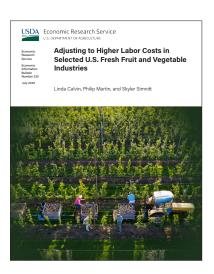
A report summary from the Economic Research Service

Adjusting to Higher Labor Costs in Selected U.S. Fresh Fruit and Vegetable Industries

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What Is the Issue?

Producers of labor-intensive agricultural commodities, including many fruit and vegetables, are especially concerned about labor costs, which typically account for a high share of these producers' variable production costs. Furthermore, farm labor costs rose faster than nonfarm labor costs over the last decade and are poised to continue increasing. Rising labor costs often cause producers to adjust their production and management practices to compensate for the changing cost structure. These adjustments vary by region and commodity, often depending on three factors: (1) the degree to which labor-saving mechanization technology can replace workers; (2) the availability of mechanical aids that do not replace workers but increase their productivity; and (3) the ability to recruit H-2A guest workers—a program to bring in foreign workers to fill seasonal farm jobs. Also,



some farms adjust to higher costs by reducing production. This may ease the problem for farmers as declining total production leads to higher product prices. These higher prices, however, may attract imports, putting downward pressure on prices.

What Did the Study Find?

Farm labor is often a major cost of production for growers of fresh fruit and vegetables. Techniques to adjust to rising farm labor costs in fruit and vegetable production include:

Labor-saving mechanization, such as mechanical harvesters that replace labor. Mechanical aids—for example, autonomous carts that move harvested product to the sides of fields—do not replace workers but make workers more efficient by allowing them to concentrate on harvesting. Durable and low-cost mechanical aids can raise labor productivity and may slow full-harvest mechanization. The harvest of certain fruit and vegetable commodities destined for the processing market (e.g., tomatoes) is already highly mechanized due to engineering advancements in the 1960s.

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- Using H-2A guest workers to fill jobs when domestic workers in the United States cannot be found. Workers admitted under the expanding H-2A program fill 10 percent of the year-round equivalent jobs in U.S. crop agriculture.
- Reducing domestic production of crops that are not competitive with imports from lower wage countries.

How Was the Study Conducted?

The study reviews the literature on agricultural mechanization and labor trends within the fruit and vegetable industries and analyzes production and trade data to examine the relative importance of U.S. production and imports of selected fresh fruit and vegetables. In the related publication, *Supplement to Adjusting to Higher Labor Costs in Selected U.S. Fresh Fruit and Vegetable Industries: Case Studies*, specific commodity cases are discussed in detail. These case studies explain how labor is currently used in commodity specific contexts, including the roles of U.S. workers and H-2A guest workers, before examining alternatives to hand labor. The case studies relied on a review of biological and engineering research as well as insights from growers, marketers, other production participants, and other researchers to understand how producers are adjusting to rising labor costs now and are likely to adjust to these costs over the next decade.