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The Agricultural Value Chain: Creating Jobs and Economic Growth

Dr. Glenda Humiston, State Director
USDA California Rural Development
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- RD Provides Funding for:
  - Business & Cooperatives Development
  - Community Facilities & Rural Utilities
  - Water, Sewer & Solid Waste Systems
  - Single and Multi-Family Housing
- Loans, Guaranteed Loans, Grants
- Technical Assistance

CA Portfolio: $6.8 Billion
Global Demand Drivers

- Global Population Increase
- Climate Change Impacts
- Growing Middle Class
- Rapid Urbanization

- Rising Food Prices
- Rising Global Trade of Food
- Policies to Reduce Carbon Footprint
- Demand for Protein, Fruits and Vegetables
Domestic Demand Drivers

• Obesity / Escalating Health Care Costs
• Dependence on Foreign Oil / Cost of Energy
• Climate Change / Reducing Carbon Footprint
• Support for Local Food / Energy / Businesses

• Health / Food Policy Intersect
• “Buy Local / Buy Fresh”
• Regional Food Systems
• Production of “Green” Energy

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Industry clusters of opportunity:
similar, related, or complementary businesses linked by core products or services. These businesses are economically interdependent and may have common supply chains, labor needs, technologies, and markets.
California Agriculture Value Chain Direct Impact is over $344 Billion
Multiplier Effect Takes it to $635 Billion per Year

- Production: $36,450 (Direct Impact) + $10,723 (Industry Purchases) + $14,494 (Employee Spending)
- Distribution: $68,839 (Direct Impact) + $26,139 (Industry Purchases) + $28,675 (Employee Spending)
- Processing: $93,693 (Direct Impact) + $56,883 (Industry Purchases) + $23,576 (Employee Spending)
- Support: $145,825 (Direct Impact) + $49,061 (Industry Purchases) + $80,716 (Employee Spending)

2008 Data

SOURCE: CA Center of Excellence, “Agriculture Value Chain Scan”, June 2011

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### Projection: Agriculture Value Chain Occupation by Sector

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>2011 JOBS</th>
<th>5-YEAR NEW JOBS</th>
<th>AVG. HOURLY WAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>1,446,232</td>
<td>183,018</td>
<td>$24.59</td>
</tr>
<tr>
<td>Production</td>
<td>206,303</td>
<td>-36,364</td>
<td>$23.34</td>
</tr>
<tr>
<td>Processing</td>
<td>226,216</td>
<td>5,173</td>
<td>$23.49</td>
</tr>
<tr>
<td>Distribution</td>
<td>585,014</td>
<td>29,913</td>
<td>$24.04</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2,463,765</strong></td>
<td><strong>181,740</strong></td>
<td><strong>$23.87</strong></td>
</tr>
</tbody>
</table>

*Source: CA Center of Excellence, “Agriculture Value Chain Scan”, June 2011*
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Retail Cost vs. Farmer Share of Food Sales

SOURCE: USDA National Agricultural Statistics Service

Ag Value Chain Profits

Most of It Leaving Our Local Communities!
SJV Cluster vs. Non-Cluster Employment Growth, 2001-2010

SOURCE: IMPLAN CEW, Applied Development Economics
Only 2% of annual state job gains are business relocations, most are from:

- expansion of existing businesses – 42%
- creation of new establishments – 56%

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Capture the Multiplier Effect

$27 LEAVES Local Economy
$73 STAYS In Local Economy

$57 LEAVES Local Economy
$43 STAYS In Local Economy

Case Studies from Arizona, Hawaii, Maine, New York, Michigan and Wisconsin
Clusters Within the Agriculture Value Chain

**Specialized Equipment Manufacturing Cluster??**

- Irrigation/Services
- Consulting
- Farm/Processing Equipment Manufacturing
- Equipment/Supplies
- Marketing
- Resource Management/Conservation
- R & D

**Support/Suppliers**

- Crops
- Animal
- Poultry & Egg
- Ornamental/Nurseries

**Production**

- Value Added (Direct Consumption and Intermediate)
- Dairy
- Wine/Beer/Beverages
- Biofuels
- Recycling
- Other Non-Food

**Processing & Packaging**

- Logistics
- Warehousing/Storage
- Sales
- Import/Export

**Clean Energy Cluster**

- Renewable Energy
- Processing

**Water Technology Cluster**

**Local / Regional Food Systems**

- Food / Nutrition
- Agri-Tourism
- Culinary Tourism

**AG Tech Innovation**

**Seed Central**

Center of Seed Excellence and Innovation

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Production and Consumption

- **Consumption**: 2.2 million tons
  - 2% Locally Produced
- **Production**: 3.4 million tons

- **Farmgate Value**: $1.6 Billion
- **Agriculture Value-Added**: $3.3 Billion
- **21,000 Jobs**
- **Working for more jobs!**
  - Local markets
  - Export markets

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Chico, California
• Locally-Owned
• Local Manufacture

OPPORTUNITY: biodiesel from livestock offal to support specialty meat cluster.
Founded in 2009 by undergraduate business majors from Haas School of Business at UC Berkeley.

- Daily collections of coffee ground waste.
- Utilized for gourmet pearl oyster mushrooms and “growit-at-home” mushroom kits.
- Substrate becomes premium soil amendment.

Sold in Home Depot, Peet’s Coffee, Whole Food, etc.

Over 3,000 Accounts in Two Years

Named to Forbes 30 Under 30
Many California Firms Already Producing Bio-Based Products

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Public – Private Partnerships

Agricultural Technology Innovation Program

- Collaborate on Research and Development
- Quickly Move New Technology into Commercialization

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“Every additional billion dollars of agricultural export sales helps to generate 8,400 jobs at home.”

Secretary Vilsack on the 2012 Farm Bill, October 24, 2012
Growing Awareness of Opportunities

Is “Ag Valley” the next Silicon Valley?

Moderator: Nicole Perlo Roth, Forbes Media
Dr. Spencer Maughan, Venrock
Stuart Rudick, Mindful Investors
Dr. Ron Meeusen, Cultivian Ventures
Joe Hudson, One Earth Capital
Craig Fourchy, Ultra Gro Plant Food

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Biggest Obstacle To Starting A Company Is:

- Financing: 36%
- Knowing where to begin: 34.7%
- Fear of failing: 10.1%
- Health insurance: 1.1%
- Training and education: 3.4%
- Finding a partner: 6.5%
- Other: 8.2%

Kauffman
FastTrac®
Survey
June 27, 2012
Equity capital in rural areas is as successful as equity capital in tech-oriented metro regions.

A study of 18,000 investments found no statistical difference between rural and metro regions measuring key variables: jobs created, type of industry, length of investment, exit type, or performance.

Patricia Scruggs et al, “The Role of Equity Capital in Rural Communities,” March 2010,
## Inadequate Infrastructure to Support Private Equity Investing

<table>
<thead>
<tr>
<th>Category</th>
<th>Sacramento Valley</th>
<th>San Joaquin Valley</th>
<th>Columbus, OH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>2.7M</td>
<td>3.8M</td>
<td>1.8M</td>
</tr>
<tr>
<td>Industries</td>
<td>Information, Govt. &amp; Educational services, Construction</td>
<td>Manufacturing, Agriculture, Health care, Logistics</td>
<td>Finance &amp; Insurance, Waste, Accommodation &amp; Food Services</td>
</tr>
<tr>
<td>Universities</td>
<td>UC Davis, Sac State, Chico State</td>
<td>UOP, Fresno State, UC Merced</td>
<td>Ohio State &amp; others</td>
</tr>
<tr>
<td>Publicly-traded firms (Non-bank)</td>
<td>13</td>
<td>4</td>
<td>48</td>
</tr>
<tr>
<td>Publicly-traded firms (Bank)</td>
<td>12</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Professional Firms</td>
<td>Adequate</td>
<td>Evolving</td>
<td>Strong</td>
</tr>
<tr>
<td>Investment Bankers</td>
<td>Limited</td>
<td>Evolving</td>
<td>Moderate</td>
</tr>
<tr>
<td>Private Equity Firms</td>
<td>Evolving</td>
<td>None</td>
<td>Strong</td>
</tr>
</tbody>
</table>

**SOURCE:** José Blanco, Central Valley Fund

**Committed to the future of rural communities**
Access to Capital
☑ Growing Local Businesses
☑ Financing Entrepreneurs
☑ Building Strong Economies

Developed by the
California Financial Opportunities Roundtable
Representing finance, impact investing, philanthropy, business, economic development, government and more.

August 2012

CalFOR
California Financial Opportunities Roundtable

• 34 Ways to Access Capital
• Recommendations on Policy and Resources
• Over 130 top experts and activists representing financial institutions, private businesses, economic development organizations and government agencies pledged to implement!

www.rurdev.usda.gov/Reports/CA-CalFOR.pdf

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- California Organized Investment Network
- State Assistance Fund for Enterprise – Business and Industrial Development Corporation (SAFE-BIDCO)
- Tax-Exempt Industrial Development Revenue Bonds
- Revolving Loan Funds
- Social Impact Bonds
- Crowdfunding

...and even more!
Direct Public Offerings

Mendocino Brewing Company
$3.6 million in six months for new brewery by word-of-mouth, cards placed in six-packs of ale.

Real Goods
Catalog of alternative energy products raised $4.6 million from customers. Several hundred thousand dollars returned when target reached.

Zap Power Systems
A manufacturer of electric bikes and scooters, raised $2.5 million from customers.

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Employee Stock Ownership Plans

The U.S. has about 11,000 ESOP companies and about 11 million employee participants.

ESOP companies, as a whole and by industry, tend to outperform their non-ESOP counterparts.

<table>
<thead>
<tr>
<th></th>
<th>Difference in Post-ESOP to Pre-ESOP Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual sales growth</td>
<td>+2.4%</td>
</tr>
<tr>
<td>Annual employment growth</td>
<td>+2.3%</td>
</tr>
<tr>
<td>Annual growth in sales per employee</td>
<td>+2.3%</td>
</tr>
</tbody>
</table>

EB-5 Visa for Immigrant Investors

Immigrants who invest $1 million in a business that creates or preserves 10 U.S. jobs over two years receive residency along with their family. This can be reduced to $500,000 by investing in a regional center or establishing businesses in a Targeted Employment Area (i.e. Rural).
Corporate Investment in Shared Value

Alcoa spends $3.5 million to support community recycling – adding 300,000 tons of material to the supply chain and reducing greenhouse gas emissions by 3.4 million tons annually (= 600,000 less cars).

Cisco invested $350 million in 10,000 academies in 165 countries – half of U.S. community colleges host an academy. This helps communities AND creates customers Cisco needs to grow.

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New Model for Financing Regions and/or Sectors

Goal: $90 Million
Funds Raised to Date: $270 Million

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Start “Invest Local” Initiatives

California Citizens Hold $859 Billion in Retirement Accounts

$43 Billion for Investment in California if...

Residents Brought 5% of Their Retirement Accounts Home

SOURCE: Employee Benefit Research Institute, May 2010
Data from Averaging National Statistics

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