

U.S. Fresh Produce Imports and Food Safety: The Case of Mexico

Linda Calvin

Economic Research Service

Assuring Safety of Imported Foods
FSRC Workshop February 1-2, 2010

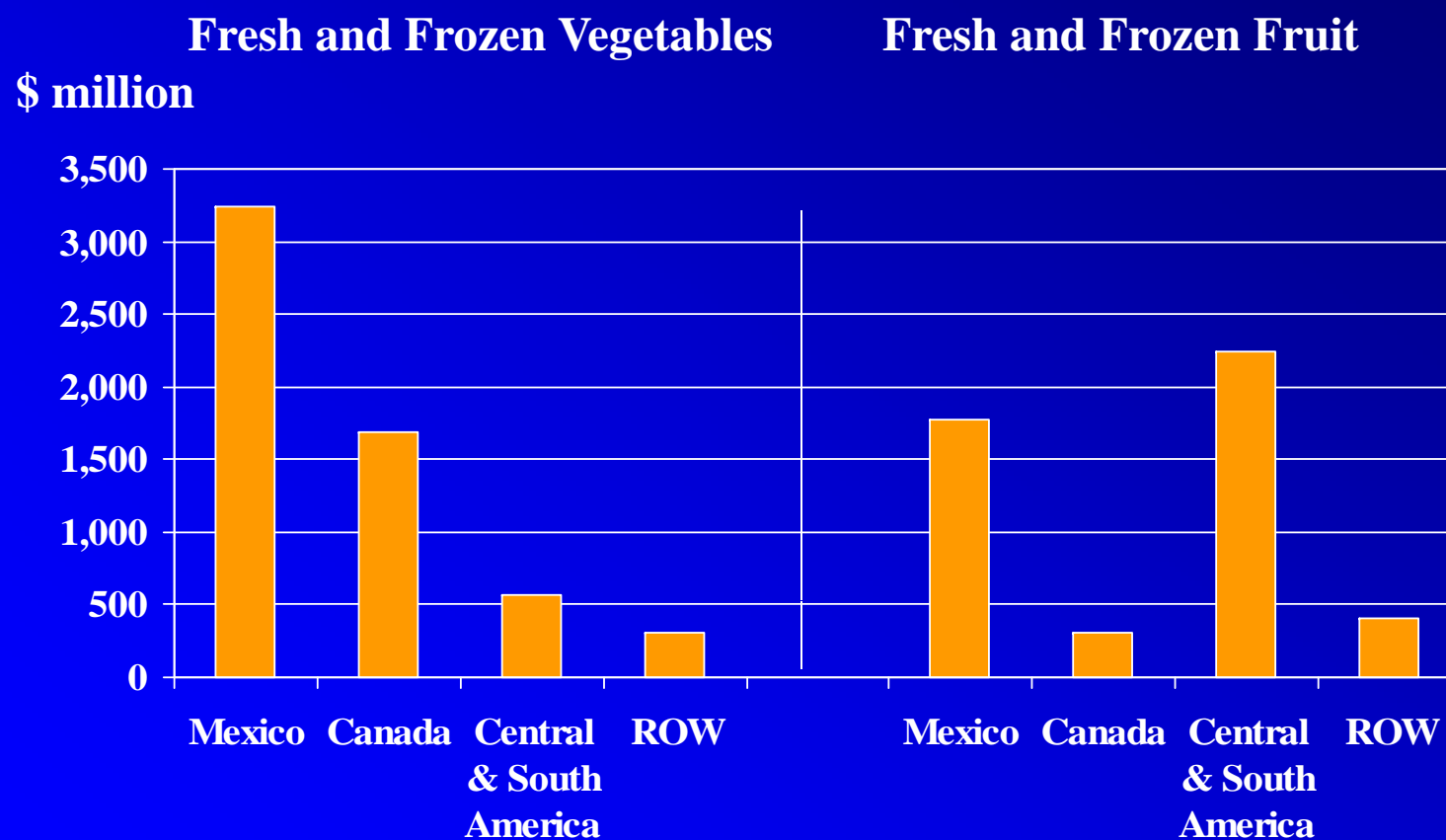


Outbreaks attributed to produce, 1996-2006

Commodity	# of outbreaks
Leafy greens	24
Tomatoes	12
Melons	11
Raspberries and other berries	6
Herbs	6
Green onions	3
Almonds	2
Others	5
Unknown	2
Total	71

Source: U.S. Food and Drug Administration

U.S. imports, 2008



Source: USDA, Foreign Agricultural Trade of the United States

Mexican fruit and vegetable industry

- Mexico has two separate industries
 - The export industry looks a lot like the U.S. industry and bases its food safety on demands of the U.S. market
 - The domestic industry has very different production standards

Factors affecting food safety incentives for produce growers in the United States and Mexico

United States	Mexican imports
FDA—0 tolerance for microbial contamination	Same
No routine FDA product testing	Border testing
No routine FDA field inspections	Same
FDA voluntary GAPs guidance	Same

Voluntary adoption of GAPs--

- Benefits
 - Business risk reduction
 - Most retailers and foodservice buyers demand GAPs
- Costs
 - New facilities and procedures
 - New training for workers

Factors affecting food safety incentives for produce growers in the United States and Mexico

United States	Mexican imports
FDA—0 tolerance for microbial contamination	Same
No routine FDA product testing	Border testing
No routine FDA field inspections	Same
FDA voluntary GAPs guidance	Same
Private incentives	Same
Buyer demands	Same
Grower-organization GAPs	Same

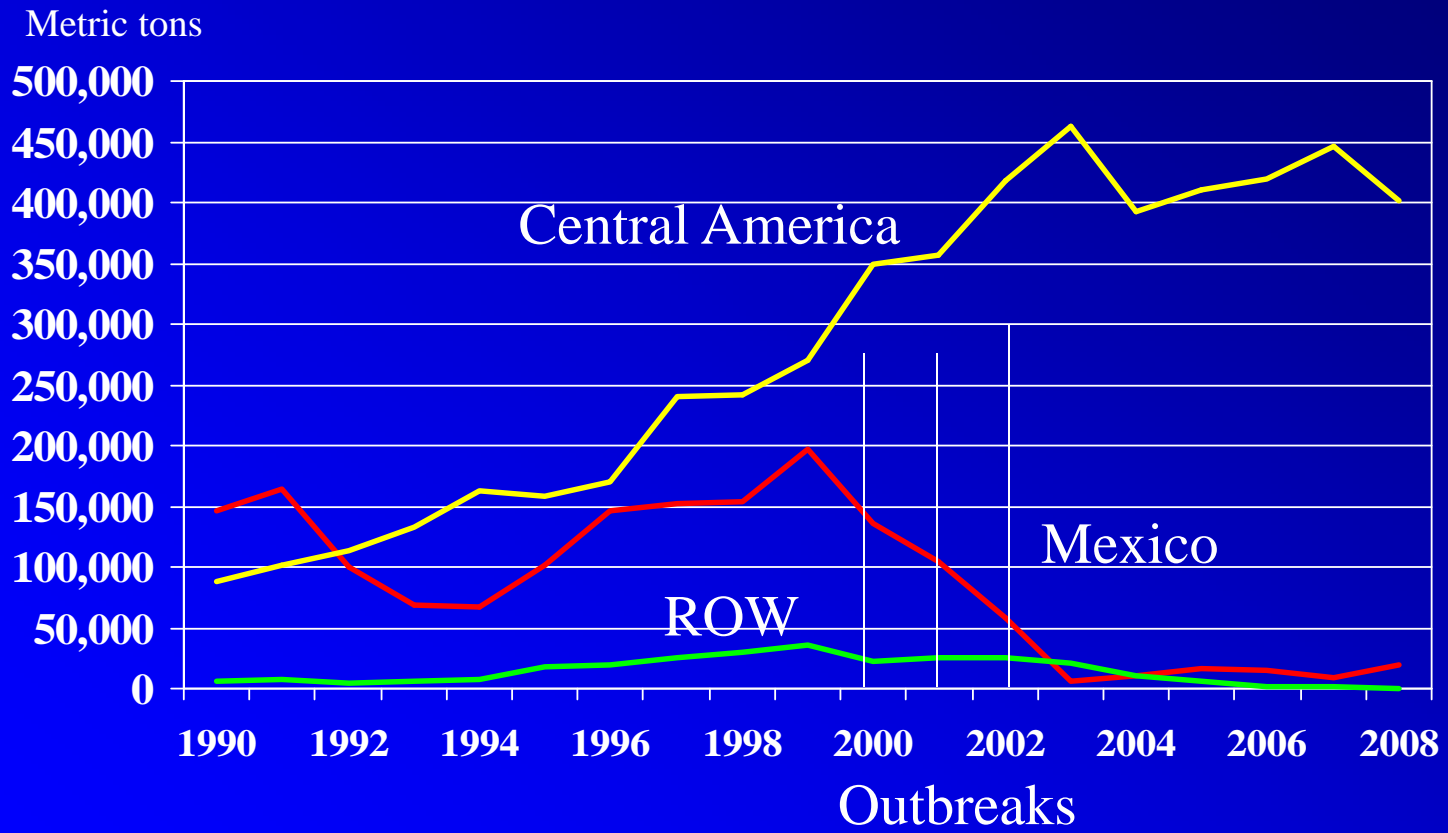
Reasons for grower-organization mandatory GAPs

- One grower can cause an outbreak that affects all growers of that commodity. The grower organization wants to protect the reputation of its commodity.

After an outbreak

United States	Mexican imports
FDA can close down a farm linked to contaminated product	FDA can issue an import alert against individual farms or a country
No recall	Import alert
FDA investigates and allows a farm to resume operations once it no longer poses a hazard to consumers	FDA not authorized to inspect farms abroad but won't allow them to export again until it thinks they are safe

U.S. cantaloupe imports, 1990-2008

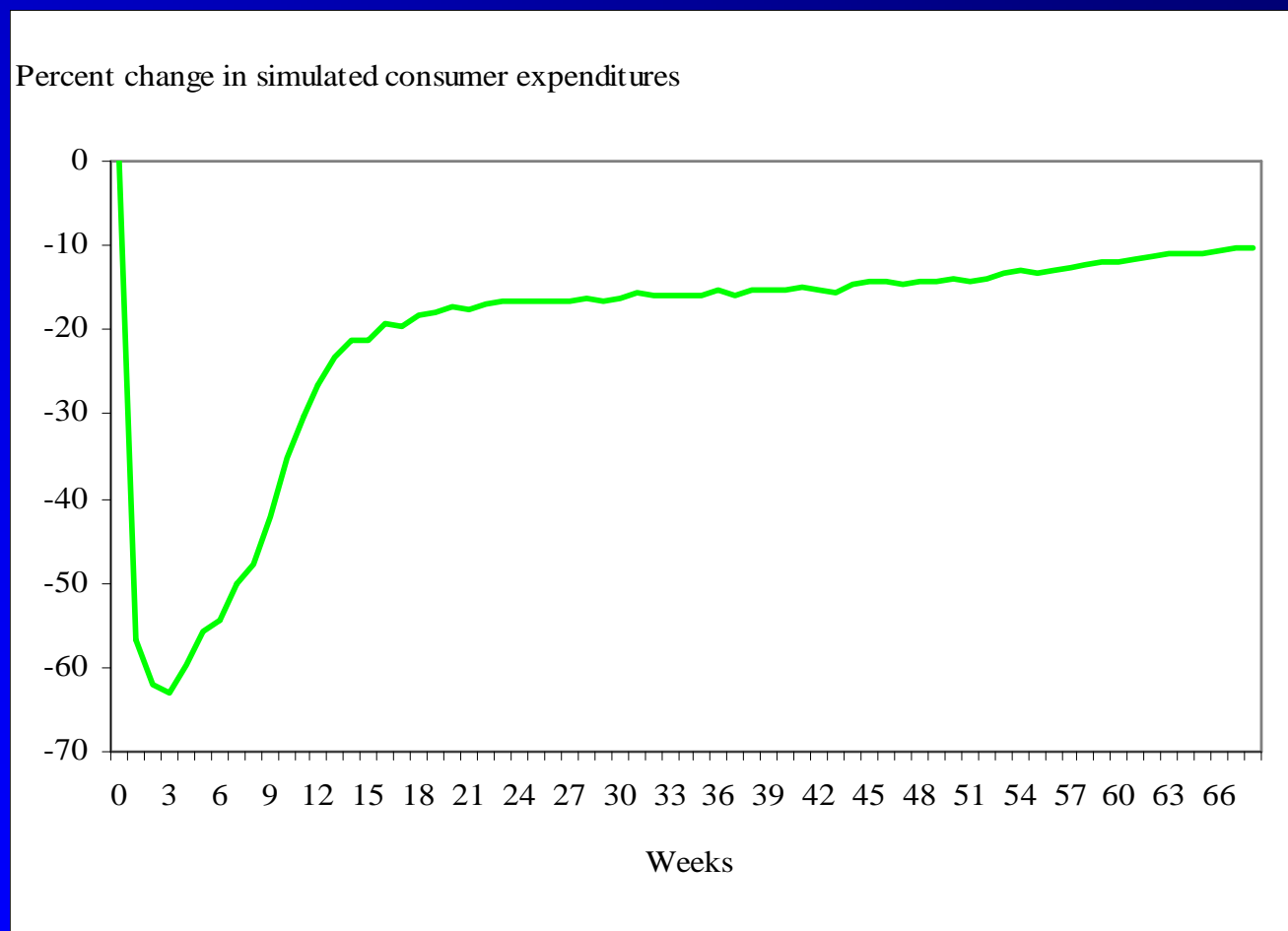


Source: U.S. Department of Commerce

California LGMA

- 2006 outbreak linked to spinach resulted in the California Leafy Greens Marketing Agreement.
 - The outbreak was linked to just one field
 - There was no U.S. spinach on the market for 5 days and no Salinas-area spinach for another 10 days.
 - Losses accrued to all spinach growers

Changes in bagged spinach retail expenditures, 9/2007-12/2008



Source: Arnade, Calvin, and Kuchler.

Ability of industries to adopt mandatory food safety programs varies; comparison of green onions and cantaloupe industries in Mexico

Characteristics	Green onions	Cantaloupe
Location	Concentrated	Dispersed
Organization	Strong	Weak
Firm size	Large	Small
Length of season	Year round	Short
Share of U.S. supply*	86 %	13%

*The share of U.S. supply refers to the last year before an outbreak.

Conclusions

- **Incentives for U.S. and Mexican growers to produce safe food are quite similar.**
- **Growers on both sides of the border use voluntary GAPs.**
- **Growers have developed commodity-specific GAPs for some crops.**
- **Mandatory grower-organization initiatives have become more important.**
- **Changing role of FDA and grower-organization initiatives**



www.ers.usda.gov

lcalvin@ers.usda.gov