

# A Look at California's Organic Agriculture Production

**Karen Klonsky**

California leads the nation with the highest number of organic farms, land in organic production, and organic sales. Two-thirds of organic sales in California are from produce, one-fourth from livestock, and the remainder from field crops. The vast majority of organic farmers in California plan to increase or maintain their current levels of organic production.

The 2008 Organic Production Survey (OPS), administered by the National Agricultural Statistics Service, was a follow-up to the 2007 Census of Agriculture and was the first survey of organic agriculture in the United States. The target population included all farms and ranches meeting the standards of the National Organic Program (NOP), administered by the Agricultural Marketing Service (AMS) of USDA, to be certified organic, organic but exempt from certification, or transitioning to organic.

Organic farmers are exempt from the certification requirement if they gross less than \$5,000 from sales of organic products. "Transitioning farms" refers to the three-year transition period during which the requirements of the NOP must be adhered to before a farm can market production as organic. In other words, a transitioning farm follows the NOP rules but cannot sell anything as organic during the transition period.

The mailing list was built from several sources, including responses to questions in the 2007 census and the 2008 AMS list of certified organic farmers. The survey was mailed to

29,000 farms, including roughly 5,000 in California. The response rate in California was 85%, yielding 2,220 usable responses. The OPS provides information about organic production in the United States and California's unique role. The results presented in this paper refer to certified and exempt organic farms in California. Transitional operations are not included.

## Organic Agriculture in California

California leads the nation in terms of number of organic farms, land in organic production, and organic sales. Overall, California

represents 19% of all organic farms and 36% of all organic sales.

Over one-third of all organic farm-gate sales derived from California farms come from only 12% of all organic acres and 19% of all farms (Table 1). These numbers suggest that California specializes in high-value crops and that there are a large number of small organic farms. By crop category, California produces more than two-thirds of organic fruits, vegetables and nuts, but only garners 11% of field crop sales.

Organic sales from farms in California are distributed 75% from crops and 25% from livestock and livestock

**Table 1. Farms, Land Use, and Sales of Organically Produced Commodities on Organic Farms—CA and U.S., 2008**

	California			United States			CA % of Total		
	Farms	Acres (1,000)	Sales (\$Mil)	Farms	Acres (1,000)	Sales (\$Mil)	Farms	Acres	Sales
<b>Land Use</b>									
Total	2,691	470.9		14,307	4,077		19	12	
Cropland	2,600	275.8		13,625	2,230		19	12	
Pasture & Rangeland	319	195.1		5,362	1,848		6	11	
<b>Crops and Livestock Sales</b>									
Total	2,714		1,148.7	14,540		3,165	19		36
Livestock			309.7			1,123			28
Crops*	2,438		839.0	11,891		1,942	21		43
<b>Livestock and Poultry Categories</b>									
Animals	191		145.7	3,353		316.5	6		46
Products	182		163.9	3,015		906.2	6		18
<b>Crop Categories</b>									
Berries	216	1.8	56.9	1,596	5.5	83.2	14	33	68
Fruit	1,539	45.5	218.0	3,279	78.4	413.8	47	58	53
Tree Nuts	335	10.4	27.7	573	16.0	30.9	58	65	90
Vegetables	546	62.3	457.3	3,948	132.8	689.9	14	47	66
Field Crops		98.8	75.8		1,354.0	708.9		7	11
Greenhouse & Nursery	80		3.3	583		15.5	14		21

\* Including nursery and greenhouse

**Table 2. Organic Crops for Which CA Produces 90% or More of the U.S. Sales**

Crop	CA Sales	U.S. Sales	% CA
	--\$ Millions--		
Lettuce	175	187	94
Grapes	111	122	91
Strawberries	40	44	92
Broccoli	30	33	91
Celery	26	27	97
Cauliflower	17	18	95
Avocados	15	15	98
Almonds	12	12	100
Plums & Prunes	11	12	96
Walnuts	11	11	99
Dates	9	9	100
Lemons	7	7	99
Figs	4	4	99
Artichokes	1	1	99

products, compared to a roughly two-thirds/one-third split nationally. Vegetables account for 40% of California sales and another 26% is from fruit, nuts, and berries (Figure 1). This compares to only 22% of sales nationwide from vegetables and 17% from fruit, nuts, and berries.

**Crop Production.** California produces more than 90% of all U.S. organic sales for 14 different commodities, including 99% of walnuts, lemons, figs and artichokes, and 100% of almonds and dates (Table 2). Of the top 20 organic crops grown in California based upon sales revenue, two are fruits (grapes and oranges), two are berries (strawberries and raspberries), two are field crops (rice and potatoes), and two are nuts (almonds and walnuts). The other 12 are vegetable crops. All of the top 20 crops have over \$10 million in sales. Lettuce sales are at \$175 million (from 190 farms) and all grapes are at \$111 million (from 525 farms)—representing the leading two crops.

In fact, organic vegetable production in California is dominated by lettuce, which comprises 38% of all sales

dollars. Lettuce, tomatoes, spinach, broccoli, and celery together account for two-thirds of all organic vegetable sales. Grapes similarly dominate the organic fruit category, comprising half of the sales. The other four fruit crops garnering over \$10 million are strawberries, oranges, avocados, and plums. Interestingly, 546 farms reported organic vegetable sales in California, compared to 1,539 farms reporting fruit sales. This indicates a relatively high number of small, organic orchards and vineyards in the state.

California leads the nation in all of the major crop categories defined by NASS except field crops. Most notably, California farms did not produce any organic soybeans, even though this crop had \$50 million in sales nationally. The most important field crops in California are rice and hay, with \$19 million and \$16 million in sales, respectively, which represents 69% of all organic rice and 15% of organic hay sold in the United States.

**Livestock, poultry, and products.** The most important organic livestock commodity for California and the nation is milk from cows (Table 4). Production of organic milk from cows was reported in 37 states and over 2,000 farms. California is the leading state with \$134 million in sales reported from 92 farms, followed by Wisconsin at \$85 million in sales from 479 farms. Sales figures for Colorado, another large organic milk producer, could not be disclosed due to confidentiality restrictions that could otherwise reveal the income of the three farms reporting sales.

Broiler chickens are the second most important organic livestock commodity

in California, posting \$129 million in sales, two-thirds of all U.S. sales, from only 17 farms. California also produces 20% of organic eggs, with \$30 million in sales from 80 farms. Pennsylvania is the next most important state for both broiler chickens and egg production.

## Production Challenges

Survey participants were asked what they considered to be their primary challenge as an organic farmer. The most important challenge identified by organic farmers in California was regulatory problems (38%)(Table 5). These include paperwork and record-keeping for certification, inspections, finding a certifier, and the cost of certification. Also, in California, unlike any other state, any farm marketing its product as organic is also required to register with

**Table 3. Top Twenty California Organic Crops**

Commodity	Farms	Acres	CA Sales	U.S. Sales	CA%
			--\$ Millions--		
Lettuce	190	33,431	174.9	186.6	94
Grapes	525	22,762	110.9	122.2	91
Strawberries	117	1,178	40.1	43.7	92
Tomatoes	274	6,854	36.0	59.4	61
Spinach	100	6,882	32.0	37.4	86
Broccoli	111	4,289	30.2	33.2	91
Celery	44	1,443	26.2	27.1	97
Sweet Potatoes	16	2,749	20.6	24.7	84
Rice	73	15,068	18.9	27.5	69
Oranges	269	3,778	17.4	22.7	77
Cauliflower	66	1,859	16.8	17.7	95
Hay	109	28,778	15.7	107.8	15
Avocados	284	3,556	14.9	15.2	98
Onions	108	1,342	13.4	33.6	40
Fresh Herbs	93	4,661	13.0	27.4	48
Almonds	95	4,934	12.5	12.5	100
Plums/ Prunes	133	3,067	11.5	11.9	96
Raspberries	59	284	11.4	12.9	89
Walnuts	205	4,279	11.1	11.2	99
Potatoes	106	1,977	10.5	30.0	35

the state Organic Program, administered by the California Department of Food and Agriculture, and pay annual registration fees, in addition to the cost of certification by a third-party certifier. Despite this additional regulatory burden in California, organic growers in California were only slightly more likely to indicate regulatory problems as their primary challenge than organic farmers in the United States as a whole.

About one-fourth of organic farmers in California said that price issues (low premiums, lack of price information, or inconsistent prices) or market access (too much competition, not enough volume produced, or lack of buyers) were their greatest challenge. Contrary to popular perception, production problems fell below regulatory and market issues as the major challenge to organic farms (Table 5). Arguably, this reflects the efficacy of organic farming practices, availability of information, and access to organic inputs.

### Marketing Practices

The vast majority of organic sales from California farms (81%) are made to wholesalers. Three-quarters of sales to wholesalers are made to a processor, distributor, wholesaler, or broker. The rest are sold to retail chain buyers, other farms, or grower cooperatives. Only 7% of organic sales are made directly to consumers. Almost three-quarters of the direct sales are either on site (farm stands or U-pick

operations) or at farmers' markets. Other direct-to-consumer outlets include mail order and Community Supported Agriculture, where consumers typically pay a monthly fee and receive a weekly box of products from the farm.

The remaining 14% of California's organic sales are direct to retail, primarily natural food stores and conventional supermarkets. Direct sales to restaurants, hospitals, and schools make up only a small part of direct sales to retailers. The first point of sale for half of organic sales in California was within 100 miles of the farm. Of course, this included sales to wholesalers who may subsequently ship out-of-state or internationally. The first point of sale is direct to an international buyer for only 2.5% of organic sales.

### Farm and Household Income from Organic Sales

Respondents were asked what percent of the total market value of production from their farms is comprised of organic sales. In essence, this is a measure of the percent of farms that are 100% organic, versus mixed operations that have both organic and conventional production. The results show that in California, almost two-thirds

Table 4. Organic Livestock, Poultry, and Products—CA and U.S., 2008

Commodity	Farms	CA Sales	U.S. Sales	CA %
		--\$ Thousands--		
<b>Livestock and Poultry</b>				
Total	191	145,749	316,470	46
Chickens, Broilers	17	129,171	195,817	66
Milk Cows	96	3,984	33,466	12
Turkeys	8	2,670	8,675	31
Beef Cows	56	433	6,141	7
Goats	36	41	229	18
Sheep & Lambs	35	26	970	3
Chickens, Layers	102	d	2,197	
Hogs & Pigs	17	d	3,945	
<b>Livestock and Poultry Products</b>				
Total	181	163,868	906,207	18
Milk from Cows	92	133,505	750,149	18
Chicken Eggs	80	30,342	154,817	20
Wool	11	8	35	21
Goat Milk	4	d	801	
Mohair	4	d	3	

d- information not reported to protect confidentiality

of all farms with organic sales are 100% organic and the other third are "mixed" operations (Figure 2). This does not shed light on what percentage of total organic sales is from 100% organic operations, unfortunately.

Respondents were also asked what percentage of their net household income came from organic

Figure 1. Farmgate Sales by Commodity Group, CA and the U.S., 2008

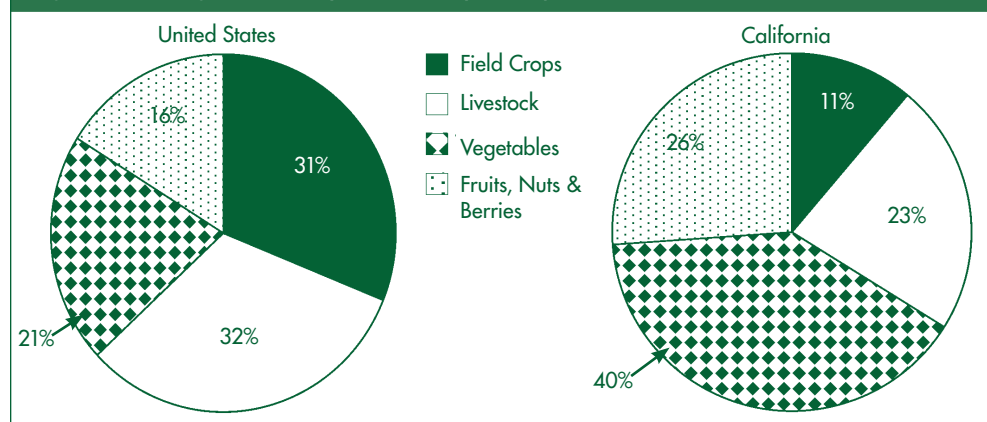
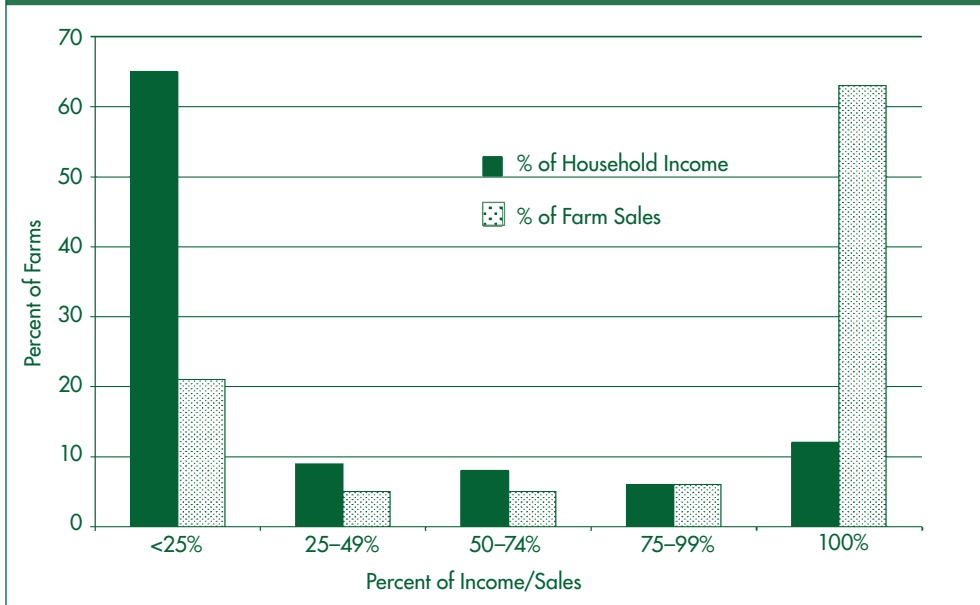


Table 5. Production Challenges for Organic Farms in CA and the U.S.—Percent Reporting in 2008

	CA%	U.S.%
Regulatory Problems	38.1	35.1
Price Issues	14.3	10.3
Production Problems	19.1	19.7
Market Access	10.0	9.9
Management Issues	8.7	12.8

Figure 2. Percent of Net Household Income from Organic Sales and Percent of Gross Farm Income from Organic Sales



sales. In this case, two-thirds of the farms reported that less than 25% of their household income came from organic sales. Only 12% said that all of their household income was from organic sales (Figure 2).

### Five-Year Production Plans

Respondents were asked about their five-year production plans with respect to organic production. Only 1% said they were getting out of farming altogether and 14% said they didn't know their plans. Another 3% said that they were going to discontinue organic production and another 5% of the farms planned to decrease production. The rest were either planning to increase production (32%) or maintain their current level (44%).

### Implications

The first Organic Production Survey follow-up to the most recent Census of Agriculture reveals California's dominance in organic production. California is most prominent in fruit, vegetable, nut and berry production, with lettuce and grapes being the highest revenue crops. California is also the top producer of livestock and livestock products, with broiler chickens and

milk from cows the most important commodities. Despite the dominance of these four commodities, the results reveal an extremely diverse subsector. Virtually all of the commodities produced conventionally in California are also produced organically.

About one-third of the farms classified themselves as mixed operations with both organic and conventional production. This implies that the organic market is an important opportunity for diversification for many conventional California farms. The vast majority of respondents also pointed to plans to maintain or expand their organic production, indicating that the subsector is financially healthy despite the economic downturn in the United States. However, it is unlikely that many "mixed" operations are moving towards becoming entirely organic. Rather, organic continues to be a niche market, albeit a profitable one.

The dominance of wholesale outlets both in California and the U.S. as the first point of sale suggests a complex marketing structure for organic production and dispels the image of organic products being sold primarily at farmers markets and roadside stands. The survey results also

challenge the perception that organic farms face their greatest challenges at the farm production level. In fact, the responses imply that organic farming practices are well developed and that access to information on organic practices and availability of organic inputs are not crippling constraints. The body of research on organic production, delivery of information, and available technical assistance seem to be keeping up with grower needs.

Instead, organic farmers in California and the United States point to regulation as their greatest constraint, with added record-keeping and expenses for certification and registration. The implications are that the USDA certification cost-share program for organic farmers is critical to many organic growers for staying in organic production. Further, the continued effort of the National Organic Program to modify, clarify, and communicate organic regulations is essential to the continued growth of the organic industry.

#### Suggested Citation:

Klonsky, Karen. 2010. "A Look at California's Organic Agriculture Production." *ARE Update* 14(2):8-11. University of California Giannini Foundation of Agricultural Economics.

*Karen Klonsky is a specialist in Cooperative Extension in the Department of Agricultural and Resource Economics at the University of California, Davis. She can be reached by e-mail at klonsky@primal.ucdavis.edu.*