

AN ECONOMIC EVALUATION OF EMPLOYMENT AND WAGES IN CONNECTICUT'S AGRICULTURAL INDUSTRY

Summary of a report by

Rigoberto A. Lopez, Christopher Laughton, Joan Nichols, & Luis Seoane

March 22, 2023



WHAT IS THE ISSUE?

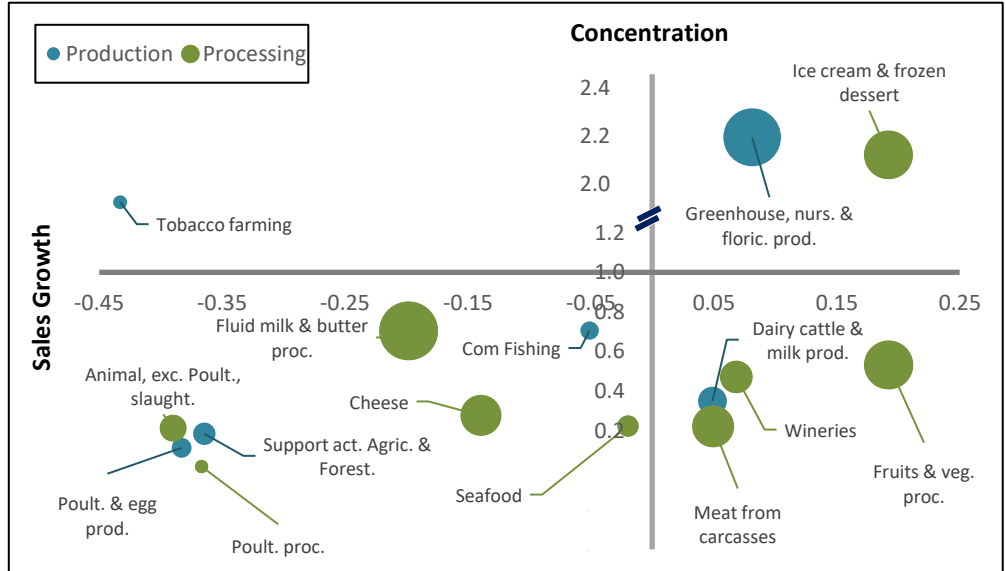
Although labor has been in chronic shortage for agricultural employers in the U.S., the shortage is more severe in Connecticut as competition from non-agricultural sectors is more intense than in the rest of the country.

In Connecticut, labor is becoming an increasingly severe constraint and bottleneck to future growth of the agricultural sector, not just in availability of workers but also in the diversity of skills needed. This report aims to document the state of employment, salaries, and skills in the Connecticut agricultural sector.

WHAT DID THIS STUDY FIND?

- Connecticut's agricultural labor, as measured by the number of jobs, contracted slightly between 2015 and 2021 (Table 1 on the reverse side).
- The employment concentration coefficients in Figure 1 indicate that relative to the rest of the country, Connecticut has relative specialization in terms of the greenhouse, nursery, and floriculture sector, tobacco farming, and ice cream manufacturing.
- However, Connecticut has lower employment specialization relative than the rest of the country in other agricultural sectors.

FIGURE 1. EMPLOYMENT CONCENTRATION VS SALES GROWTH BY SELECTED SUBSECTORS



Note: The vertical axis is concentration of employment in Connecticut relative to the U.S. in 2021. The horizontal axis indicates sales growth between 2015 and 2021, where 2015 sales are adjusted to 2021 values for comparability. Bubble sizes represent sales in 2021. For more details see full report

- Figure 1 shows that among selected sectors (the larger ones in terms of sales), most experienced a contraction of sales between 2015 and 2021, particularly those involved in animal production and processing, with some exceptions (meat from carcasses and dairy cattle and milk production).
- When employment concentration is juxtaposed with sales growth, Figure 1 illustrates that the most promising areas of future growth are the greenhouse, nursery, and floriculture and the ice cream and frozen dessert sectors.
- Other promising areas of growth where employment is relatively less specialized than the national level include wineries, meat from carcasses, and fruit and vegetable processing.
- Areas of limited prospects, with both low employment concentration and negative sales growth between 2015 and 2021 (perhaps due in part to the pandemic), include mostly animal product sectors.

TABLE 1: NUMBER OF JOBS BY SUBSECTORS

- Agricultural production workers generally receive lower wages than construction workers and laborers with similar qualifications.
- Agricultural production requires a higher level of post-secondary education than agricultural processing where most training is on-the-job.
- Job experience, skills, and job training are usually acquired in the first two years on the job. This also reflects the typical short tenure of workers in these industries.
- The supply of potential workers is constrained by competition from non-agricultural sectors both in wage and non-wage benefits.
- Industry employers have several options to make the industry more attractive to workers by offering better wages as well as opportunities for professional growth and development, and training and partnerships with educational institutions at various levels.

Subsector	2015	2021
Ag Production		
Grain farming	95	144
Vegetable and melon farming	642	507
Fruit farming	493	447
Greenhouse, nursery, and floriculture production	4,896	4,546
Tobacco farming	727	394
All other crop farming	1,559	1,680
Cattle ranching and farming	421	280
Dairy cattle and milk production	321	318
Poultry and egg production	219	126
Animal production, except cattle and poultry and eggs	626	505
Commercial logging	632	323
Sawmills	205	190
Commercial fishing	373	608
Support activities for agriculture and forestry	1,395	1,439
Other agricultural and forest production sectors ⁽¹⁾	59	49
Total for agricultural and forest production	12,662	11,556
Ag Processing		
Fruits and vegetables canning, pickling, and drying	357	373
Fluid milk & butter manufacturing	447	437
Cheese manufacturing	158	158
Ice cream and frozen dessert manufacturing	434	586
Animal, except poultry, slaughtering	158	121
Meat processed from carcasses	274	341
Poultry processing	75	51
Seafood product preparation and packaging	105	93
Wineries	314	397
Total for primary agricultural processing	2,322	2,558
Total for the agricultural industry	14,984	14,114

Note: (1) Subsectors with less than 50 employees are grouped together.

- Table 1: Notable sectors where employment expanded during the period studied include commercial fishing, ice cream manufacturing, meat processed from carcasses, and wineries. Sectors where employment contracted include tobacco farming, poultry and egg processing, animal (poultry and non-poultry) slaughtering, and commercial logging.

HOW WAS THIS STUDY CONDUCTED?

Using an input-output model of the Connecticut economy and data from the IMPLAN Occupational Database, we measure employment, salaries, and identify occupational skills in the different sub-sectors between 2015 and 2021. Importantly, we compare these to other comparable sectors in the economy that may compete for similarly qualified labor.

ABOUT THE AUTHORS

Rigoberto A. Lopez and Luis Seoane are, respectively, professor and PhD student in the Department of Agricultural and Resource Economics at UConn, Christopher Laughton is the Director of Knowledge at Farm Credit East, and Joan Nichols is the director of the Connecticut Farm Bureau. They are grateful to Bonnie Burr for helpful comments in the development of this project. Support from the Richard DeFavero Fund for Agricultural and Resource Economics is gratefully acknowledged.

For the full report or further information, contact rigoberto.lopez@uconn.edu.

