California Agriculture 2001: Trends and Issues

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The Importance of Agriculture

• Contributions to global economy.

• Contributions to local economies.
## Economic Impact of California Agriculture, 1998

<table>
<thead>
<tr>
<th>Region</th>
<th>Share of Income</th>
<th>Share of Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>6.60%</td>
<td>7.37%</td>
</tr>
<tr>
<td>Sacramento Valley</td>
<td>8.17%</td>
<td>8.61%</td>
</tr>
<tr>
<td>San Joaquin Valley</td>
<td>31.65%</td>
<td>36.91%</td>
</tr>
</tbody>
</table>
Most Issues are Perennials

• Some issues are unique to selected commodities or sub-sectors, but most span the industry.

• And, issues for one group are also important to customers, competitors and neighbors.
National, State and Local Policy

• Exotic pests and diseases (GWSS and many more)

• Farm land conversion and urban edge issues

• Agribusiness consolidation and competition policy
National Farm Policy

• Farm payment programs, the “baseline” spending levels and the “2002?” farm bill

• Crop insurance and risk management program reforms and implementation of 2000 changes

• Dairy supports and milk marketing order implementation issues
Global Policy

• Implementation of commitments and trade disputes

• Biotech controversies as demand drivers and global policy issues

• Finalize China accession to the WTO,

• EU Agenda 2000 implementation

• The new WTO round
Current Commodity Prices

• Low current prices are not sustainable.

• High prices in the past for some commodities were also not sustainable.

• That does not tell us when the turnaround is coming.

• Supply/demand fundamentals differ by commodity but are connected on both sides of the equation.
Index of California Agricultural Commodity Prices, 1960-2000
1965-1967 = 100

Based on Constant $1996
Price Indices for California Fruit and Tree-Nuts, 1960-2000
(1965-67=100)

Based on constant $1996

- Peaches, Clingstone
- Walnuts, English
- Strawberries
(1965-67=100)

Based on constant $1996

- Carrots, All
- Lettuce, Head
- Broccoli, All
Price Indices for California Cattle and Milk, 1960-2000
(1965-67=100)

Based on constant $1996

Cows
Steers and Heifers
Milk
(1965-67=100)

- Cotton, Upland
- Hay
- Rice

Based on constant $1996
Input Prices and Availability

• Energy and energy based materials
  – Big jumps from low prices in recent years.

• Water
  – Continues to be influenced by legal and regulatory forces.
  – Process is evolutionary.
California Farm Production Expenses, 1997

- Electricity: 3%
- Machinery and Repairs: 8%
- Pesticides and Fertilizer: 10%
- Interest, Rent, Taxes: 11%
- Other Expenses: 19%
- Animals and Feed: 20%
- Farm Labor: 29%
Prices Paid by U.S. Farmers 1996-2001

- All Production Items
- Fertilizer
- Fuel
### California Rice Operating Costs, 2001

<table>
<thead>
<tr>
<th></th>
<th>$/acre</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemicals</td>
<td>83</td>
<td>14</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>72</td>
<td>12</td>
</tr>
<tr>
<td>Irrigation</td>
<td>54</td>
<td>9</td>
</tr>
<tr>
<td>Fuel &amp; Lube</td>
<td>50</td>
<td>8</td>
</tr>
</tbody>
</table>

**Total Operat. Costs** 605
## California Walnut Operating Costs, 2001

<table>
<thead>
<tr>
<th>Category</th>
<th>$/acre</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemicals</td>
<td>271</td>
<td>19</td>
</tr>
<tr>
<td>Hull, dry</td>
<td>212</td>
<td>15</td>
</tr>
<tr>
<td>Irrigation</td>
<td>132</td>
<td>9</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>59</td>
<td>4</td>
</tr>
<tr>
<td>Fuel &amp; Lube</td>
<td>48</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Operat. Costs</strong></td>
<td><strong>1407</strong></td>
<td></td>
</tr>
</tbody>
</table>
## California Processing Tomato Operating Costs, 2001

<table>
<thead>
<tr>
<th>Category</th>
<th>$/acre</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation</td>
<td>135</td>
<td>12</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>119</td>
<td>10</td>
</tr>
<tr>
<td>Fuel &amp; Lube</td>
<td>99</td>
<td>9</td>
</tr>
<tr>
<td>Chemicals</td>
<td>82</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total Operat. Costs</strong></td>
<td><strong>1159</strong></td>
<td></td>
</tr>
</tbody>
</table>
Input Prices and Availability

• Crop protection and chemicals
  – Regulation affects both availability and cost. FQPA remains a driver.

• Hired farm labor
  – Drift up in wages, continued supply problems.
  – This may be the year for another immigration (guest worker) law.
National Farm Subsidy Programs

- Farm payment programs do contribute to selected commodities.
- Crop insurance and risk management programs have expanded.
- Marketing orders and dairy supports are important without direct payments.
<table>
<thead>
<tr>
<th>Year</th>
<th>$ Million</th>
<th>California as a Percent of Total U.S. Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>22</td>
<td>3.1</td>
</tr>
<tr>
<td>1970</td>
<td>132</td>
<td>3.5</td>
</tr>
<tr>
<td>1980</td>
<td>14</td>
<td>1.1</td>
</tr>
<tr>
<td>1990</td>
<td>252</td>
<td>2.7</td>
</tr>
<tr>
<td>1995</td>
<td>238</td>
<td>3.3</td>
</tr>
<tr>
<td>1996</td>
<td>301</td>
<td>4.1</td>
</tr>
<tr>
<td>1997</td>
<td>220</td>
<td>2.9</td>
</tr>
<tr>
<td>1998</td>
<td>353</td>
<td>2.9</td>
</tr>
<tr>
<td>1999</td>
<td>651</td>
<td>3.2</td>
</tr>
<tr>
<td>2000</td>
<td>~700</td>
<td>~3.0</td>
</tr>
</tbody>
</table>
## Use of Federal Crop Insurance by California Farmers

<table>
<thead>
<tr>
<th>Year</th>
<th>Catastrophic Policies</th>
<th>Buy-up Policies</th>
<th>Acres Insured</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>31,923</td>
<td>7,935</td>
<td>4,476,324</td>
</tr>
<tr>
<td>1996</td>
<td>29,591</td>
<td>8,602</td>
<td>3,686,363</td>
</tr>
<tr>
<td>1997</td>
<td>25,896</td>
<td>8,775</td>
<td>3,173,440</td>
</tr>
<tr>
<td>1998</td>
<td>23,617</td>
<td>9,942</td>
<td>3,526,321</td>
</tr>
<tr>
<td>1999</td>
<td>24,893</td>
<td>13,002</td>
<td>4,050,454</td>
</tr>
</tbody>
</table>
Global Issues

• Trade remains important for California agriculture.

• Global investment is also important.

• About 20% of farm value is exported.

• Import competition and global competition in third markets are challenges.
## Indexes of Real Trade-Weighted Dollar Exchange Rates for All Agricultural Trade

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US Markets</td>
<td>119.9</td>
<td>118.4</td>
<td>118.2</td>
<td>127.5</td>
<td>124.6</td>
</tr>
<tr>
<td>US Competitors</td>
<td>115.8</td>
<td>122.3</td>
<td>126.7</td>
<td>135.8</td>
<td>137.6</td>
</tr>
<tr>
<td>US Suppliers</td>
<td>111.4</td>
<td>113.6</td>
<td>115.2</td>
<td>121.2</td>
<td>120.8</td>
</tr>
</tbody>
</table>
California Agricultural Export Value, 1995-1999

$ Millions

Agricultural Exports to the Top 10 Destinations by Value, 1999

- Canada 22%
- Japan 22%
- United Kingdom 5%
- Mexico 6%
- Hong Kong 5%
- Taiwan 4%
- Germany 4%
- South Korea 4%
- Netherlands 3%
- Spain 2%
- Other 23%
California Agricultural Exports by Category, 1999

- Other: 21%
- Animal Products: 8%
- Field Crops: 12%
- Vegetables: 13%
- Tree-Nuts: 14%
- Fruit: 32%
Where from here?

• Most issues are perennials, but so is California agriculture

• Such low prices cannot continue much longer.

• But, how much longer is that?