Agriculture: occupational employment and wages

Since the founding of the Occupational Employment Statistics (OES) program, almost all the agriculture, forestry, fishing, and hunting sector was out of scope for the OES survey. This study uses special tabulations of data collected as part of the Green Goods and Services Occupations survey combined with OES data to analyze the agricultural sector as a whole. Data showed that two of three states with the most employment in the sector had mean wages below average. The two largest occupations, farmworkers and laborers, crop, nursery, and greenhouse; and farmworkers, farm, ranch, and aquacultural animals, which directly relate to the major economic activity of the sector, dominated employment in the agricultural sector, thus affecting its mean, median, and percentile wages.

Since the dawn of history, as people learned how to cultivate and grow their first grains, agriculture has been a powerful instrument that is vital in the growth and prosperity of every village, city, and country. Its intricate and complex relationship with our daily lives frequently draws attention from policymakers, scholars, investors, and media. A great number of economic factors continuously contribute to price fluctuations of agricultural products, and one of them, undoubtedly, is wages of the people employed in the agricultural industries. In 2011, employment in the agricultural sector was more than one million, with most of employment concentrated in two occupations directly related to the major economic activity of the sector: (1) farmworkers and laborers working in crop, nursery, and greenhouse establishments; and (2) farmworkers working with farm, ranch, and aquacultural animals. These two occupations represented over half the sector employment and vastly influenced the overall wage composition of the sector.

Methodology

This study uses special tabulations of data collected as part of the short-term Green Goods and Services Occupations (GGS-OCC) program to analyze employment and wages in the agricultural sector as a whole. The GGS-OCC program estimates combined data from two U.S. Bureau of Labor Statistics (BLS) surveys: Occupational Employment Statistics (OES) and Green Goods and Services (GGS). Because the OES program...
has limited coverage of the agricultural sector, a supplement to the OES survey was used to collect data from agricultural establishments specifically to produce GGS-OCC estimates. In the GGS-OCC survey, 333 industries potentially produced GGS. Of those industries, 63, or nearly a fifth, were in the agriculture, forestry, fishing, and hunting sector.

Both the GGS and OES programs are establishment-based surveys. The purpose behind the GGS was to identify how much revenue came from the sale of green goods and services, whereas the annual OES survey collects occupational employment and wage data for nonfarm establishments.

The employment and wage definitions of the OES survey were applied to the supplement. Self-employed workers, volunteers, owners and partners in unincorporated firms, private household workers, and unpaid family workers were excluded from the GGS-OCC estimates. In determining wages, base rate, cost-of-living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and production bonuses), and tips were included in the calculations. And back pay, jury duty pay, overtime pay, severance pay, shift differentials, nonproduction bonuses, and tuition reimbursements were excluded.

The GGS-OCC estimates include data collected in six semiannual panels over 3 years from May 2009 to November 2011. To represent total employment for the reference period, the GGS-OCC data were benchmarked to the average of May 2011 and November 2011 employment from the BLS Quarterly Census of Employment and Wages (QCEW).