THE FOOD CHAIN CLUSTER

INTEGRATING THE FOOD CHAIN IN SOLANO & YOLO COUNTIES TO CREATE ECONOMIC OPPORTUNITY

Solano County Economic Development Corporation

November 16, 2011

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KEY FINDINGS

The food chain contributes significantly to the region's economic vitality

The region benefits from many natural assets that support the production of high-value crops, and the region's advantageous location at the center of a mega region

Innovation across the region's food chain is improving process and resource efficiencies as well as food quality

The region is fertile with opportunities for growth across the food chain



OVERVIEW

What do we mean by the "Food Chain?"

The Economic Impact of the Food Chain in the Region

Regional Strengths: Natural Assets and Location

Opportunities for Growth



WHAT DO WE MEAN BY THE "FOOD CHAIN?"

WHAT IS THE FOOD CHAIN?

DISTRIBUTION

Scan-based inventory systems Electronic data interchange (EDI) Management of point-of-sale data Category management

PACKAGE/PROCESSING

Diagnostic testing for the detection of food contaminants

High-speed processing mechanization

Nitrogen-filled salad bags Advanced membrane technology

Biodegradable plastics/packaging

CONSUMER DEMAND Quality

Convenience
Variety
Reduced Environmental
impact
Safety and Sustainable
Practices

MARKETS FOR WASTE BYPRODUCTS

Fibrous organic matter can be used for:

- Packaging materials
- Construction materials

Biomass can be broken down by anaerobic digesters to:

- Generate electricity
- Reduce electricity costs or sell power to the grid
- · Reduce costs for waste removal
- · Reduce methane emissions

SUPPORT

Novel seed varieties

Pest-resistant seed varieties

Coated seeds for regulating multiple planting Recycling of agricultural waste products for construction

Monitoring technology for air and water quality

PRODUCTION

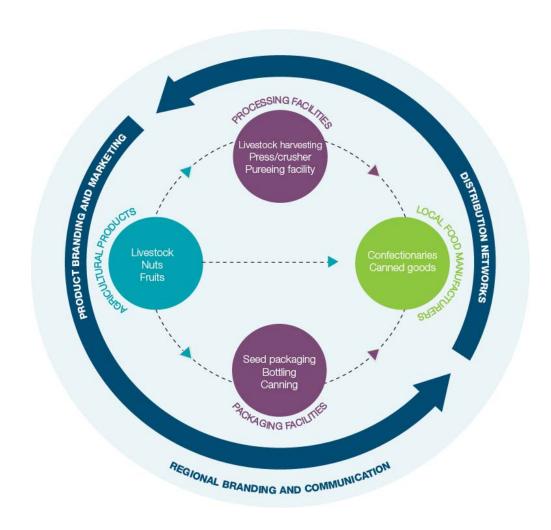
Diagnostic testing for detection of plant/animal disease and feed contaminants

Precision irrigation

GPS-directed micro-tractors with weed triggers and herbicide

Advances in organic production methods

EXPANDING
FOOD CHAIN
OPERATIONS
WILL CREATE
MORE VALUE
LOCALLY

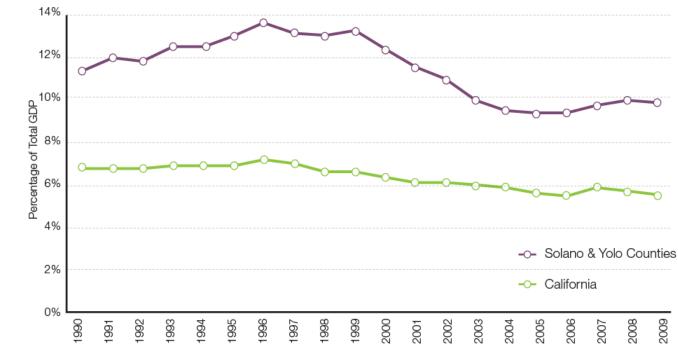


ECONOMIC IMPACT OF THE FOOD CHAIN IN THE REGION

THE ECONOMIC IMPACT OF THE FOOD CHAIN

PERCENTAGE OF TOTAL ECONOMIC OUTPUT

Generated by the Food Chain Solano and Yolo Counties



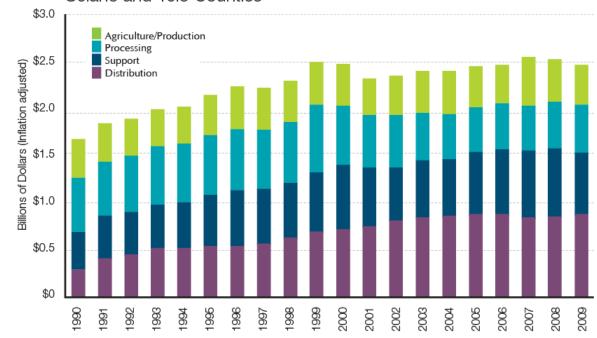
The GDP for Agriculture/Production segment is based on a more inclusive definition than the Food Chain Production segment. Data Source: Moody's Economy.com

Analysis: Collaborative Economics

THE FOOD CHAIN GENERATED \$2.5 BILLION IN 2009

ECONOMIC OUTPUT OF FOOD CHAIN

Gross Domestic Product by Segment Solano and Yolo Counties



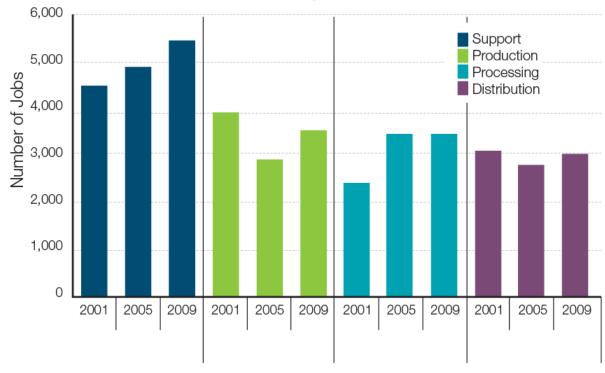
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Analysis: Collaborative Economics

FOOD CHAIN EMPLOYMENT IS GREATEST IN AGRICULTURAL SUPPORT

FOOD CHAIN EMPLOYMENT TRENDS BY SEGMENT

Solano & Yolo Counties - 2nd Quarter 2009

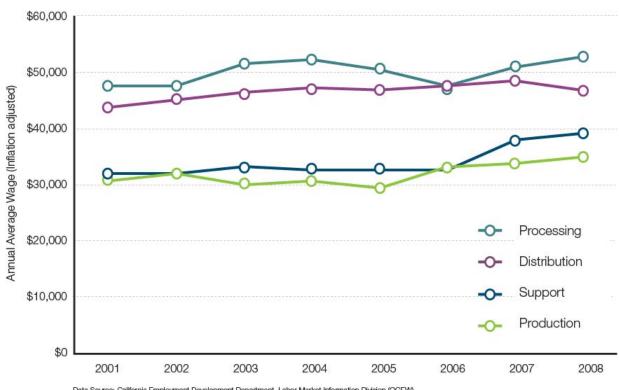


Data Source: CA Employment Development Department, Labor Market Information Division (QCEW) Analysis: Collaborative Economics

FOOD CHAIN EARNINGS INCREASED BY 12% FROM 2001 TO 2008

EARNINGS GROWTH IN FOOD CHAIN

Annual Average Earnings by Segment Solano & Yolo Counties



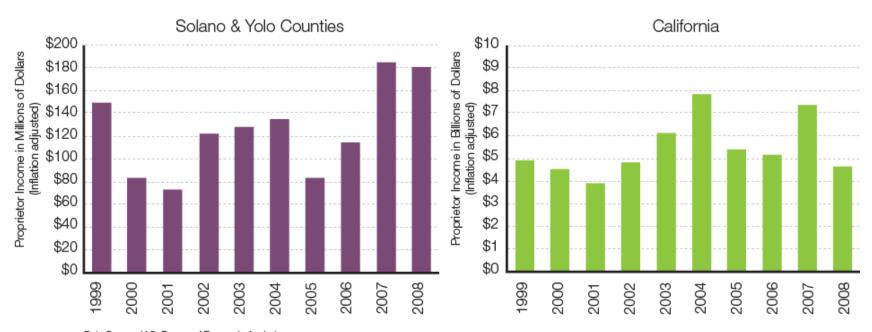
Data Source: California Employment Development Department, Labor Market Information Division (QCEW) Analysis: Collaborative Economics

REGIONAL EARNINGS OF NONEMPLOYERS EXCEED THE STATE AVERAGE

TOTAL RECEIPTS PER NONEMPLOYER FIRM IN 2008 (Inflation adjusted)		
	Solano & Yolo Counties	California
Agriculture	\$57,994	\$54,312
Food & Beverage Manufacturing	\$54,182	\$72,061
Total Economy	\$41,362	\$50,994

INCOMES FOR LOCAL SMALL FARM OWNERS ARE RISING

TOTAL ANNUAL FARM PROPRIETOR INCOME

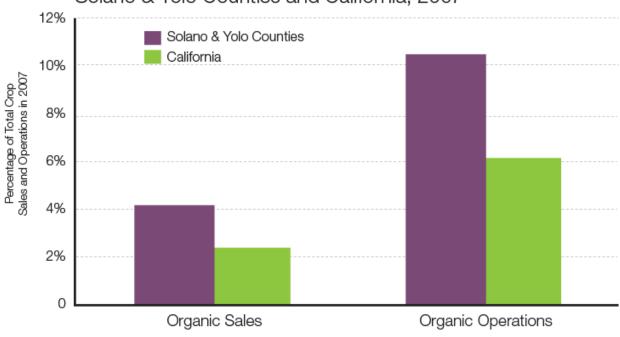


Data Source: U.S. Bureau of Economic Analysis Analysis: Collaborative Economics

ORGANIC FARMING REPRESENTS A HIGHER PERCENTAGE THAN STATEWIDE

ORGANIC FARMING

Percentage of Total Crop Sales and Operations Solano & Yolo Counties and California, 2007



Data Source: National Agricultural Statistics Service, United Department of Agriculture Analysis: Collaborative Economics

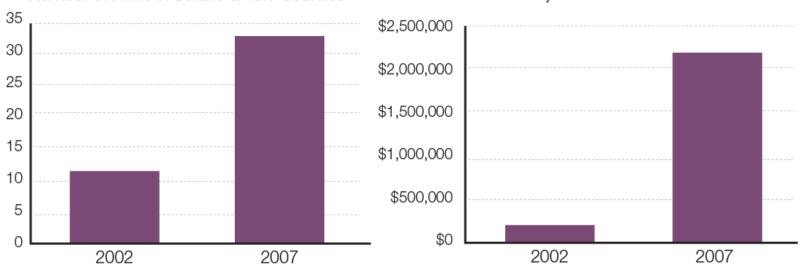
AGRICULTURAL TOURISM HAS EXPLODED SINCE 2002

AGRICULTURAL TOURISM & RECREATIONAL SERVICES

Number of Firms in Solano & Yolo Counties

TOTAL RECEIPTS FROM OPERATIONS

Inflation Adjusted



Data Source: U.S. Department of Agriculture, National Agricultural Statistics Service Analysis: Collaborative Economics

REGIONAL STRENGTHS: NATURAL ASSETS & LOCATION

THE REGION BENEFITS FROM NATURAL ASSETS & TRANSPORTATION INFRASTRUCTURE

Infrastructure for transport

Interstate highways, railways, seaports, airports

Secondary and post-secondary education infrastructure

Available water and wastewater services

High-value crops with local and global demand

Almonds and walnuts

Preservation of valuable farmland



THE REGION ALSO BENEFITS FROM INNOVATION ASSETS

7 of Top 10 seed producers, seed research and biotechnology presence (UC Davis)

Farms and businesses adopting innovative renewable energy systems

i.e., Anheuser Busch, Salad Cosmo



OPPORTUNITIES FOR GROWTH

THERE ARE OPPORTUNITIES FOR GROWTH ACROSS THE FOOD CHAIN

Expand chilling capacity, slaughtering facilities and other essential processors

Maintain transportation infrastructure

Improve educational opportunities in secondary and postsecondary institutions

Encourage farmers markets and community supported agriculture (CSA)

Grow global demand for high-value products



GROWING VALUE: BUILDING A REGIONAL FOOD CHAIN & CLUSTER NETWORK

Capitalizing on areas of opportunity will help to increase the churn of products through the Food Chain

This will create added value in the region

