage Manufacturing	Berks	9
3121	Beverage Manufacturing	Delaware	8
3121	Beverage Manufacturing	Philadelphia	8
3121	Beverage Manufacturing	Chester	7

Textile – Employment

NAICS	Code Description	County Name	Number of Employees
313	Textile Mills	Luzerne	903
313	Textile Mills	Schuylkill	832
313	Textile Mills	Berks	806
313	Textile Mills	Philadelphia	754
313	Textile Mills	Montgomery	651

Textile – Establishments

NAICS	Code Description	County Name	Total Establishments
313	Textile Mills	Philadelphia	754
313	Textile Mills	Montgomery	651
313	Textile Mills	Bucks	484
313	Textile Mills	Lehigh	635
313	Textile Mills	Berks	806

Textile Product Mills – Employment

NAICS	Code Description	County Name	Number of Employees
314	Textile Product Mills	Columbia	1,080
314	Textile Product Mills	Lehigh	787
314	Textile Product Mills	Philadelphia	573
314	Textile Product Mills	Montgomery	546
314	Textile Product Mills	Northampton	478

Textile Product Mills – Establishments

NAICS	Code Description	County Name	Total Establishments
314	Textile Product Mills	Allegheny	33
314	Textile Product Mills	Philadelphia	31
314	Textile Product Mills	Montgomery	20
314	Textile Product Mills	Bucks	17
314	Textile Product Mills	Lancaster	15

Apparel – Employment

NAICS	Code Description	County Name	Number of Employees
315	Apparel Manufacturing	Philadelphia	3,299
315	Apparel Manufacturing	Northampton	2,268
315	Apparel Manufacturing	Lancaster	2,124
315	Apparel Manufacturing	Schuylkill	1,722
315	Apparel Manufacturing	Lehigh	1,452

Apparel – Establishments

NAICS	Code Description	County Name	Total Establishments
315	Apparel Manufacturing	Philadelphia	120
315	Apparel Manufacturing	Lehigh	66
315	Apparel Manufacturing	Montgomery	49
315	Apparel Manufacturing	Lancaster	48
315	Apparel Manufacturing	Bucks	33

Pulp, Paper, and Paperboard Mills –
Employment

NAICS	Code Description	County Name	Number of Employees
3221	Pulp, Paper, and Paperboard Mills	Wyoming	2,500-4,999
3221	Pulp, Paper, and Paperboard Mills	York	1,000-2,499
3221	Pulp, Paper, and Paperboard Mills	Delaware	500-999
3221	Pulp, Paper, and Paperboard Mills	Erie	500-999
3221	Pulp, Paper, and Paperboard Mills	Philadelphia	500-999

Pulp, Paper, and Paperboard Mills –
Establishments

NAICS	Code Description	County Name	Total Establishments
3221	Pulp, Paper, and Paperboard Mills	Chester	4
3221	Pulp, Paper, and Paperboard Mills	Philadelphia	4
3221	Pulp, Paper, and Paperboard Mills	Berks	3
3221	Pulp, Paper, and Paperboard Mills	Cumberland	2
3221	Pulp, Paper, and Paperboard Mills	York	2

Converted Paper – Employment

NAICS	Code Description	County Name	Number of Employees
3222	Converted Paper Product Manufacturing	Bucks	1,697
3222	Converted Paper Product Manufacturing	Chester	1,426
3222	Converted Paper Product Manufacturing	Luzerne	1,080
3222	Converted Paper Product Manufacturing	Montgomery	1,000-2,499
3222	Converted Paper Product Manufacturing	Philadelphia	1,000-2,499

Converted Paper – Establishments

NAICS	Code Description	County Name	Total Establishments
3222	Converted Paper Product Manufacturing	Philadelphia	35
3222	Converted Paper Product Manufacturing	York	27
3222	Converted Paper Product Manufacturing	Montgomery	24
3222	Converted Paper Product Manufacturing	Bucks	22
3222	Converted Paper Product Manufacturing	Chester	20

Basic Chemicals – Employment

NAICS	Code Description	County Name	Number of Employees
3251	Basic Chemical Manufacturing	Butler	500-999
3251	Basic Chemical Manufacturing	Schuylkill	500-999
3251	Basic Chemical Manufacturing	Bucks	599
3251	Basic Chemical Manufacturing	Washington	595
3251	Basic Chemical Manufacturing	Lehigh	467

Basic Chemicals – Establishments

NAICS	Code Description	County Name	Total Establishments
3251	Basic Chemical Manufacturing	Allegheny	11
3251	Basic Chemical Manufacturing	Montgomery	11
3251	Basic Chemical Manufacturing	Bucks	8
3251	Basic Chemical Manufacturing	Lehigh	8
3251	Basic Chemical Manufacturing	Philadelphia	8

Agricultural Chemicals – Employment

NAICS	Code Description	County Name	Number of Employees
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	Lancaster	287
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	Lebanon	100-249
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	Adams	20-99
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	Bucks	20-99
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	Chester	20-99

Agricultural Chemicals – Establishments

NAICS	Code Description	County Name	Total Establishments
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	Lancaster	7
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	Chester	5
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	Lebanon	3
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	Montgomery	3
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing	Berks	3

Pharmaceutical and Medicine – Employment

NAICS	Code Description	County Name	Number of Employees
3254	Pharmaceutical and Medicine Manufacturing	Montgomery	6,244
3254	Pharmaceutical and Medicine Manufacturing	Lancaster	1,840
3254	Pharmaceutical and Medicine Manufacturing	Montour	500-999
3254	Pharmaceutical and Medicine Manufacturing	Philadelphia	811
3254	Pharmaceutical and Medicine Manufacturing	Bucks	758

Pharmaceutical and Medicine – Establishments

NAICS	Code Description	County Name	Total Establishments
3254	Pharmaceutical and Medicine Manufacturing	Montgomery	14
3254	Pharmaceutical and Medicine Manufacturing	Allegheny	10
3254	Pharmaceutical and Medicine Manufacturing	Bucks	10
3254	Pharmaceutical and Medicine Manufacturing	Chester	6
3254	Pharmaceutical and Medicine Manufacturing	Philadelphia	6

Agriculture, Construction, and Mining Machinery – Employment

NAICS	Code Description	County Name	Number of Employees
3331	Agriculture, Construction, and Mining Machinery Manufacturing	Franklin	1,000-2,499
3331	Agriculture, Construction, and Mining Machinery Manufacturing	Lancaster	1,230
3331	Agriculture, Construction, and Mining Machinery Manufacturing	Cumberland	500-999
3331	Agriculture, Construction, and Mining Machinery Manufacturing	Mifflin	500-999
3331	Agriculture, construction, and Mining Machinery Manufacturing	Somerset	500-999

Agriculture, Construction, and Mining Machinery – Establishments

NAICS	Code Description	County Name	Total Establishments
3331	Agriculture, Construction, and Mining Machinery Manufacturing	Lancaster	21
3331	Agriculture, Construction, and Mining Machinery Manufacturing	Lebanon	6
3331	Agriculture, Construction, and Mining Machinery Manufacturing	Montgomery	6
3331	Agriculture, Construction, and Mining Machinery Manufacturing	Franklin	5
3331	Agriculture, Construction, and Mining Machinery Manufacturing	Indiana	5

Furniture – Employment

NAICS	Code Description	County Name	Number of Employees
337	Furniture and Related Product Manufacturing	Montgomery	2,924
337	Furniture and Related Product Manufacturing	Lancaster	2,549
337	Furniture and Related Product Manufacturing	Snyder	2,083
337	Furniture and Related Product Manufacturing	Lycoming	1,585
337	Furniture and Related Product Manufacturing	York	1,419

Furniture – Establishments

NAICS	Code Description	County Name	Total Establishments
337	Furniture and Related Product Manufacturing	Lancaster	110
337	Furniture and Related Product Manufacturing	Allegheny	78
337	Furniture and Related Product Manufacturing	Montgomery	67
337	Furniture and Related Product Manufacturing	Bucks	60
337	Furniture and Related Product Manufacturing	Philadelphia	57

For each component listed above, there are differences in the counties that have the largest number of employees and those that have the largest number of establishments. For the other sectors, the number of employees and establishments are parallel for the counties as follows.

Wholesale

Paper and Paper Product

NAICS	Code Description	County Name	Total Establishments	Number of Employees
4221	Paper and Paper Product Wholesalers	Montgomery	95	1,538
4221	Paper and Paper Product Wholesalers	Allegheny	71	1,318
4221	Paper and Paper Product Wholesalers	Philadelphia	51	1,242
4221	Paper and Paper Product Wholesalers	Bucks	50	706
4221	Paper and Paper Product Wholesalers	Delaware	54	683

Furniture and Home Furnishing

NAICS	Code Description	County Name	Total Establishments	Number of Employees
4212	Furniture and Home Furnishing Wholesalers	Philadelphia	65	1,182
4212	Furniture and Home Furnishing Wholesalers	Montgomery	72	801
4212	Furniture and Home Furnishing Wholesalers	Allegheny	68	792
4212	Furniture and Home Furnishing Wholesalers	York	9	278
4212	Furniture and Home Furnishing Wholesalers	Bucks	51	259

Farm and Garden Machinery

NAICS	Code Description	County Name	Total Establishments	Number of Employees
42182	Farm and Garden Machinery and Equipment Wholesalers	Lancaster	35	545
42182	Farm and Garden Machinery and Equipment Wholesalers	Franklin	13	195
42182	Farm and Garden Machinery and Equipment Wholesalers	Montgomery	9	155
42182	Farm and Garden Machinery and Equipment Wholesalers	Lebanon	10	126
42182	Farm and Garden Machinery and Equipment Wholesalers	Cumberland	10	113

Drugs and Druggists

NAICS	Code Description	County Name	Total Establishments	Number of Employees
4222	Drugs and Druggists' Sundries Wholesalers	Montgomery	34	5,028
4222	Drugs and Druggists' Sundries Wholesalers	Philadelphia	20	1,695
4222	Drugs and Druggists' Sundries Wholesalers	Delaware	10	1,000-2,499
4222	Drugs and Druggists' Sundries Wholesalers	Allegheny	39	1,138
4222	Drugs and Druggists' Sundries Wholesalers	Dauphin	8	623

Apparel, Piece Goods, and Notions

NAICS	Code Description	County Name	Total Establishments	Number of Employees
4223	Apparel, Piece Goods, and Notions Wholesalers	Philadelphia	86	1,555
4223	Apparel, Piece Goods, and Notions Wholesalers	Montgomery	57	577
4223	Apparel, Piece Goods, and Notions Wholesalers	Bucks	53	471
4223	Apparel, Piece Goods, and Notions Wholesalers	Delaware	23	411
4223	Apparel, Piece Goods, and Notions Wholesalers	Allegheny	35	394

Grocery and Related Products

NAICS	Code Description	County Name	Total Establishments	Number of Employees
4224	Grocery and Related Product Wholesalers	Philadelphia	223	4,314
4224	Grocery and Related Product Wholesalers	Allegheny	173	3,574
4224	Grocery and Related Product Wholesalers	Dauphin	39	3,140
4224	Grocery and Related Product Wholesalers	Montgomery	125	2,971
4224	Grocery and Related Product Wholesalers	Westmoreland	38	2,329

Farm Product Raw Material

NAICS	Code Description	County Name	Total Establishments	Number of Employees
4225	Farm Product Raw Material Wholesalers	Lancaster	13	204
4225	Farm Product Raw Material Wholesalers	Adams	6	113
4225	Farm Product Raw Material Wholesalers	Greene	1	20-99
4225	Farm Product Raw Material Wholesalers	Allegheny	2	20-99
4225	Farm Product Raw Material Wholesalers	Erie	3	20-99

Chemical and Allied Products

NAICS	Code Description	County Name	Total Establishments	Number of Employees
4226	Chemical and Allied Products Wholesalers	Dauphin	17	310
4226	Chemical and Allied Products Wholesalers	Washington	10	218
4226	Chemical and Allied Products Wholesalers	Centre	6	141
4226	Chemical and Allied Products Wholesalers	Westmoreland	18	139
4226	Chemical and Allied Products Wholesalers	York	18	134

Beer, Wine, and Distilled Alcoholic Beverages

NAICS	Code Description	County Name	Total Establishments	Number of Employees
4228	Beer, Wine, and Distilled Alcoholic Beverage Wholesalers	Allegheny	40	665
4228	Beer, Wine, and Distilled Alcoholic Beverage Wholesalers	Philadelphia	43	661
4228	Beer, Wine, and Distilled Alcoholic Beverage Wholesalers	Montgomery	26	324
4228	Beer, Wine, and Distilled Alcoholic Beverage Wholesalers	Westmoreland	13	196
4228	Beer, Wine, and Distilled Alcoholic Beverage Wholesalers	Lehigh	5	185

Miscellaneous Nondurable Goods

NAICS	Code Description	County Name	Total Establishments	Number of Employees
4229	Miscellaneous Nondurable Goods Wholesalers	Lancaster	87	1,937
4229	Miscellaneous Nondurable Goods Wholesalers	Philadelphia	108	1,616
4229	Miscellaneous Nondurable Goods Wholesalers	Bucks	125	1,363
4229	Miscellaneous Nondurable Goods Wholesalers	Allegheny	108	1,107
4229	Miscellaneous Nondurable Goods Wholesalers	Montgomery	122	990

Retail

Furniture and Home Furnishing

NAICS	Code Description	County Name	Total Establishments	Number of Employees
442	Furniture and Home Furnishings Stores	Allegheny	267	3,227
442	Furniture and Home Furnishings Stores	Montgomery	254	2,581
442	Furniture and Home Furnishings Stores	Philadelphia	224	1,784
442	Furniture and Home Furnishings Stores	Bucks	183	1,727
442	Furniture and Home Furnishings Stores	Lancaster	150	1,568

Food and Beverage Stores

NAICS	Code Description	County Name	Total Establishments	Number of Employees
445	Food and Beverage Stores	Allegheny	695	14,975
445	Food and Beverage Stores	Montgomery	449	12,813
445	Food and Beverage Stores	Philadelphia	1012	12,399
445	Food and Beverage Stores	Bucks	368	9,400
445	Food and Beverage Stores	Lancaster	287	8,498
445	Food and Beverage Stores	Delaware	379	8,191

Health and Personal Care

NAICS	Code Description	County Name	Total Establishments	Number of Employees
446	Health and Personal Care Stores	Allegheny	474	6,890
446	Health and Personal Care Stores	Philadelphia	519	6,173
446	Health and Personal Care Stores	Montgomery	328	4,250
446	Health and Personal Care Stores	Delaware	201	2,775
446	Health and Personal Care Stores	Bucks	207	2,561

Clothing and Clothing Accessories

NAICS	Code Description	County Name	Total Establishments	Number of Employees
448	Clothing and Clothing Accessories Stores	Montgomery	673	8,166
448	Clothing and Clothing Accessories Stores	Philadelphia	905	8,125
448	Clothing and Clothing Accessories Stores	Allegheny	843	7,758
448	Clothing and Clothing Accessories Stores	Bucks	319	2,961
448	Clothing and Clothing Accessories Stores	Lancaster	278	2,938

CONCLUSION

Based on our findings, the entire Food & Fiber System accounts for \$46.4 billion and employs over 1 million people in Pennsylvania.

The predominant region for agribusiness is the Southeast, followed by Southwest, Northwest, South Central, and Northeast.

The largest agribusiness sector in value is manufacturing with \$13.5 billion and 196,453 employees. The largest agribusiness sector in employment is retail with 307,152 employees but the second in value with \$8.7 billion.

The most predominant business size is 1-4 employees with 22,549 establishments. This is followed by 10-49 employees with 15,175 establishments of this size. Also, it was concluded that approximately 84% of Pennsylvania's agribusiness workforce is employed by businesses with less than 250 employees. Fifteen percent of the workforce is employed by businesses with ten employees or less. **This data demonstrates how important small businesses are for the Pennsylvania agribusiness sector.**

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