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Tools for Community Self-determination

Finding Food in California: local gains, systemic losses

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Agriculture in California, as in the rest of the U.S., has ridden waves of prosperity and decline, but has yet to establish long-term sustainability.

One metaphor for the state's ups and downs is the barn that Leland Stanford built at his Palo Alto farm in 1886.¹ The Stanford barn story is especially revealing since it shows the choices that can be made by someone of means. Clearly, the Stanford family was free to develop this property without great financial concern, unlike many of the farmworkers and sustainable farming pioneers who now work California lands. Still, the family had to respond to markets.

An extraordinarily airy and spacious brick structure, the Stanford barn was built to serve as the production point for the family winery. A recognized label was produced here until 1915, when prohibition convinced the family to uproot its grape vines. The next year the building was transformed into a milking barn. A nearby farmer, D. Fleishhacker, moved in his Holstein cows. Another neighbor, named Krobitzch, pastured Guernsey cattle on Stanford land.

Over time, the Peninsula Creamery opened in this same building, bottling under that name until 1941—ironically, closing because rapid population growth meant that the site was no longer tenable as a creamery. Ultimately, the firm that became the American Breeders Association opened its artificial insemination headquarters here, until relocating to rural Madison, Wisconsin, in 1948. The building now houses a bank and several offices.

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This history is a testament, both to the flexibility that allowed a single property to cycle through so many products in such a short time, and to the financial means that could be martialed to adapt. Yet, with three major food-related businesses cycling in and out of fashion in two generations, even as thousands of consumers settled nearby, the story is hardly a testament to the idea that investment or profitability itself can make a business sustainable.

Indeed, Santa Clara Valley itself—once known as some of the most fertile land in the state—had earlier endured similar waves, phasing through ranching, to wheat, to orchards, to suburbs and technological industries—which themselves have suffered a setback since 2001.² The Central Valley evolved from grazing land to industrial produce farms to large-scale fruit orchards to massive feedlots and dairy operations.

As *Ripe for Change*, an exhaustive survey of California's food systems reported, the state now imports a variety of fruits and vegetables that its once counted on to provide regional advantage. More strawberries, asparagus, garlic, and fresh vegetables are imported from abroad than exported.³ Indeed, more food is brought in from other states than shipped out.

To better understand these waves of prosperity and decline, and to frame more sustainable alternatives, Vivid Picture research has focused on the farm and food economies of three diverse geographies: (1) the state of California; (2) Ventura County; and (3) the Sacramento metropolitan area—consisting of El Dorado, Placer, Sacramento, Sutter, Yolo and Yuba counties.

Our analysis uses existing data in new ways. Unlike USDA statistics, which focus on commodities and farm operations, we have turned to data provided by the Bureau of Economic Analysis (BEA). BEA tracks cash flows through counties and regions nationally.⁴ Using this data, we have examined the fundamentals of the California food economy. One key focus in on what we call the Farm Production Balance: the balance between cash receipts and farm production costs. Once related sources of farm income are stripped away, this becomes an essential measure of the health of the farm production sector—and therefore helps analyze the counties in which farmers labor.

What stands out most clearly in this analysis is how localized—and transitory—are the farm success stories, and how systemic—and lasting—are the declines.

Ventura County now stands as California's most prolific strawberry producer, ranked first and second—in both the state and the nation—in acreage devoted to lemon and avocado production. Oranges and berries are also important crops. Three-fourths of the farms are less than 50 acres in size 5

Furthermore, Ventura is the ninth most successful county in the U.S. in showing increased returns to farmers over the period 1969-2002. Ventura County growers now earn \$112 million more from farm production in real (inflation-adjusted) dollars than they did at the start of that 33-year period.⁶

Yet farm acreage plummeted 12 percent in the past five years, as suburban homes have taken over farmland. Orchards have been relocated from the most fertile soils to higher ground. The number of farms also fell 11 percent from 1997-2002.⁷

In the Sacramento metropolitan area, only one of the six counties even came close to breaking even from farm production in 2002. That county is the most urban one, Sacramento. Yet growers there lost \$795,000 producing \$240 million of commodities that year. This despite being the number two corn producer in California, and number seven nationally in acreage devoted to safflower production. The county is also an important poultry, hay, grape, and wheat producer.⁸

The metropolitan area as a whole, however—home to 2 million people who eat \$4 billion of food a year—lost \$316 million producing food commodities over the three-year period, 2000-2002. Farmers in all six counties lost money. The main bright spot was El Dorado county, where growers have staged somewhat of a comeback. County farmers only spent \$2 million more producing their crop in 2002 than they earned in selling their products. This was a \$5 million improvement over 1999. Yet El Dorado's growers have lost money for 21 straight years, spending \$111 million more producing their crops than they brought in from sales. This is systemic trouble, not bad management—county farmers have shaved expenses steadily since 1989.⁹

Because of a reliance on corn, the farm production balance of Sacramento County—and therefore its metro area—resembled that of the U.S. as a whole. Nationally, farmers spent \$44 billion more producing crops over the past four years than they earned selling those crops.¹⁰ This is the current

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systemic pattern for cash grain production. Bludgeoned by foreign competition—often fostered by American grain trading firms—the nation's grain farmers have pared their expenses to the bone, and doubled their productivity.¹¹ Yet their return has steadily declined since the mid-1970s, when the nation asked them to offset rising energy costs during the OPEC embargo, by exporting more grain.

This short-term leap in farm income, however, sowed the seeds of long-term decline. Feeding livestock became more expensive, which favored large-scale feedlots and pulled away from many rural communities nationally the hope of producing their own wealth through the very natural increase of raising livestock. Grain farmers themselves took on more debt than they could afford, setting the stage for a major credit crisis of the 1980s.

Nor was the decline limited to the grain belt. Of the nation's more than 3,000 counties, real farm income declined in six of every seven counties from 1969-2002.¹²

The fortunes of the farmers of the state of California are by no means irrelevant to this national story, since California produces about 13% of the nation's food commodities. Because of the size of its counties, California has both the largest gainers and the largest losers. Four of the counties in the U.S. in which the farm production balance has improved since 1969 are in California. However, so are eight of the 14 counties that have suffered the largest declines. Moreover, losses outweigh gains. The four counties that gained earned \$900 million more in 2002 than they had in 1969—while the eight California counties posting losses lost \$1.4 billion.¹³

Important farm counties, such as Fresno and San Joaquin, are actually among the most challenged in the nation, posting losses of over \$300 million each. So are Sutter and Yolo counties—both part of the Sacramento metro area.

Still, due in large part to lucrative fruit, vegetable, and nursery crops—and also the importance of migrant labor—California farmers earned \$3.2 billion more producing their crops in 2002 than they spent to produce them. Federal farm subsidies added another \$451 million, but are generally much less of a factor here than in the Midwest. Yet even this rosy profile has troubling signs. Farm expenses are rising faster than income, and the balance of cash receipts over farm production income declined steadily since 1974, \$6 billion lower than its former level.¹⁴

Farmworkers earn per capita annual wages of between \$13,000 and \$19,000 in the regions we studied—far farm a livable wage. Yet per capita farm proprietor income in the Sacramento region was even lower, at \$4,000.

This is especially chilling given that California is the nation's largest food producer, and of course its most populous state. California produced \$25 billion worth of farm commodities in 2002, selling \$114 million directly to consumers, and exporting \$6.5 billion of food products internationally,¹⁵ and an estimated \$3.5 billion out of the state.¹⁶ Meanwhile, the state's consumers spent \$66 billion buying food. An estimated \$15 to \$30 billion of this food was purchased from external vendors—as the state's farmers struggled.¹⁷ Stunningly, in a state that prides itself as the nation's fruit and vegetable basket, food imports considerably exceed outward shipments.

Moreover, growers purchase farm inputs from economic structures that drain potential wealth from the state. While data are imprecise, farmers appear to spend at least \$3.5 billion, and perhaps as much as \$10 billion, each year buying farm inputs from external vendors. A middle-of-the-road estimate places this at a \$7 billion outflow from farm production alone.¹⁸ This, of course, is more than the value of the state's foreign exports.

One of the state's compensating sources of income, alas, are food stamps. Notably, low-income consumers in California received \$1.7 billion of food stamps in 2002—a little over half the net income farmers earned by selling their crops, and more than the value of all wine grapes produced in the state.¹⁹

All told, this amounts to a gross outflow of \$22 billion, and perhaps as much as \$40 billion, spent by the state's food producers and consumers, buying essentials from out of state. In partial compensation, \$10 billion of income accrues to the state's exporters and shippers. Factoring in food stamp revenue, net outflow is at minimum \$10 billion dollars—nearly half the entire value of the state's food (non-nursery/floral/cotton) crop. The net value of inflowing food is at least \$5.5 billion.

This is illustrated in the following graphic:



Also severely troubling is the disconnect between growers and consumers. Intense investment has created highly technological food distribution systems that can ship exact quantities to warehouses all over the U.S—yet have also created massive imbalances of supply and demand.²⁰

These imbalances have squeezed farmers and consumers for the benefit of the middle. The exhaustive *Ripe for Change* report pointed out that U.S. growers receive only 9 percent of the value of the food they produce.²¹ Two-thirds of American consumers are overweight, and many urbanites have no knowledge of where their food comes from.²²

There is also an economic level to this story, exemplified in the imbalances of personal income earned by workers in the food sector in the Sacramento metropolitan area. As the attached chart shows, worker income began to diverge in the mid-1970s, and has continued to do so. Farm income has plummeted, and food manufacturing income has held steady, while worker income at retail food stores and eating and dining establishments has risen. In short, more and more money is being earned serving higher-value food products—while growers are ever more threatened.²³

Such imbalances were not created by free markets. They are caused by increasing concentration in the food manufacturing sector,²⁴ which has raised consumer prices,²⁵ and by the essentially extractive nature of the U.S. farm economy.²⁶

California, of course, has its own unique history of growers being forced off their lands by eminent domain acquisitions in Silicon Valley,²⁷ and by legendary disputes over water and irrigation rights.

Among the lessons of history is the fact that, despite its long history of colonial rule, large land holdings, and industrial agriculture, California once organized some of its production for local markets. In 1866, to take only one example, the state produced 24 pounds of butter per capita. In 2002, in one of the largest dairy producing states in the nation, California produced 7 pounds per person.

Yet even at that time there was excess. One history recalled that over half of the fruit California "cannot be marketed." This was seen as an impetus for developing a dried fruit industry.²⁸

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Deeply humbling, also is the list of food varieties found in California in 1866. At the time, there were a total of 1,186 fruit varieties produced in the state—and someone counted them. A list of some of these is found in the Appendix. Only 561 of these were approved by the state's Pomological Society, including 178 apple and 122 pear varieties.²⁹ Today, California produces a total of 350 commercial crops, though of course the number of varieties is far greater.³⁰

California's opportunity

By December, 2005, the U.S. will follow California's lead, becoming a net food importer.³¹ Emerging exporters, such as Chile, Brazil, and China, will be searching even greater markets in the state. California will face a very clear choice of whether to devote its considerable consumer power to purchasing lower cost produce from other areas, or whether to build financial channels that cycle wealth to local producers and laborers.

This moment gives California the opportunity to shape its food system to suit its own needs—perhaps for the first time in its history.

Now the state has a growing awareness of the dilemmas posed by extractive food systems—the loss of biodiversity, the severe environmental "externalities," and the lack of return to producers.³² The state has both sufficient hunger and sufficient obesity to move it to restore balance in markets. It has plenty of personal health and food security reasons to challenge itself to make significant changes. Moreover, the state has produced investors who share a vision of long-term sustainability.

What primarily interferes is the lack of experience Californians actually have with creating food systems that are designed primarily with the interests of Californians in mind. The habits and structures that are left from a long colonial legacy still limit the state's ability to take the important next steps.

The fact that farm productivity in California has doubled as return to farmers was cut in half proves that the beneficiaries of new efficiencies are not always those that create them. A more sustainable California will find ways to disperse the benefits of new technologies and efficiencies.

Northern Italy's experience with clustering regional firms around a core industry, and its well-entrenched networks of food cooperatives, offer one inspiration. These flexible networks were built upon historical roots of social connection. Regions that successfully clustered had a history of fertile activity in voluntary civic associations that dated back to the Rennaissance era. This, in turn, led to more responsive regional governments—which stepped in once it became clear the national government was incapable of acting in accord with local priorities. Also crucial to regional strength was the presence of an independent press.³³

Clustering food production, processing, distribution and retail firms on a regional basis appears to be an effective strategy for building social connection and stronger local economies. This would allow smaller firms to take advantage of efficiencies of small size, and allow large firms to distribute any advantages that larger-scale production or trading may have. If the benefits of efficiency can be dispersed among a region's stakeholders, rather than privately held, that region is likely to find a path to sustainability—and perhaps an end to the cycles of rapid growth that lead to decline.

Select California Fruit Varieties in 1867

Apples:

Early June Red Astracan Early Astracan Fall Pippin Cooper's Market Porter Rhode Island Greening Jonathan Esopus White Pearmain Blue Pearmain Bellflower Black Detroit Baldwin Spitzenberg Red-Cheek Pippin Schwaar Green Newtown Pippin Yellow Newtown Pippin Virginia Greening Black Heart Winseap **Roxbury Russet**

Pears:

Doyenne d'Eté Madelaine Dearborn Seedling Bloodgood Bartlett Beurre Diel Fondante d'automne (Belle Lucratif) Seckel Buerre Clairgeau Glout Morceau Easter Buerre Winter Nellis

Peaches:

Early Tiletson Early York Strawberry Early Crawford Morris' White Late Crawford

Plums:

Drap d'Eté Green Gage Purple Gage Columbia Bradshaw Red Magnum Bonum Yellow Magnum Bonum Washington Jefferson, Prune d'Agen

Cherries:

Kentish Knight's Early Red Banman's May Black Eagle Black Tartarian Holland Napoleon Bigereau

"Oranges come to us from Tahiti, Mexico, Cape St. Lucas, the Sandwich Islands, and latterly from China. But they are plucked green, of course, and have a poor flavor. Our own oranges, requiring but three days to be sent to market, may be plucked fully ripe; and if the quality of the fruit is good, they will take preference and make money very fast for the grower."

Excerpted from

Cronise, Titus Fey (1868). *The Natural Wealth of California*. San Francisco: H. H. Bancroft & Co., 362-363.

Endnotes

¹ Information in this section is drawn from the historical exhibit at the original Stanford family barn, which stands on the Stanford University campus. Visited December 6, 2004.

² Jacobson, Yvonne (1984). *Passing Farms, Enduring Values: California's Santa Clara Valley.* Los Altos: William Kaufmann, Inc., in cooperation with the California History Center at De Anza College, 66.

³ Mamen, Katy, Steven Gorelick, Helena Norberg-Hodge, and Diana Deumling (2004). *Ripe for Change: Rethinkig California's Food Economy.* International Society for Ecology and Culture, 27.

⁴ Bureau of Economic Analysis, Regional Economic Accounts data. Viewed December 10, 2004, at http://www.bea.doc.gov/bea/regional/reis/. Analysis by the author.

⁵ National Agriculture Statistics Service (NASS), 2002 Census of Agriculture, Ventura County Profile. Viewed at http://www.nass.usda.gov/census/census02/volume1/ca/, December 27, 2004.

- ⁶ Bureau of Economic Analysis, Regional Economic Accounts data.
- ⁷ NASS, Ventura County Profile.
- ⁸ NASS, Sacramento County Profile.
- ⁹ Bureau of Economic Analysis, Regional Economic Accounts data.
- ¹⁰ Bureau of Economic Analysis, Regional Economic Accounts data.
- ¹¹ USDA data on total factor productivity (www.usda.gov) compared to farm production balance data.
- ¹² Bureau of Economic Analysis, Regional Economic Accounts data.
- ¹³ Bureau of Economic Analysis, Regional Economic Accounts data.
- ¹⁴ Bureau of Economic Analysis, Regional Economic Accounts data.
- ¹⁵ Mamen, et al., 25.

¹⁶ Author's estimate based on food consumption and production data.

¹⁷ Value of food produced, and direct sales to consumers, from USDA Agricultural Census, 2002. Value of food consumed from US Census data and Bureau of Labor Statistics Consumer Expenditure Survey, 2000, for western states. Food exports out of California draws from Office of Freight Management data by Katy Mamen, *et al., Ripe for Change.* 25-27. Food purchases from external sources estimated by Ken Meter of Crossroads Resource Center using the above data.

¹⁸ Farm input purchases from external sources estimated by Ken Meter of Crossroads Resource Center using ERS data on food production costs.

¹⁹ Bureau of Economic Analysis, Regional Economic Accounts data covering transfer payments; California Agriculture Statistics Service (2003). *California Agriculture Statistics*, 7.

²⁰ Meter, Ken (2003). "Food with the Farmers Face on It." Media guide published by W. K. Kellogg Foundation. Available at http://www.wkkfweb.org/FSRDFullGuide.pdf.

²¹ Mamen, et. al, 69.

²² Flegal, Kim. et. al. (1998). "Overweight and Obesity in the United States, Prevalence and Trends, 1960-1994," International Journal of Obesity, August. Cited in Gardner, Gary; & Halweil, Brian (2000). "Overfed and Underfed: The Global Epidemic of Malnutrition." World Watch Institute: Worldwatch Paper 150, March, 9. Also Wellman, N. S. et. al (1996). "Elder Insecurities: Poverty, Hunger, and Malnutrition." American Dietetic Association hunger line, cited in Pothukuchi & Kaufman, 7.

²³ Bureau of Economic Analysis, personal income and farm income for the Sacramento metropolitan area, 1969-2002.

²⁴ Heffernan, William & Mary Hendrickson (2002). "Concentration in Agricultural Markets." National Farmers Union. Available from the Agribusiness Accountability Initiative at http://www.agribusinessaccountability.org/pdfs/48_Concentration%20in%20Agricultural%20Markets.pdf, viewed April 26, 2004.

²⁵ Lopez, Rigoberto A.; Azzedine M Azzam; and Carmen Lirón-España (2001). "Market Power and/or Efficiency: An Application to U.S. Food Processing." University of Connecticut Department of Agricultural and Resource Economics Food Marketing Policy Center, Research Report Number 60, July, 1.

²⁶ Meter, Ken and Jon Rosales (2001). *Finding Food in Farm Country.* Lanesboro: Community Design Center and University of Minnesota. Available at http://www.crcworks.org/ff.pdf.

²⁷ Jacobson, 233-234.

²⁸ Cronise, Titus Fey (1868). The Natural Wealth of California. San Francisco: H. H. Bancroft & Co., 366.

²⁹ Cronise, 362,

³⁰ California Agricultural Statistics Service (2003), 1.

³¹ Kilman, Scott (2004). "Increasing Imports of Food Creating Trade Problems for U.S. Economy." *Wall Street Journal*, November 8.

³² For a review of these concerns, see Mamen, et. al.

³³ Putnam, Robert (1993). Making Democracy Work: Civic Traditions in Modern Italy. Princeton.