

## V.2 Multiplier Effects in the Central Valley

**A**griculture represents a much larger share of the Central Valley's economy than of the state as a whole. Through multiplier effects, agricultural production and processing account for about 21% of the Valley's income, 19% of its value added, and 25% of its employment. Within the Central Valley, the economic impacts of agriculture are even greater on the San Joaquin Valley's economy, while for the Sacramento Valley the impacts are smaller.

- Fresh and processed fruits, tree-nuts and vegetables represent over half of the economic impacts attributed to agriculture in the Central Valley. Dairy and poultry products and grains are also significant contributors to the regional economy.

TABLE 51

**Economic Impacts of the Central Valley's\* Agricultural Production and Processing, 1998**

Major Commodity Group	Direct Sales (\$1,000)	ECONOMIC IMPACTS ON CENTRAL VALLEY			
		Sales (\$1,000)	Total Income (\$1,000)	Value Added (\$1,000)	Number of Jobs**
Dairy / Poultry Farm Products and Processing	6,124,518	13,809,910	4,789,136	5,108,538	103,275
Livestock, Processed Meats	1,144,422	2,495,972	782,437	857,528	27,432
Cotton, Fabric/Yarn/Thread Mills	697,066	1,356,818	619,777	676,912	13,604
Food/Feed Grains, Hay and Flour/Grain Mill Products	4,118,794	7,991,260	2,988,004	3,248,265	71,802
Fruits, Tree-nuts, Vegetables, Processed Fruits/Vegetables, and Beverages	16,266,242	32,391,867	13,745,926	15,084,150	307,220
Sugar/Misc. Crops, and Confectionery Products	1,987,640	4,027,092	1,368,835	1,487,929	30,008
Greenhouse/Nursery Products	177,307	310,216	193,560	201,922	3,664
Other***	192,330	441,798	132,069	146,378	3,234
<b>Total</b>	<b>30,708,320</b>	<b>62,824,934</b>	<b>24,619,744</b>	<b>26,811,621</b>	<b>560,238</b>
Central Valley Total (agricultural and non-agricultural)			115,840,319	141,307,738	2,286,640
<b>Agriculture as a Percent of Central Valley Total</b>			<b>21.25%</b>	<b>18.97%</b>	<b>24.50%</b>

\*Central Valley is comprised of the San Joaquin and Sacramento Valleys.

\*\*Adjusted for inflation to 1998.

\*\*\*Includes vegetable oil mills, shortening/cooking oils, roasted coffee, and manufactured ice.

*Sources:*

1. Central Valley Personal Income 1998: Estimated applying 1997-98 growth rate for California.
2. Central Valley Value Added, 1998: Estimated applying 1997 Ratio of Gross State Product to Personal Income to 1998 Estimated Personal Income.
3. Central Valley Employment, 1998: Labor Market Information Division, EDD, Sacramento, Website Data File.
4. 1997 Economic Census, Manufacturing, Geographic Area Series, U.S. Census Bureau.

- Most of the Central Valley's agricultural activity is located in the San Joaquin Valley. There, agriculture accounts for about 32% of the total income, 28% of the value added, and 37% of the employment.

TABLE 52

**Economic Impacts of San Joaquin Valley's\* Agricultural Production and Processing, 1998**

Major Commodity Group	Direct Sales (\$1,000)	ECONOMIC IMPACTS ON SAN JOAQUIN VALLEY			
		Sales (\$1,000)	Total Income (\$1,000)	Value Added (\$1,000)	Number of Jobs**
Dairy / Poultry Farm Products, and Processing	5,698,406	12,819,012	4,371,597	4,664,565	98,297
Livestock, Processed Meats	948,842	2,089,354	628,538	690,243	22,673
Cotton, Fabric/Yarn/Thread Mills	687,951	1,328,987	599,638	655,276	13,522
Food/Feed Grains, Hay and Flour/Grain Mill Products	2,835,176	5,438,956	1,972,965	2,141,327	48,289
Fruits, Tree-nuts, Vegetables, Processed Fruits/Vegetables, and Beverages	13,334,219	26,414,293	11,051,423	12,116,863	263,733
Sugar/Misc. Crops and Confectionery Products	1,062,508	2,116,263	691,176	751,672	15,490
Greenhouse/Nursery Products	100,180	179,531	107,003	111,805	2,186
Other***	155,223	346,632	95,069	106,249	2,329
<b>Total</b>	<b>24,822,504</b>	<b>50,733,028</b>	<b>19,517,408</b>	<b>21,237,999</b>	<b>466,519</b>
San Joaquin Valley Total (agricultural and non-agricultural)			61,666,467	75,223,800	1,264,050
<b>Agriculture as a Percent of San Joaquin Valley Total</b>			<b>31.65%</b>	<b>28.23%</b>	<b>36.91%</b>

\*San Joaquin Valley is Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare counties.

\*\*Adjusted for inflation to 1998.

\*\*\*Includes vegetable oil mills, shortening/cooking oils, roasted coffee, and manufactured ice.

*Sources:*

1. San Joaquin Valley Personal Income 1998: Estimated applying 1997-98 growth rate for California.
2. San Joaquin Valley Value Added, 1998: Estimated applying 1997 Ratio of Gross State Product to Personal Income to 1998 Estimated Personal Income.
3. San Joaquin Valley Employment, 1998: Labor Market Information Division, EDD, Sacramento, Website Data File.
4. 1997 Economic Census, Manufacturing, Geographic Area Series, U.S. Census Bureau.

■ In the Sacramento Valley, the share of income and jobs related to agriculture is larger than for the state as a whole, but considerably smaller than in the San Joaquin Valley.

TABLE 53

**Economic Impacts of Sacramento Valley's\* Agricultural Production and Processing, 1998**

Major Commodity Group	Direct Sales (\$1,000)	ECONOMIC IMPACTS ON SACRAMENTO VALLEY			
		Sales (\$1,000)	Total Income (\$1,000)	Value Added (\$1,000)	Number of Jobs**
Dairy / Poultry Farm Products and Processing	509,802	800,385	279,739	297,400	4,552
Livestock, Processed Meats	196,325	395,143	137,613	150,075	4,587
Cotton, Fabric/Yarn/Thread Mills	8,286	15,562	6,791	7,409	139
Food/Feed Grains, Hay, and Flour/Grain Mill Products	1,279,476	2,343,070	919,407	1,003,029	21,279
Fruits, Tree-nuts, Vegetables, Processed Fruits/Vegetables, and Beverages	2,960,921	5,592,227	2,353,435	2,605,604	42,487
Sugar/Misc. Crops, and Confectionery Products	925,204	1,780,900	631,365	686,728	13,339
Greenhouse/Nursery Products	57,466	91,606	65,734	68,217	973
Other***	37,108	79,530	29,741	32,407	661
<b>Total</b>	<b>5,974,587</b>	<b>11,098,423</b>	<b>4,423,825</b>	<b>4,850,870</b>	<b>88,017</b>
Sacramento Valley Total (agricultural and non-agricultural)			54,173,852	66,083,938	1,022,590
<b>Agriculture as a Percent of Sacramento Valley Total</b>			<b>8.17%</b>	<b>7.34%</b>	<b>8.61%</b>

\* Sacramento Valley is Butte, Colusa, Glenn, Sacramento, Shasta, Solano, Sutter, Tehama, Yolo, and Yuba counties.

\*\* Adjusted for inflation to 1998.

\*\*\* Includes vegetable oil mills, shortening/cooking oils, roasted coffee, and manufactured ice.

**Sources:**

1. Sacramento Valley Personal Income 1998: Estimated applying 1997-98 growth rate for California.
2. Sacramento Valley Value Added, 1998: Estimated applying 1997 Ratio of Gross State Product to Personal Income to 1998 Est. Personal Income.
3. Sacramento Valley Employment, 1998: Labor Market Information Division, EDD, Sacramento, Website Data File.
4. 1997 Economic Census, Manufacturing, Geographic Area Series, U.S. Census Bureau.

- Farm related employment totals (employees, payroll, and firms) increased during the 1980's and 1990's, but at a slower rate than aggregate state employment totals. Thus, farm related employment decreased as a percent of the state's employees, payroll, and firms.

TABLE 54

**California Farm Related Employment Trends**

	1977	1982	1987	1992	1997
<b>Agricultural Services*</b>					
Number of Employees	29,168	34,275	39,129	43,911	48,722
Payroll (\$1,000)	301,134	463,325	608,750	776,427	1,014,847
Number of Firms	3,504	3,647	4,446	4,624	4,688
<b>Food Manufacturers*</b>					
Number of Employees	148,200	159,494	153,535	162,711	165,114
Payroll (\$1,000)	2,139,197	3,322,492	3,732,798	4,495,335	5,140,545
Number of Firms	2,370	2,359	2,574	2,755	2,906
<b>Agricultural Machinery*</b>					
Number of Employees	16,967	NA**	13,635	11,009	12,353
Payroll (\$1,000)	243,953	NA**	335,582	317,972	388,945
Number of Firms	882	940	969	855	900
<b>Agricultural Chemicals*</b>					
Number of Employees	3,559	3,129	2,086	1,884	1,645
Payroll (\$1,000)	53,882	66,537	58,496	67,466	50,819
Number of Firms	104	90	80	80	86
<b>Total Farm Related Employment*</b>					
Number of Employees	197,894	NA**	208,385	219,515	227,834
% of Total	2.96%	NA**	2.07%	2.05%	1.97%
Payroll (\$1,000)	2,738,166	NA**	4,735,626	5,657,200	6,595,156
% of Total	3.37%	NA**	2.10%	1.95%	1.78%
Number of Firms	6,860	7,036	8,069	8,314	8,580
% of Total	1.47%	1.34%	1.15%	1.11%	1.12%
<b>California Total***</b>					
Number of Employees	6,696,345	8,330,004	10,086,198	10,729,697	11,565,015
Payroll (\$1,000)	81,329,595	146,937,574	225,507,263	290,374,778	371,114,217
Number of Firms	465,944	526,168	703,258	746,789	766,009

\*The agricultural services sector includes establishments that work in crop and soil preparation, animal services, and farm labor and management. Landscape and garden services have been removed from this category. Food manufacturers include businesses that produce or process food, the agricultural machinery sector includes businesses that manufacture or sell farm or food processing equipment, and the agricultural chemicals sector captures manufacturers of agricultural fertilizer and pesticides.

\*\*Standard Industrial Classification 3523 (agricultural machinery manufacturing) was not disclosed for 1982 by County Business Patterns.

\*\*\*Excludes government employees, railroad employees, and self-employed persons.

Source: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns*, various years.

