

# The Measure of California Agriculture

## CHAPTER I

### University of California Agricultural Issues Center

#### California Farms and Farmers

- 1-3.....Land use
- 1-12.....Farmland conversion
- 1-14.....Land in farms and land ownership
- 1-17.....Size distribution by total sales
- 1-19.....Legal organization
- 1-20.....Farmer demographics

More than one-quarter of California's landmass is used for agriculture. Just over half of the 27.6 million acres of agricultural land is pasture and range and about 40 percent is cropland. Most California farms are small in terms of cash receipts and total sales and are family or individually operated, but most sales derive from farms with cash receipts higher than one-half million dollars. California has a greater share of female farm operators and farmers with Hispanic, Asian and Pacific Islander backgrounds than the United States as a whole. As the state's population has grown, agricultural land has been converted to residential, industrial and commercial uses, yet agriculture remains a vibrant industry.

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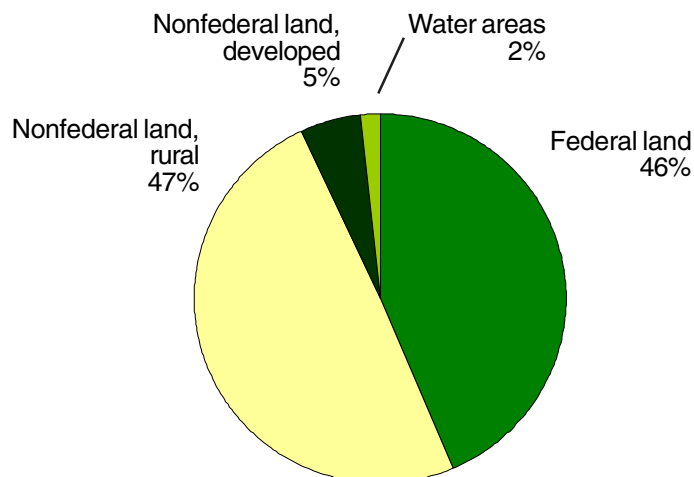
## Land use

California total land area amounts to 101.5 million acres. In 2002, the state's 79,600 farms occupied about 27 percent of that total. Approximately 48 percent of the state's land was federal land and water areas, and the rest was nonfederal rural and nonfederal developed land. Federal land includes mostly national forests, national parks and wildlife areas. Other areas are covered by swamps, bare rock deserts, rural transportation areas, defense and industrial areas, farmsteads, and farm roads and lanes.

Nonfederal land use in California is mostly rural (Figure 1.1). Of a total of nearly 53 million nonfederal acres, 37 percent is pasture and rangeland, 26 percent forestland and 18 percent cropland (Figure 1.2). The U.S. Department of Agriculture Natural Resources Conservation Service (USDA/NRCS) defines "developed land" as the area devoted to residential, commercial or industrial use. Part of this area may still be "rural" or idle, if there are no buildings on it. Figures 1.1 and 1.2 show *National Resources Inventory* data, which was available on total land use in California for 1997, while Figures 1.3 and 1.4 show national data that is available for 2002.

Compared to California, 76 percent of the total land in the 48 contiguous states (1.9 billion acres) is nonfederal land, most of which is in rural areas (Figure 1.3). Pasture and rangeland account for 35 percent of the nonfederal land in the 48 contiguous states (Figure 1.4). Forests occupy 27 percent and crops 25 percent. Developed areas account for 7 percent.

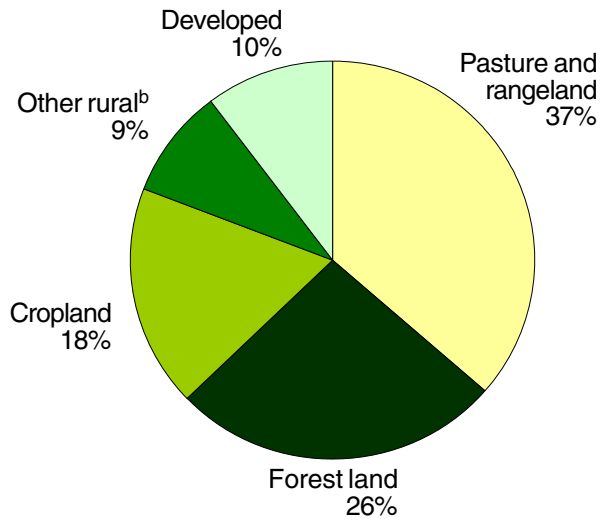
FIGURE 1.1  
Federal and nonfederal land use in California, 1997<sup>a</sup>



Source: USDA Natural Resources Conservation Service, *National Resources Inventory, 1997* (2000 revision). [www.ca.nrcs.usda.gov/technical/nri/NRIresults.html](http://www.ca.nrcs.usda.gov/technical/nri/NRIresults.html)

<sup>a</sup>1997 figures were revised in 2000.

FIGURE 1.2  
Nonfederal land use in California, 1997<sup>a</sup>

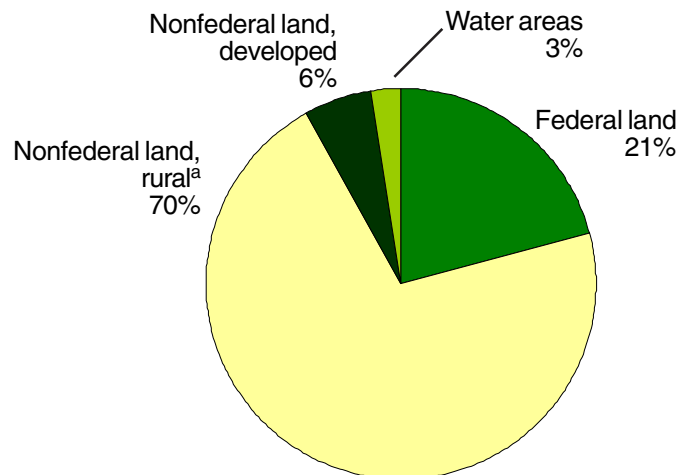


Source: USDA Natural Resources Conservation Service, *National Resources Inventory, 1997* (2000 revision). [www.ca.nrcs.usda.gov/technical/nri/NRIresults.html](http://www.ca.nrcs.usda.gov/technical/nri/NRIresults.html)

<sup>a</sup>1997 figures were revised in 2000.

<sup>b</sup>Includes Conservation Reserve Program.

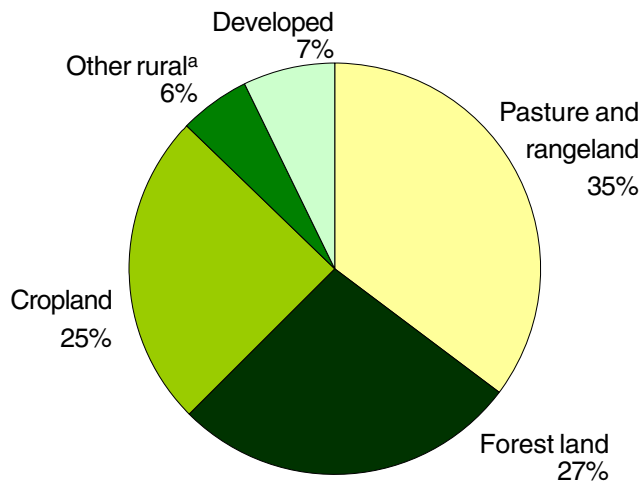
FIGURE 1.3  
Federal and nonfederal land use, 48 contiguous states, 2002



Source: USDA Natural Resources Conservation Service, *National Resources Inventory, 2002*. [www.nrcs.usda.gov/technical/land/nri02/index.html](http://www.nrcs.usda.gov/technical/land/nri02/index.html)

<sup>a</sup> Includes Conservation Reserve Program.

FIGURE 1.4  
Nonfederal land use, 48 contiguous states, 2002



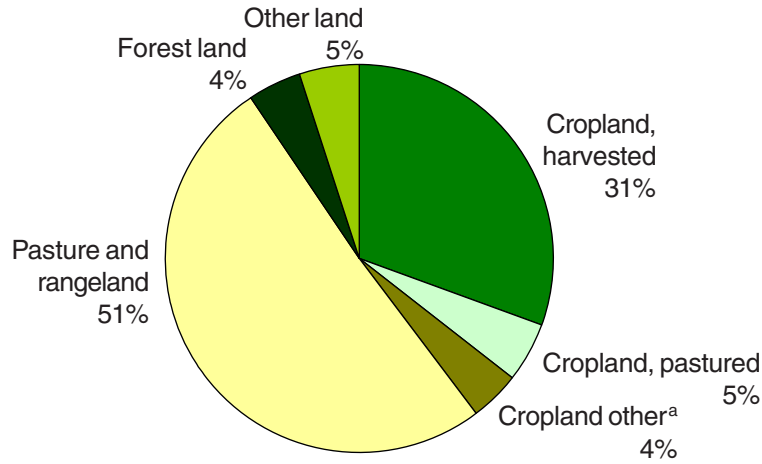
Source: USDA Natural Resources Conservation Service, *National Resources Inventory*, 2002.  
[www.nrcs.usda.gov/technical/land/nri02/index.html](http://www.nrcs.usda.gov/technical/land/nri02/index.html)

<sup>a</sup>Includes Conservation Reserve Program.

The 2002 *Census of Agriculture* reports 27.6 million acres of agricultural land in California, 51 percent of which is pasture and rangeland (Table 1.1, Table 1.2 and Figure 1.5). Harvested cropland occupies 31 percent, while pastured cropland and other cropland together account for 9 percent. Total agricultural land in the state decreased by about 4 percent compared to the 1997 *Census of Agriculture*.

For the United States as a whole, pasture and rangeland account for 42 percent of total agricultural land, while all croplands account for 46 percent (Figure 1.6). Agricultural land decreased 2 percent between 1997 and 2002.

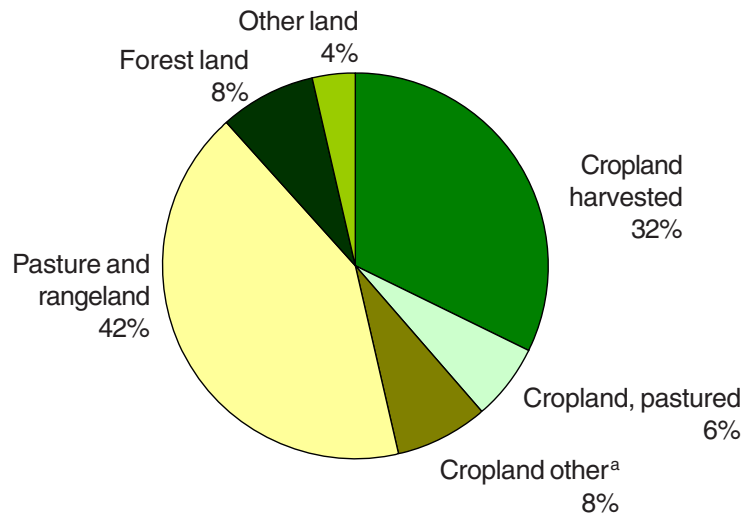
FIGURE 1.5  
**Agricultural land use, California, 2002**



Source: USDA National Agricultural Statistics Service, *Census of Agriculture, 2002*.  
[www.nass.usda.gov/Census\\_of\\_Agriculture/index.asp](http://www.nass.usda.gov/Census_of_Agriculture/index.asp)

<sup>a</sup>Includes cover crops, failed crops, summer fallow and idle fields.

FIGURE 1.6  
**Agricultural land use, United States, 2002**



Source: USDA National Agricultural Statistics Service, *Census of Agriculture, 2002*.  
[www.nass.usda.gov/Census\\_of\\_Agriculture/index.asp](http://www.nass.usda.gov/Census_of_Agriculture/index.asp)

<sup>a</sup>Includes cover crops, failed crops, summer fallow and idle fields.

TABLE 1.1  
Agricultural land use, California and United States, 1964-2002

	Pasture & rangeland <sup>a</sup>	Total cropland <sup>b</sup>	Harvested cropland	Other land <sup>c</sup>	Woodland & woodland pasture <sup>d</sup>	Total agricultural land
1,000 acres						
<b>California</b>						
1964	20,450	11,815	7,846	1,343	3,403	37,011
1982	17,980	11,257	8,765	1,437	1,483	32,157
1992	16,191	10,479	7,761	1,158	1,150	28,978
1997 <sup>e</sup>	15,022	11,063	8,676	1,498	1,213	28,796
2002	13,988	10,994	8,466	1,416	1,191	27,589
<b>United States</b>						
1964	490,307	434,322	286,892	39,671	145,976	1,110,276
1982	418,264	445,362	326,306	36,082	87,088	986,796
1992	410,835	435,366	295,937	25,369	73,962	945,532
1997 <sup>e</sup>	398,279	445,325	318,937	34,340	76,854	954,798
2002	395,279	434,165	302,697	32,957	75,878	938,279

Source: U.S. Department of Commerce Census Bureau, *Census of Agriculture* (1964-1992); USDA National Agricultural Statistics Service, *Census of Agriculture* (1997-2002).

<sup>a</sup>Other than cropland and woodland pastured.

<sup>b</sup>Including that used for pastures and other cropland.

<sup>c</sup>Houses and barns, roads and wastelands.

<sup>d</sup>Excluding cropland pasture.

<sup>e</sup>Figures from 1997 were adjusted for coverage in 2002 and are not directly comparable with previous years.

TABLE 1.2  
Agricultural land use, California and United States, 1964-2002

	Pasture & rangeland <sup>a</sup>	Total cropland <sup>b</sup>	Harvested cropland	Other land <sup>c</sup>	Woodland & woodland pasture <sup>d</sup>
	Percent				
<b>California</b>					
1964	55.3	31.9	21.2	3.6	9.2
1982	55.9	35.0	27.3	4.5	4.6
1992	55.9	36.2	26.8	4.0	4.0
1997 <sup>e</sup>	52.2	38.4	30.1	5.2	4.2
2002	50.7	39.8	30.7	5.1	4.3
<b>United States</b>					
1964	44.2	39.1	25.8	3.6	13.1
1982	42.4	45.1	33.1	3.7	8.8
1992	43.5	46.0	31.3	2.7	7.8
1997 <sup>e</sup>	41.7	46.6	33.4	3.6	8.0
2002	42.1	46.3	32.3	3.5	8.1

Source: U.S. Department of Commerce Census Bureau, *Census of Agriculture* (1964-1992); USDA National Agricultural Statistics Service, *Census of Agriculture* (1997-2002).

<sup>a</sup>Other than cropland and woodland pastured.

<sup>b</sup>Including that used for pastures and other cropland.

<sup>c</sup>Houses and barns, roads and wastelands.

<sup>d</sup>Excluding cropland pasture.

<sup>e</sup>Figures from 1997 were adjusted for coverage in 2002 and are not directly comparable with previous years.

Every five years, farm operators are asked to provide information to the *Census of Agriculture*. During the past four decades, the area of California cropland allocated to orchards, vineyards, vegetables and melons has consistently increased (Table 1.3). The area allocated to the main field crops such as cotton, wheat and rice increased from the 1960s to the 1980s, but it has been decreasing since, particularly for cotton and wheat, with rice acreage moving more erratically. The acreage in barley and “other crops” has been decreasing since 1964. Within the latter group are crops such as dry beans, potatoes and sugarbeets (Table 1.3).



TABLE 1.3  
California harvested cropland, 1964-2002

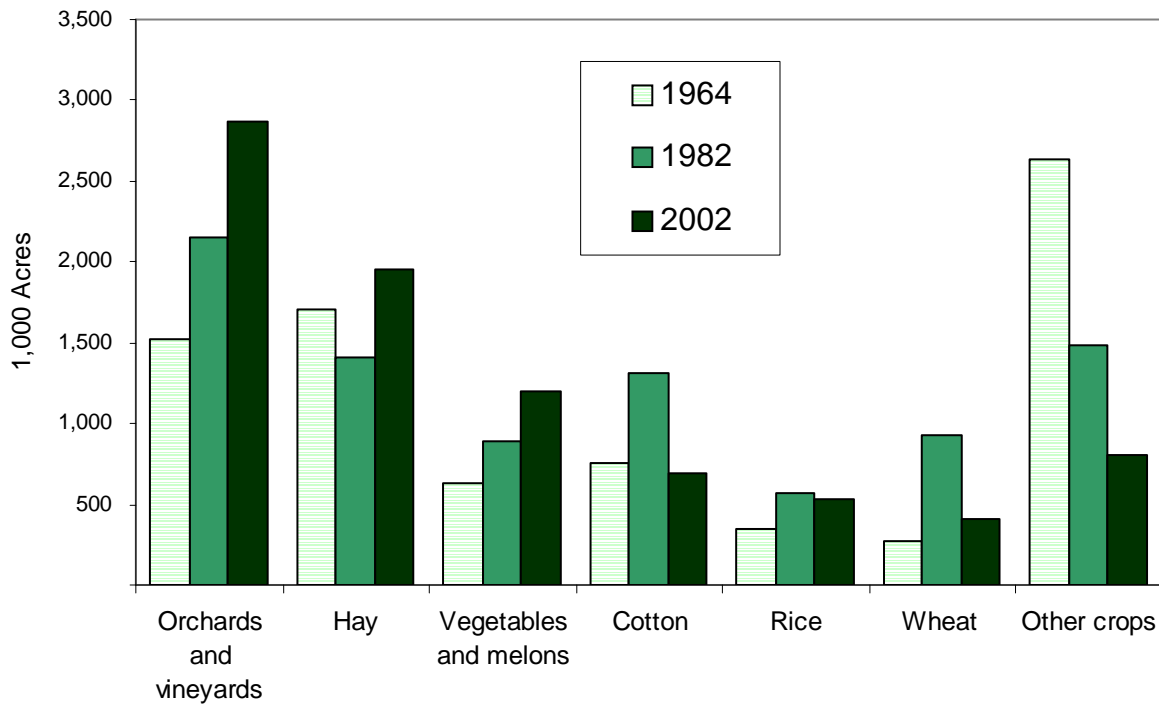
	1964	1982	1992	2002
	1,000 acres			
Orchards and vineyards	1,520	2,158	2,246	2,872
Hay, all types <sup>a</sup>	1,702	1,416	1,531	1,953
Vegetables and melons	626	895	1,017	1,197
Cotton	759	1,313	1,066	695
Rice	343	567	401	531
Wheat for grain	267	929	569	410
Barley for grain	1,319	583	204	75
Other crops <sup>b</sup>	1,310	904	727	733
<b>Total harvested cropland</b>	<b>7,846</b>	<b>8,765</b>	<b>7,761</b>	<b>8,466</b>

Source: U.S. Department of Commerce Census Bureau, *Census of Agriculture* (1964-1992); USDA National Agricultural Statistics Service, *Census of Agriculture* (1997-2002).

<sup>a</sup> Hay includes alfalfa, small grain, wild grass silage and green chop varieties.

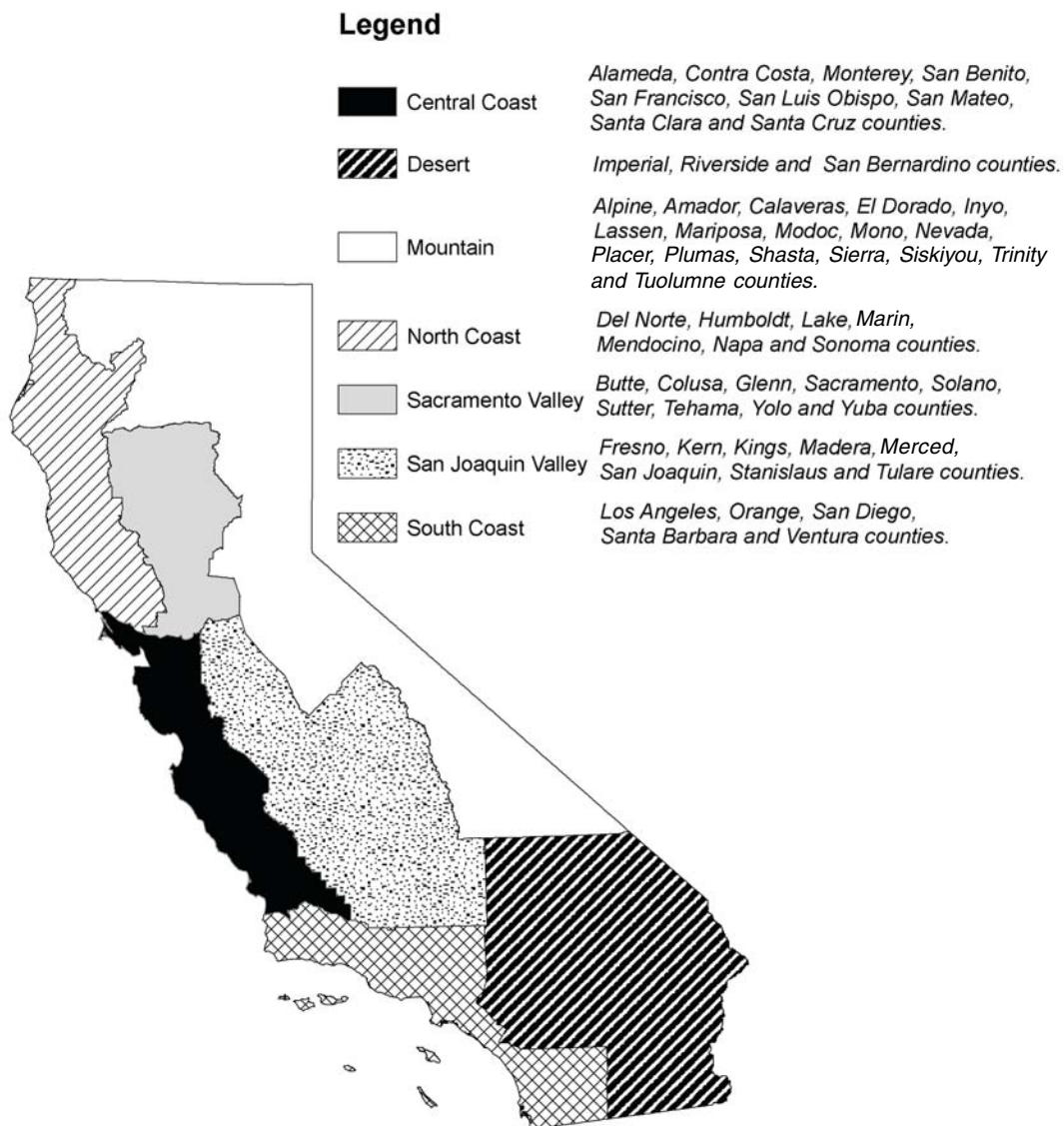
<sup>b</sup> Residual obtained by subtracting all reported crops from total harvested cropland. Dry beans, potatoes and sugarbeets are in this group.

FIGURE 1.7  
California harvested cropland, 1964, 1982, 2002



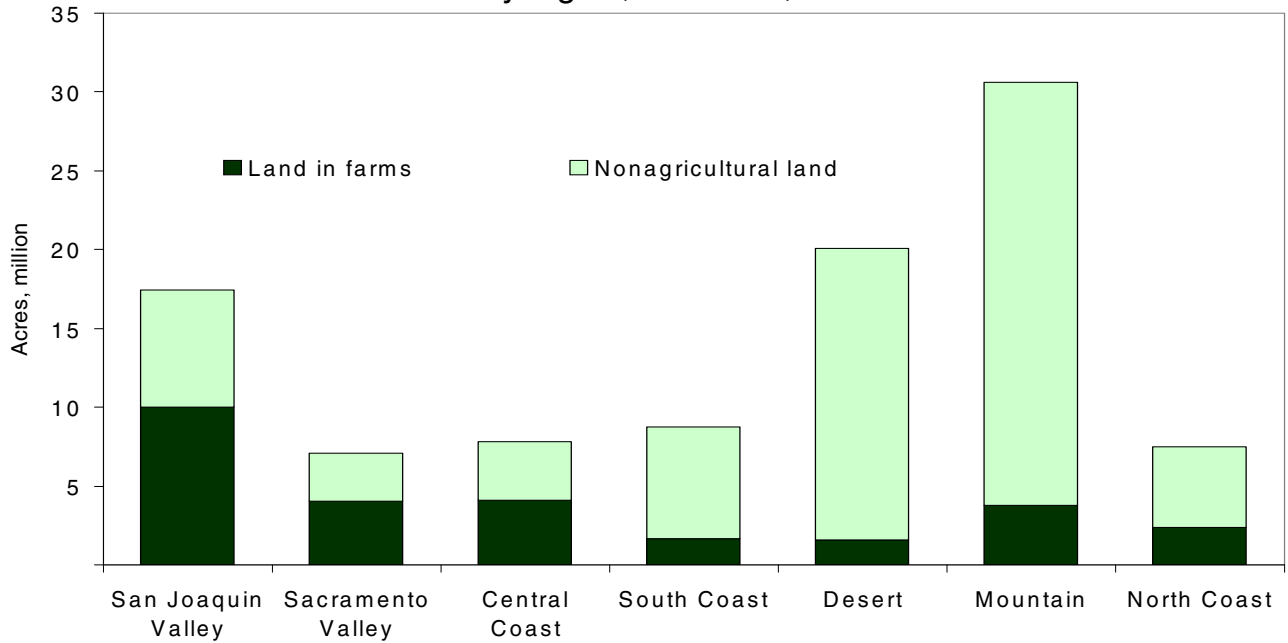
Source: Table 1.3 (above).

FIGURE 1.8  
California production regions



Two-thirds of the agricultural land in California is concentrated in the Central Valley (San Joaquin and Sacramento valleys) and the Central Coast (Figure 1.8). Geographically, the Mountain and Desert are the largest regions of the state, but in those regions the majority of the land is not arable (Figure 1.9). Of the agricultural land in the Central Valley and Desert regions more than 50 percent is used as cropland. In the Coastal and Mountain regions, pastures and rangelands are more important than cropland (Figure 1.10).

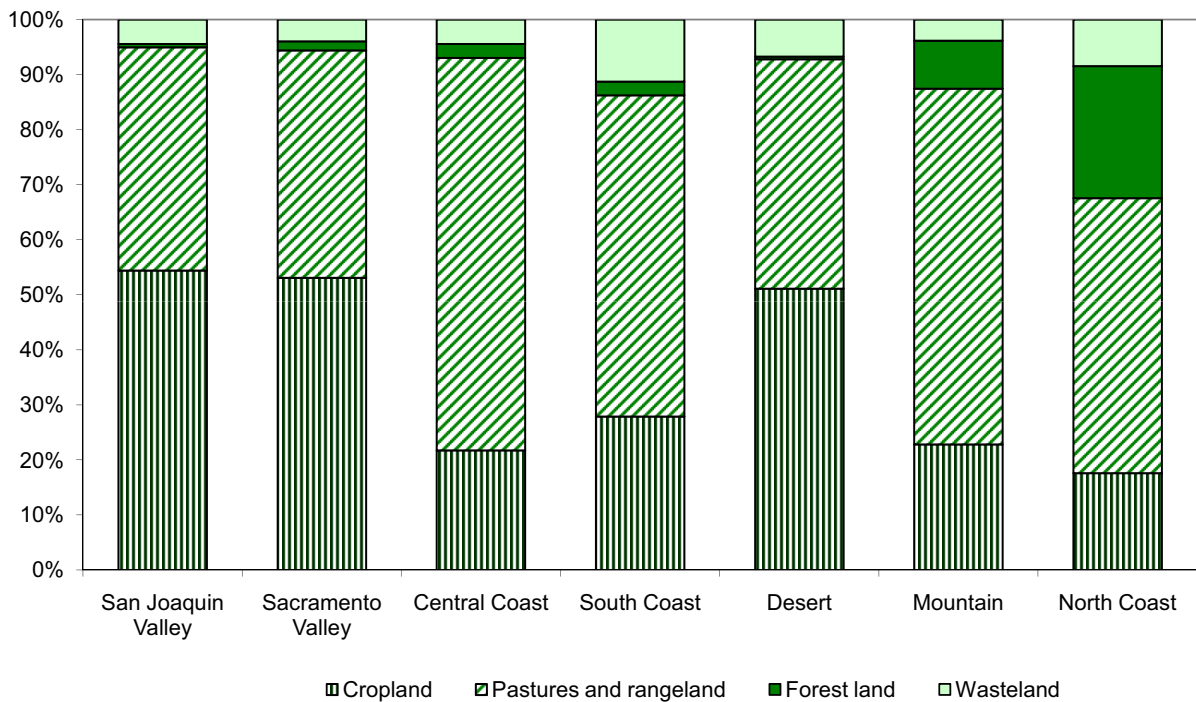
FIGURE 1.9  
Total land and land in farms by region, California, 2002<sup>a</sup>



Source: USDA National Agricultural Statistics Service, *Census of Agriculture*, 2002.

<sup>a</sup>Land in farms as defined by the *Census of Agriculture* comprises agricultural land used for crops, pasture or grazing. It also includes woodland and wasteland not actually under cultivation or used for pasture or grazing, provided it is part of the farm operator's total operation.

FIGURE 1.10  
Total agricultural land use by region, California, 2002



Source: USDA National Agricultural Statistics Service, *Census of Agriculture*, 2002.

## Farmland conversion

Conversion of agricultural land to urban uses is an ongoing public policy issue in the United States and in California. Data from the California Department of Conservation indicate that between 1988 and 2002, about 734,000 acres of land have been converted into urban and built-up uses (Table 1.4). This quantity is equivalent to 2.4 percent of the total agricultural land that the *Census of Agriculture* reported was available in the state in 1987 (30.6 million acres).

Of the total acres converted from 2000 to 2002, 59,144 acres were former cropland and 35,126 were grazing land. In addition, conversion occurred with 89,973 acres of “other land” comprised of idled farmland that previously had been removed from agricultural activities in anticipation of development.

The two-year rate at which agricultural land is converted into urban and built-up areas decreased at the beginning of the 1990s but has been increasing since 1994-96. The Central Valley (San Joaquin and Sacramento valleys), which according to the 2002 census contains over half of the state’s agricultural land, has seen a lower proportion of its cropland and grazing land converted than the rest of the state. The Valley accounts for 69 percent of California’s cropland, but according to the Department of Conservation accounted for 42 percent of the statewide cropland conversion between 1988 and 2002. Similarly, with 41 percent of the state’s total grazing land, the Central Valley recorded only 22.5 percent of the statewide grazing land converted during that 14 year period.

Farmland conversion depends largely on population growth. California’s population increased by 75 percent between 1970 and 2002, or approximately 1.8 percent per year. The population growth in the Central Valley was more than 100 percent during that same period. For the year 2050, the California Department of Finance projects a total state population of 54.8 million, about 56 percent higher than in 2002. The Central Valley’s population is projected to increase faster than the state’s population. Accordingly, the Central Valley is projected to grow from today’s 16 percent of total state population in 2002 to 23 percent in 2050 (California Department of Finance).

TABLE 1.4

## Acres converted to urban and built-up areas, 1988-2002

California	Cropland <sup>a</sup>	Grazing land	Other land <sup>b</sup>	Total converted
1988-90	40,003	20,863	57,364	118,230
1990-92	39,141	14,729	45,394	99,264
1992-94	23,453	10,464	20,390	54,307
1994-96	25,954	13,303	19,185	58,442
1996-98	37,585	17,057	34,919	89,997
1998-00	46,859	24,403	57,816	129,161
2000-02	59,144	35,126	89,973	184,243
Cumulative Total	272,139	135,945	325,041	733,644
<b>Central Valley<sup>c</sup></b>				
1988-90	10,119	5,590	11,908	27,617
1990-92	23,390	3,530	9,997	36,917
1992-94	9,333	2,491	4,028	15,852
1994-96	10,735	2,844	4,323	17,902
1996-98	20,126	5,932	10,091	36,309
1998-00	18,111	4,715	10,458	33,284
2000-02	22,641	5,513	17,183	45,337
Cumulative Total	114,455	30,615	67,988	213,218
<b>Sacramento Valley<sup>d</sup></b>				
1988-90	4,772	3,783	6,535	15,090
1990-92	6,450	3,088	3,421	12,959
1992-94	2,516	1,122	1,935	5,573
1994-96	2,868	2,312	2,186	7,366
1996-98	3,377	3,212	3,640	10,342
1998-00	7,038	3,704	4,810	15,552
2000-02	5,482	3,820	7,566	16,868
Cumulative Total	32,503	21,041	30,093	83,750
<b>San Joaquin Valley<sup>e</sup></b>				
1988-90	5,347	1,807	5,373	12,527
1990-92	16,940	442	6,576	23,958
1992-94	6,817	1,369	2,093	10,279
1994-96	7,867	532	2,137	10,536
1996-98	16,749	2,720	6,451	25,967
1998-00	11,073	1,011	5,648	17,732
2000-02	17,159	1,693	9,617	28,469
Cumulative Total	81,952	9,574	37,895	129,468

Source: California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. [www.conserv.ca.gov/dlrp/fmmp/stats\\_reports/index.htm](http://www.conserv.ca.gov/dlrp/fmmp/stats_reports/index.htm)

<sup>a</sup>All agricultural land that is not classified as grazing land.

<sup>b</sup>Includes idle land previously removed from agricultural production.

<sup>c</sup>Central Valley is the sum of Sacramento and San Joaquin valleys.

<sup>d</sup>Counties of Butte, Colusa, Glenn, Sacramento, Shasta, Solano, Sutter, Tehama, Yolo and Yuba.

<sup>e</sup>Counties of Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare.

## Land in farms and land ownership

As has been the national trend for decades, the number of farms and the total land in farms in California has continued to decrease. At the same time, the average number of acres per farm in California has increased by about 6 percent between 1997 and 2002. Table 1.5 should be read with caution. The definition of “farm” has changed several times, and with each change some of the smallest farms have been removed from the census. The 2002 *Census of Agriculture* introduced yet another change in the way the survey was conducted, resulting in better coverage. However, this change makes it difficult to compare the most recent records with those before 1997. General long-term trends, however, remain in place.

TABLE 1.5  
Number of farms and land in farms, California and United States, 1945-2002<sup>a</sup>

	California			United States		
	Number of farms	Land in farms (1,000 acres)	Average size (acres)	Number of farms	Land in farms (1,000 acres)	Average size (acres)
1945	138,917	35,054	252	5,859,169 <sup>b</sup>	1,141,615 <sup>b</sup>	195
1964	80,852	37,011	458	3,154,857	1,110,187	352
1987	83,217	30,598	368	2,087,759	964,471	462
1997 <sup>c</sup>	87,991	28,796	327	2,215,876	954,753	431
2002	79,631	27,589	346	2,128,982	938,279	441

Source: U.S. Department of Commerce Census Bureau, *Census of Agriculture* (1945-1987); USDA National Agricultural Statistics Service, *Census of Agriculture*, 2002.

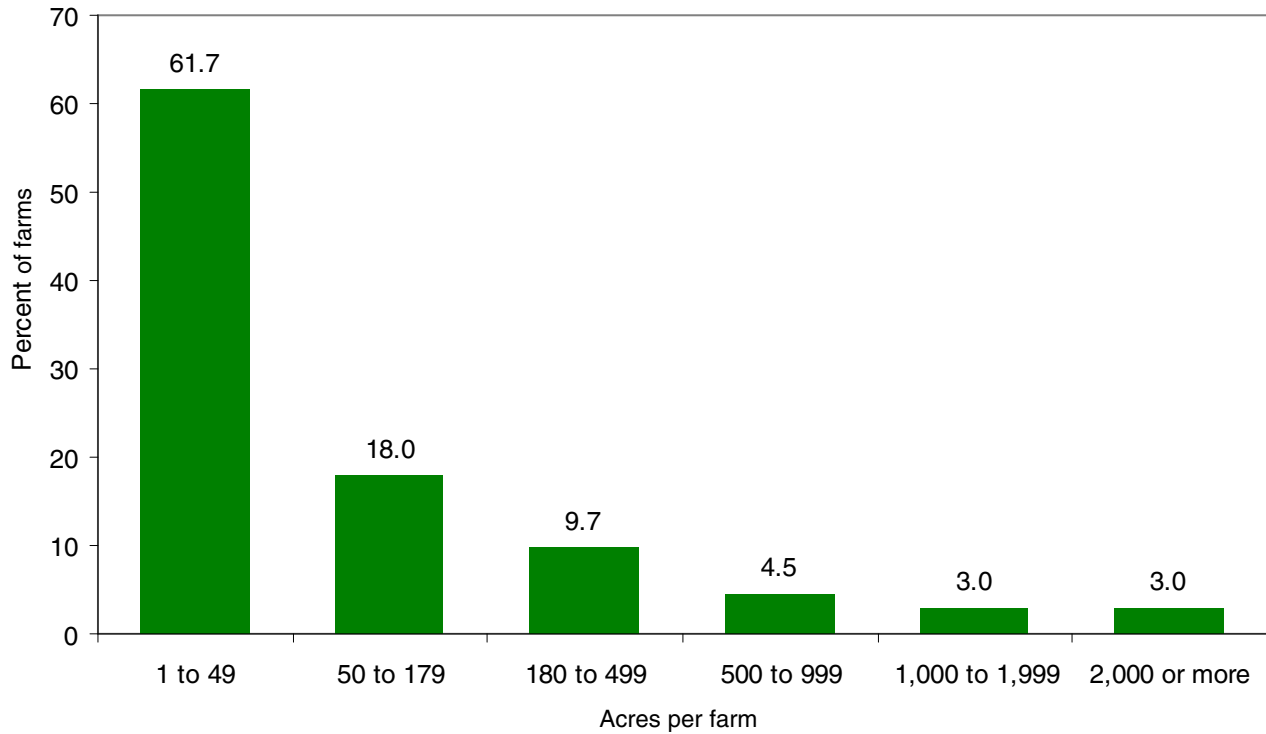
<sup>a</sup> A farm as defined by USDA is a place that generated or normally would have generated at least \$1,000 in agricultural sales, or for 1997 and 2002, a place that received \$1,000 in federal payments.

<sup>b</sup> Excludes Hawaii and Alaska.

<sup>c</sup> Figures from 1997 were adjusted for coverage in 2002 and are not directly comparable with previous years.

In 2002, almost 62 percent of counted California farms were smaller than 50 acres. The largest farms, with 2,000 acres or more acres each, represented only 3 percent of the state's 79,631 farms (Figure 1.11). The average farm in the Central Valley has 352 acres, which is similar to the state average of 346 acres. Farms in the Central Coast and Mountain regions are larger than the state average, with 537 and 472 acres per farm respectively. Farms in the South and North Coast and in the Desert are on average smaller than in the other regions of the state, especially in the South Coast where farms averaged 154 acres.

FIGURE 1.11  
California farms by acres per farm, 2002

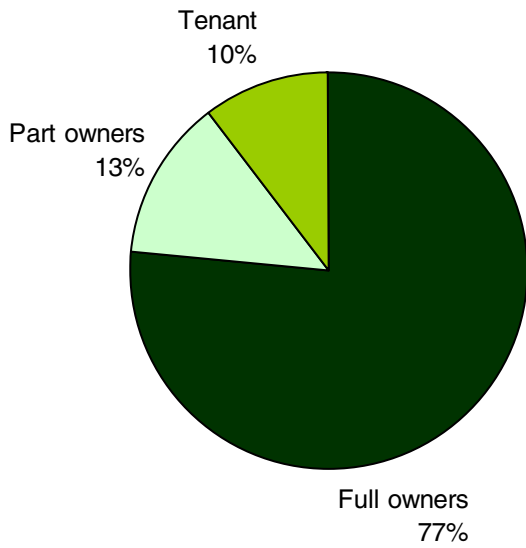


Source: USDA National Agricultural Statistics Service, *Census of Agriculture*, 2002.

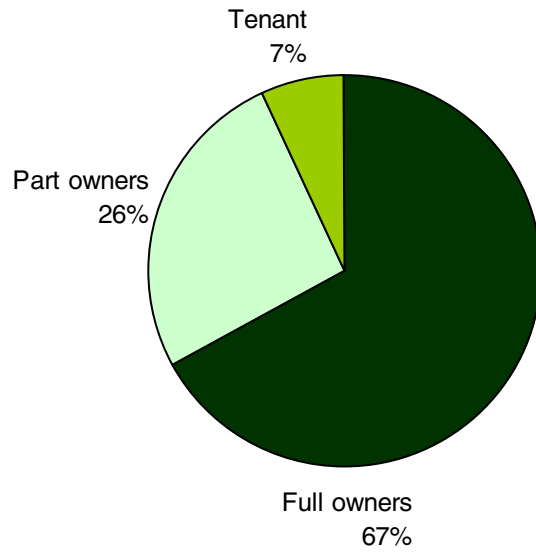
A greater portion California farmers (76.5%) are full owners (Figure 1.12) of their farms than in the United States as a whole (67.1%). Full ownership in California has been above two-thirds of the farms since 1940. Over 90 percent of the farms in California (91.5%) and the United States (94.3%) have no more than 2 operators per farm (Table 1.6).

FIGURE 1.12  
 Land ownership and farm operators, California and United States, 2002

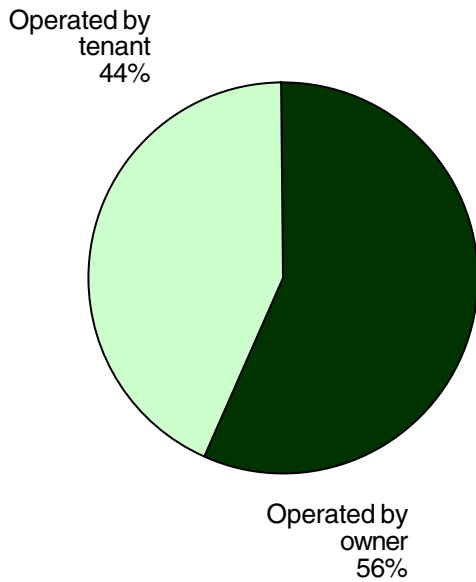
Share of farms, California



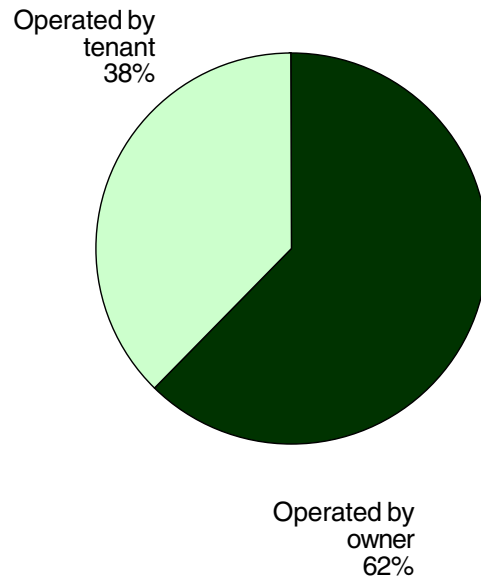
Share of farms, U.S.



Land in farms, California



Land in farms, U.S.



Source: USDA National Agricultural Statistics Service, *Census of Agriculture*, 2002.



TABLE 1.6

## Farms by number of operators per farm, California and United States, 2002

Operators per farm	California		United States	
	Number of farms	Percent	Number of farms	Percent
1	44,967	56.5	1,325,855	62.3
2	28,058	35.2	681,435	32.0
3	4,385	5.5	84,917	4.0
4	1,335	1.7	24,819	1.2
5 and more	886	1.1	11,956	0.6

Source: USDA National Agricultural Statistics Service, *Census of Agriculture*, 2002.

## Size distribution by total sales

A large share of California farms account for a small portion of state agricultural sales, and a small share of farms account for the majority of sales. Nearly 37,000 California farms (46 %) account for 0.3 percent of all agricultural sales (Table 1.7). Conversely, 10 percent of the farms, each with more than half a million dollars in sales, account for 86 percent of total sales (Figure 1.13). A similar picture can be seen for the whole United States. The major difference, however, is that the group of California farms selling over \$500,000 has average sales that are considerably higher than U.S. farms in the same sales class (\$2.7 million versus \$1.8 million).

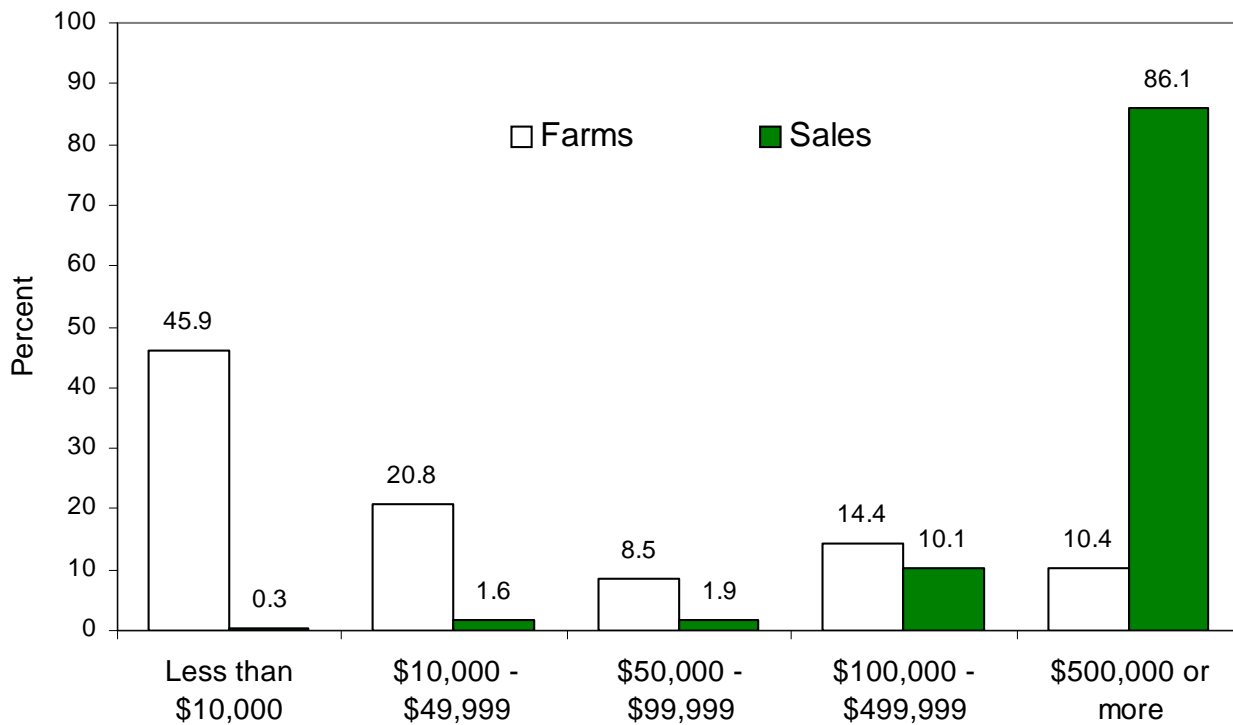
The size distribution by sales class and acres per farm varies with the nature of the commodities produced. See the section “Production by principal commodity group,” in Chapter 2, for a more detailed description.

TABLE 1.7  
 Number of farms and market value of sales by total sales class, 2002

Market value of agricultural products sold	California			United States		
	Number of farms	Sales value (\$1,000)	Average sales per farm (\$)	Number of farms	Sales value (\$1,000)	Average sales per farm (\$)
Less than \$10,000	36,602	85,149	2,326	1,262,285	2,825,097	2,238
\$10,000 - \$24,999	9,442	151,466	16,042	256,579	4,067,428	15,853
\$25,000 - \$49,999	7,168	251,402	35,073	158,270	5,593,748	35,343
\$50,000 - \$99,999	6,772	478,765	70,698	140,584	10,024,295	71,305
\$100,000 - \$499,999	11,462	2,601,575	226,974	240,696	53,931,713	224,066
\$500,000 or more	8,263	22,168,817	2,682,902	70,812	124,204,073	1,753,998
All	79,709	25,737,174	322,889	2,129,226	200,646,354	94,234

Source: USDA National Agricultural Statistics Service, *Census of Agriculture, 2002*.

FIGURE 1.13  
 Percent of farms and sales value by total sales class, California, 2002



Source: USDA National Agricultural Statistics Service, *Census of Agriculture, 2002*.

## Legal organization

Individuals or families control 81 percent of California's farms, a lower percentage compared to the United States as a whole (90 %). This type of legal organization accounts for 54 percent of the agricultural area and 33 percent of total sales in the state (Table 1.8).

In California, corporations account for 16 percent of the agricultural area and 38 percent of total sales. These firms are also larger in terms of the average value of land and buildings compared to individually owned or family farms (Table 1.8).

TABLE 1.8  
Legal organization of farms, California and United States, 2002<sup>a</sup>

California							
		Individual or family	Partner- ship	Corporation		Other <sup>a</sup>	All farms
				Family held	Not family held		
Farms	(percent)	80.9	11.2	5.4	1.0	1.5	100
Average area	(acres)	229	842	845	1,024	722	346
Total area	(percent)	53.5	27.3	13.2	3.0	3.1	100
Average sales	(\$1,000)	131.8	803.1	1,761.0	2,802.7	395.2	325
Total sales	(percent)	32.8	27.6	29.2	8.6	1.8	100
Average value of land and buildings	(\$1,000)	1,206.8	830.3	2,366.5	3,539.6	4,721.8	2,027
United States							
		Individual or family	Partner- ship	Corporation		Other <sup>a</sup>	All farms
				Family held	Not family held		
Farms	(percent)	89.7	6.1	3.1	0.3	0.8	100
Average area	(acres)	326	1,130	1,485	1,315	3,845	441
Total area	(percent)	66.3	15.6	10.4	0.9	7.0	100
Average sales	(\$1,000)	57.0	294.9	670.3	1,832.4	152.1	97
Total sales	(percent)	52.5	18.5	21.4	5.6	1.3	100
Average value of land and buildings	(\$1,000)	438.0	1,209.0	1,719.7	2,142.0	1,366.4	538

Source: USDA National Agricultural Statistics Service, *Census of Agriculture*, 2002.

<sup>a</sup>Includes cooperative, estate or trust, institutional, etc.

## Farmer demographics

Over the past 15 years the number of farm operators under 44 years of age has been decreasing steadily (Table 1.9). In 1987, 28 percent of California's farmers were younger than 44; that number fell to 18 percent in 2002. Older age groups have remained about the same or have increased since 1987. However, reported distribution of operators by age group could be misleading if family farms remain in the name of the oldest member, even when this person is no longer the primary decision maker in the farm business. It is also likely that farming is an attractive part time activity for those who retire from other occupations.

TABLE 1.9

### Farm operators by age group, California and United States, 1987-2002<sup>a</sup>

California								
Age (years)	<25	25-34	35-44	45-54	55-59	60-64	65-69	>69
Number of operators								
1987	539	6,327	16,613	19,368	10,336	10,636	8,619	10,779
1992	417	4,288	14,232	19,223	8,818	9,279	8,222	13,190
1997	466	4,255	15,301	23,473	10,597	9,194	8,376	16,329
2002	364	2,299	11,470	22,904	10,870	9,528	7,219	14,977
Percent								
1987	0.6	7.6	20.0	23.3	12.4	12.8	10.4	13.0
1992	0.5	5.5	18.3	24.7	11.4	11.9	10.6	17.0
1997	0.5	4.8	17.4	26.7	12.0	10.4	9.5	18.6
2002	0.5	2.9	14.4	28.8	13.7	12.0	9.1	18.8
United States								
Age (years)	<25	25-34	35-44	45-54	55-59	60-64	65-69	>69
Number of operators								
1987	35,851	242,688	411,153	454,910	247,908	247,908	191,435	255,906
1992	27,906	178,826	381,746	429,333	213,315	216,524	188,165	289,485
1997	23,771	154,839	444,003	552,170	251,956	229,264	201,873	358,000
2002	16,962	106,097	366,306	572,664	268,712	240,411	197,476	360,354
Percent								
1987	1.7	11.6	19.7	21.8	11.9	11.9	9.2	12.3
1992	1.4	9.3	19.8	22.3	11.1	11.2	9.8	15.0
1997	1.1	7.0	20.0	24.9	11.4	10.3	9.1	16.2
2002	0.8	5.0	17.2	26.9	12.6	11.3	9.3	16.9

Source: USDA National Agricultural Statistics Service, *Census of Agriculture*, 2002.

<sup>a</sup>1997 figures were revised in 2002.

About half of the 80,000 farmers in California reported in 2002 that they had not been employed off the farm during the previous year (Table 1.10). That same year more than 26,000 farm operators (one-third of the total) reported having worked off the farm for more than 200 days. The proportion of farm operators not employed off the farm increased 10 percentage points between 1987 and 2002, while those reporting working more than 200 days off the farm decreased by 6 percentage points.

TABLE 1.10

**Reported number of farm operators by number of days employed off the farm, California and United States, 1987-2002<sup>a</sup>**

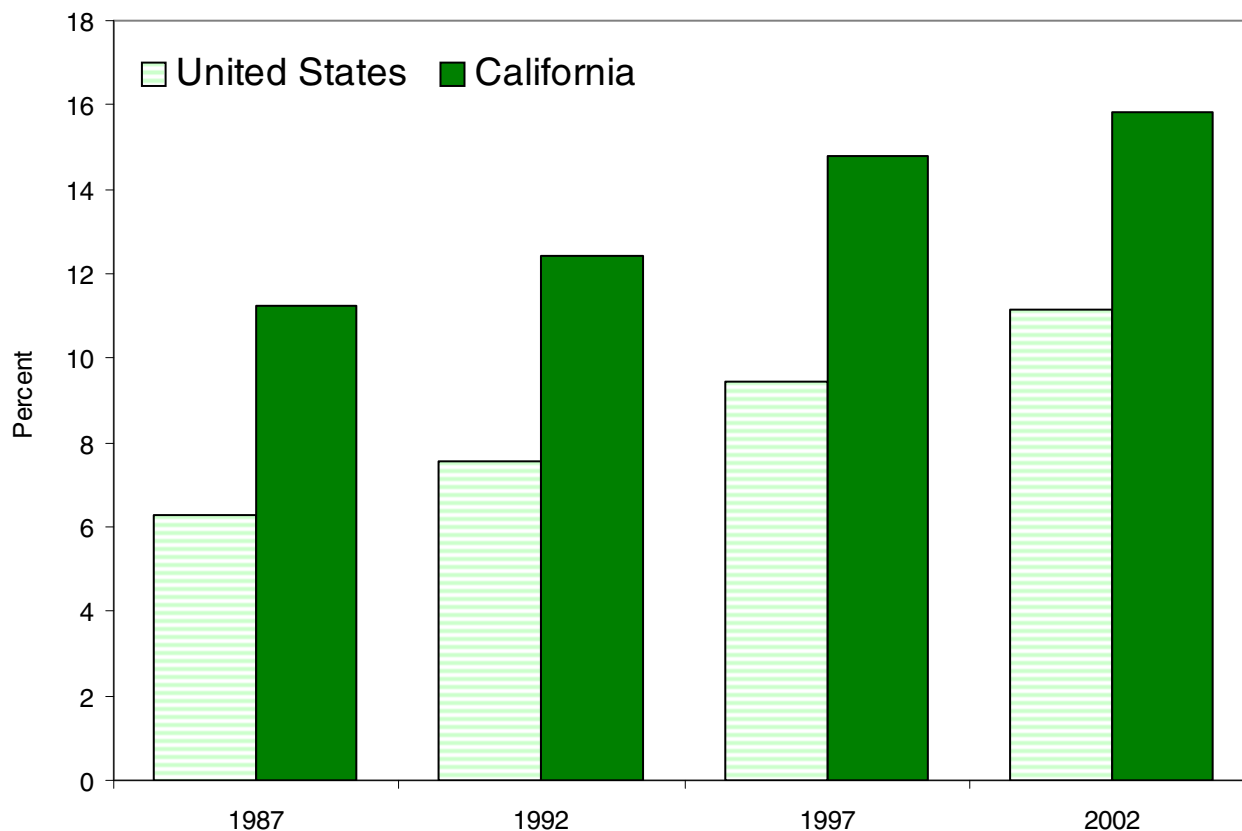
California						
Days	None	Any	1-49	50-99	100-199	≥ 200
Number of operators						
1987	32,051	47,085	4,991	2,832	8,314	30,948
1992	32,118	41,278	4,478	2,500	7,619	26,681
1997	35,359	47,362	5,045	2,939	7,109	30,644
2002	40,223	39,408	5,037	2,813	5,521	26,037
Percent						
1987	41	59	6	4	11	39
1992	44	56	6	3	10	36
1997	43	57	6	4	9	37
2002	51	49	6	4	7	33
United States						
	None	Any	1-49	50-99	100-199	≥ 200
Number of operators						
1987	844,476	1,115,560	135,116	64,915	178,323	737,206
1992	801,881	992,773	110,437	54,743	162,023	665,570
1997	832,585	1,254,537	120,650	65,346	167,922	870,945
2002	962,200	1,166,782	122,248	66,306	145,580	832,348
Percent						
1987	43.1	56.9	6.9	3.3	9.1	37.6
1992	44.7	55.3	6.2	3.1	9.0	37.1
1997	39.9	60.1	5.8	3.1	8.0	41.7
2002	45.2	54.8	5.7	3.1	6.8	39.1

Source: U.S. Census Bureau, *Census of Agriculture*, 1987-1992; USDA National Agricultural Statistics Service, *Census of Agriculture*, 1997-2002.

<sup>a</sup>1997 figures were revised in 2002.

FIGURE 1.14

### Females as a percent of principal farm operators, United States and California, 1987-2002



Source: USDA National Agricultural Statistics Service, *Census of Agriculture*, 1992, 1997, 2002.

The number of women with farm operator responsibilities reported in the census has been increasing for several years in both California and the nation as a whole, although California has always recorded a higher ratio of female to male operators than the rest of the country. At the same time as the total number of operators has decreased in California and the United States, the proportion of women operators has increased. Women farm operators in California accounted for nearly 16 percent of total principal operators in 2002, up from 11 percent in 1987 (Figure 1.14).

In 2002 the National Agricultural Statistical Service (NASS) implemented several activities to improve coverage of minority farm operators in their census reports. These activities included but were not limited to (1) obtaining mailing lists from organizations likely to contain names and addresses of minority farm operators, and (2) conducting pre-census promotional activities that targeted women, American Indian, African American and Spanish, Hispanic, or Latino origin farm operators. This factor may have led to increased minority figures in 2002 relative to previous years.

TABLE 1.11

## Principal farm operators by race, California and United States, 2002

All principal operators						
	White	Black or African American	American Indian or Alaskan native	Asian or Pacific Islander <sup>a</sup>	More than one race <sup>b</sup>	Total
California	74,044	278	977	3,780	552	79,631
United States	2,067,379	29,090	15,494	9,358	7,661	2,128,982
Principal operators of Spanish, Hispanic or Latino origin						
	White	Black or African American	American Indian or Alaskan native	Asian or Pacific Islander <sup>a</sup>	More than one race <sup>b</sup>	Total
California	6,940	29	303	342	97	7,711
United States	46,878	890	1,606	737	481	50,592

Source: USDA National Agricultural Statistics Service, *Census of Agriculture*, 2002.

<sup>a</sup>Includes Hawaiian native.

<sup>b</sup>Those reporting more than one race are not included in individual race categories.

Ethnicity cannot be compared accurately across censuses. In 2002, for the first time, respondents were given the option of marking more than one race. Only one option had been presented in the past, so many respondents who opted for two different race groups in 2002 may have chosen one race group in a previous census, even the group called “other,” which was no longer an option in 2002. In addition, ethnicity characteristics were not adjusted for the newly expanded coverage. Thus, recent agricultural censuses are not directly comparable with unadjusted 1997 data and earlier censuses.

Operators reporting Spanish, Hispanic or Latino ethnicity can be found in all race groups. For the 2002 *Census of Agriculture*, 7,711 principal operators in California reported Spanish, Hispanic or Latino ethnicity—10 percent of all California principal operators (Table 1.11). In the United States as a whole, only 2 percent of principal operators reported being of Spanish, Hispanic, or Latino origin.

