

How Mexico's Horticultural Export Sector Responded to the Food Safety Modernization Act

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What Is the Issue?

The Food Safety Modernization Act (FSMA)—officially named the “FDA Food Safety Modernization Act”—was designed to improve the capacity to prevent food safety problems and detect and respond to such problems, as well as to improve the safety of imported food. Among its many provisions, FSMA gave the U.S. Food and Drug Administration (FDA) new powers to ensure that imported food meets U.S. standards and is safe to eat. Mexico's horticultural export sector is the largest source of U.S. horticultural imports (63.5 percent of U.S. vegetable imports and 46.1 percent of U.S. fruit and nut imports in 2021); as such, Mexican exporters had to comply with FSMA and its accompanying rules. Because most of Mexico's horticultural exports are destined for the United States, FSMA introduced an additional degree of risk into the sector since the extent to which the sector's firms would be able to comply with FSMA's new requirements was unknown. In general, government regulators associating a Mexican product with an outbreak of a foodborne illness in the United States can have a potentially harmful effect on a broad segment of Mexican horticultural exports, in part because it is difficult for government investigators to identify promptly and precisely which actors (e.g., producers, packers, shippers, retailers) in the agri-food system are responsible for a specific outbreak.

What Did the Study Find?

FSMA does not appear to have had a major negative effect on Mexico's horticultural export sector. Since the act's implementation in 2011, the growth of Mexican horticultural exports to the United States has not slowed. Indeed, because FSMA provided a framework for the Mexican horticultural export sector to address food safety concerns, the act helped to secure Mexican access to the U.S. market for horticultural products.

In response to FSMA's new requirements, Mexican horticultural companies made changes to equipment, invested in new infrastructure, and implemented monitoring programs featuring improved sampling techniques—many of which were connected to ensuring a supply of clean water throughout the production process. The concentration of Mexico's horticultural exports in the U.S. market may have provided opportunities for economies of scale and



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scope when complying with FSMA. Costs of measures taken could be spread across all sales to the United States, and there were likely synergies across crops and even among the regulatory concerns of the United States and other markets for Mexico-grown produce, including Mexico itself.

To explore how Mexico's horticultural export sector responded to FSMA's new requirements, the researchers interviewed representatives of 26 companies in that sector. The main challenges in responding to FSMA related to training—half of the companies interviewed indicated that obtaining food safety training for the head of the firm's food safety program was their main challenge; nearly a third indicated that it was providing food safety training to seasonal farmworkers. Another challenge identified was the lack of accredited laboratories recognized by the FDA for the analysis of samples from water, soil, and surfaces of contact. To address this challenge, some companies set up their own laboratories and instituted relationships with entities recognized by the FDA.

Medium-to-large companies (300–1,000 seasonal farmworkers) seemed more adept at meeting FSMA's new requirements. Companies of this size were more likely to have modified their food safety activities in response to FSMA and more likely to hold three or more food safety certifications. These findings about Mexican horticultural growers generally align with findings about U.S. horticultural growers generated by past USDA, ERS research.

How Was the Study Conducted?

A case study approach was used to examine how Mexican horticultural growers focused on the export market responded to the implementation of FSMA and why they were able to respond in that fashion. The researchers conducted a series of interviews from March 2018 to March 2020 with representatives of 26 produce firms that export 1 or more of 4 major produce commodities to the United States—tomatoes, strawberries, green onions, and cantaloupe. The researchers focused on these commodities because prior to FSMA, Mexican exports of each of these products had been associated with outbreaks of foodborne illness in the United States. The companies studied are in seven Mexican States that are among Mexico's main horticultural exporting States. Findings from these interviews are presented using summary statistics and qualitative assessments of interview data.