

Hired workers on California farms

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Each year California farms mobilize workers to fill half a million seasonal jobs.

A vast and complex farm labor mobilization takes place every year in California. The most common statistic used to describe this annual mobilization is the estimate of employment of workers on California farms. Such figures do provide us with essential information, but a more complete picture emerges if we also examine estimates of the hired farm labor force—estimates that are only intermittently available.

In discussing hired labor on California farms we have to distinguish three concepts: (1) the hired work force, (2) employment, and (3) work done. The hired work force includes all individuals who do farm work for wages in the course of the year. Employment refers to the average number of individuals actually working at a particular time—for example, the week containing the twelfth day of the month. Employment may also refer to

the average number of persons employed during a period of time, such as a year. The third concept, work done, refers to the total hours of work done on farms during the year.

Farm employment estimates are published regularly. We have the least information about the hired farm labor force in California, although the Employment Development Department of the State of California recently made available data about the California hired farm labor force of 1978. Estimates of work done on California farms are only indirectly available, since published statistics group California, Oregon, and Washington together as a region. However, the dominance of California agriculture in this region makes these estimates useful in assessing changes. Although the 1978 hired farm work force figures are the only new data used in this article, the insights they provide are amplified when examined in conjunction with estimates of employment and work done.

Annual mobilization

In 1978 the hired work force consisted of 616,280 individuals who worked for wages on California farms (table 1). During the average week, only 218,400 of these workers were actually employed on California farms (table 2).

One could say that there were 218,400 jobs on California farms in 1978 and that each job was filled by 2.82 workers in the course of the year. However, it may be more appropriate to visualize the situation as one in which there were 616,280 jobs, most of them of short duration, and a year's employment is created when 2.82 of these average jobs are added together.

The annual mobilization is, in fact, more complex than these averages suggest. Employment and labor force estimates for 1978 indicate about 102,000 jobs that continued

TABLE 1. California agricultural workers and wages, 1978

Agricultural wage category	Earnings in nonagricultural occupations						Total
	\$0	\$1 to \$800	\$801 to \$4,000	\$4,001 to \$8,000	\$8,001 to \$12,000	\$12,001 and up	
	----- Number of workers and percent -----						
\$1 to \$800							
No. workers	222,410	22,770	27,740	14,530	7,940	12,180	307,570
% of all workers	36.09	3.70	4.49	2.36	1.28	1.97	49.91
\$801 to \$4,000							
No. workers	89,500	20,880	26,400	12,370	6,290	7,950	163,390
% all workers	14.52	3.39	4.28	2.00	1.01	1.29	26.52
\$4,001 to \$8,000							
No. workers	37,380	8,680	11,180	5,830	3,130	4,610	70,810
% all workers	6.07	1.40	1.81	.94	.51	.75	11.49
\$8,001 to \$12,000							
No. workers	19,330	3,590	4,880	3,150	1,770	2,360	35,080
% all workers	3.14	.58	.80	.51	.28	.38	5.69
\$12,001 and up							
No. workers	18,930	3,740	6,030	4,020	2,570	4,140	39,430
% all workers	3.07	.61	.98	.65	.42	.67	6.40
TOTAL							
No. workers	387,550	59,660	76,230	39,900	21,700	31,240	616,280
% all workers	62.89	9.68	12.37	6.48	3.53	5.07	100.00

Source: California, Employment Development Dept.

from year to year and over 500,000 seasonal jobs that were filled and vacated during the year.

Statewide employment figures do not convey a true picture of farm labor market dynamics. For example, in 1978 employment of hired farm workers statewide ranged from 166,900 in January to a high of 279,000 in September (a peak-trough ratio of 1.5), while employment in Fresno County (the largest agricultural county in the United States) ranged from 18,000 to 53,200 (ratio 2.9). Seasonal worker fluctuations are even more pronounced—74,600 to 167,100 for the state, 8,100 to 41,010 for Fresno County (table 2).

Fresno County illustrates local employment patterns in California agriculture. In May 1978, 18,020 seasonal workers were employed. By mid-June employment increased to almost 29,000, and in September reached 41,010. By the middle of October it declined to 16,560.

Month-to-month variations in employment are greater at the state than those at the county level in absolute terms, but much lower in relative terms. At the local level the number of seasonal jobs can more than double and can also decline by more than half in a month.

These sharp variations, often obscured in state data, stem from the farm and regional specialization in labor-intensive crops that characterize California agriculture. Such specialization has made it possible to take advantage of the relatively large areas with unique soil and climatic characteristics. Farm operators, in selecting crops to be grown, give most consideration to soil, market, and climate. Availability of labor only occasionally enters into the decision.

Earnings

The labor supply that has evolved to provide the workers needed on California farms is largely local. Employment figures indicate that, during the peak month, migrant workers constitute less than a third of the total number of farm workers employed. The dominance of local labor and the limited extent to which farm and nonfarm employment are combined tend to result in low annual earnings.

Of the 616,280 individuals who did some work for wages on California farms in 1978, 307,570 earned \$800 or less in agriculture. About 222,410 of these worked only in agriculture, and about 85,000 farm workers also had nonfarm earnings (table 1).

Although most of the 616,280 farm workers had relatively low annual earnings, several thousand earned more than \$12,000 from both farm and nonfarm work. Indeed, 4,140 individuals earned more than \$12,000 in agriculture and more than \$12,000 in non-

agriculture. Almost a quarter of the workers who had both farm and nonfarm jobs earned more than \$8,000 in nonfarm jobs during 1978. Over 38,000 farm workers earned more than \$8,000 in agricultural employment. And slightly more than 62 percent of all individuals employed on farms in 1978 had no other employment.

Numbers of employers

Distribution of workers by farm employers is bimodal: a relatively large number work for only one farm employer and no non-agricultural employer; another group works for one or more farms and one or more non-farm employers (table 3). In 1978, 261,280 individuals worked for only one farm employer and no nonfarm employers; 80,230 worked for one farm employer and one or more non-farm employers.

However, almost 5,000 individuals worked for more than 10 agricultural employers and no nonagricultural employers. An additional 21,000 worked for 10 or more farm employers and one or more nonfarm employers during the year, 9,650 of these for one or two non-agricultural employers, and 11,430 for three or more nonagricultural employers. Finally, 6,590 individuals worked for six or more agricultural employers and six or more nonagricultural employers.

These figures suggest that many California farm workers make a vigorous effort to find more employment—farm and nonfarm. However, from the available data, it is not possible to determine the extent to which working for more than one employer (farm and nonfarm) results in higher earnings. Low annual earnings suggest that multiple job-holding does not necessarily help to increase incomes, but we have no dependable information on the effectiveness of workers' job search efforts.

The farm labor market is changing. New patterns have emerged in employment, labor force, and work done.

During 1950-80, average employment of hired workers on California farms increased (1950-56), then decreased (1966-73), and then increased again (1974-80). Over the 30-year period, employment of seasonal workers during the peak month followed approximately the same pattern of increase, decrease, increase. Yet in 1980, average annual employment of hired workers was only 1 percent below the 1950 level, and that of seasonal workers and regular workers was very close to the 1950 level.

Some significant changes did occur, however, in the roles of family and hired labor. During 1950-80, average use of family labor dropped from 132,100 to 64,200, a decline of about 52 percent. Because about as many hired workers were employed in 1980 as in 1950, the relative share of family labor on farms during 1950-80 declined from 58 to about 28 percent.

The dominant change over the three decades was the absolute decline in employment of farmers and unpaid members of their families, and the increasing importance of seasonal and regular hired workers.

Estimates of the hired farm labor force are only intermittently available and have been published for only three years, 1965, 1966, and 1978. The total number of individuals who worked for wages on California farms in these years was 706,250, 689,904, and 616,280. Estimates of the total number of individuals who worked for wages during each of the four quarters, available only for 1965-72, as well as the annual data referred to previously, suggest that from 1965 to 1978 the number of individuals who worked during each of the four quarters has declined somewhat, but the few years for which we have

TABLE 2. California agricultural employment: total hired and seasonal workers, midmonth estimates, 1978

Month	State		Seasonal workers, selected counties	
	Total hired	Seasonal	Fresno	Tulare
January	166,900	81,900	20,930	11,650
February	170,300	77,000 L*	12,130	9,550
March	172,600	74,600	8,100 L	7,300 L
April	188,400	89,200	10,710	9,530
May	231,700	124,700	18,020	15,280
June	273,400	163,600	28,890	26,690 H
July	259,600	150,800	28,970	21,170
August	263,700	153,200	35,020	19,670
September	279,200	167,100 H	41,010 H	14,850
October	249,900	141,900	16,560	20,780
November	181,200	80,800	10,420	9,550
December	184,200	87,800	15,270	11,600
Annual average	218,400	116,000	20,500	14,800

Source: State of California, Employment Development Department, Employment Data and Research, Report 881M, January 1980.

* L means low month; H means high month.

data make it hazardous to describe trends.

Although estimates of work done are published only for the three Pacific states, California, Oregon, and Washington as a region, these figures shed additional light on patterns of farm employment in California.

The total hours of farm work done in the three states declined from 1.093 billion in 1950 to 624 million in 1979 (table 4). Most of

this decline was in meat animals, milk cows, poultry, and cotton, in each of which labor used decreased 50 percent or more. On the other hand, hours used to produce vegetables and fruit and nut crops, which account for half of the labor used on farms in the Pacific states, increased between 1960 and 1979.

This change in labor inputs—hours of work done—reflects changes both in tech-

nology and in volume of production. Over the years, California agriculture has accounted for more than three-quarters of the fruits, nuts, and vegetables produced by the three states.

It should be noted that labor used declined in those sectors where regular rather than seasonal workers are likely to be employed. Labor input increased in fruits, nuts, and vegetables, where seasonal labor is likely to be more important. This is consistent with the employment data showing stability of employment for seasonal and regular labor, and a decline in family labor. As farms become larger, the use of farmer and unpaid family labor has tended to decline relatively and absolutely. Increases in productivity per hour have been roughly offset by increases in the proportion of labor inputs provided by hired workers. The hired labor input has increased relatively but remained fairly stable in absolute terms.

Conclusion and questions

The farm labor market in California does an unheralded job of matching thousands of farm workers with jobs. There are few accounts of crop losses because farmers were unable to assemble adequate crews of farm workers. Average annual employment and the number of individuals who work for wages on farms show substantial year-to-year stability. Employment of seasonal farm workers has been relatively stable for more than a decade and the hired labor force has not been declining precipitously.

However, it should be noted that the statistics provide no indication of the share of work done by undocumented workers. We suspect that the aggregate stability in employment and the gradual change in size of the hired labor force may be to some degree an illusion. The low annual earnings of a relatively large share of the labor force leads to questions about the extent to which the workers achieve their employment and income goals, about which we do not have reliable information. If farm workers are not reaching their goals, the longer run availability of such workers to agriculture may become increasingly uncertain, particularly when employment in the nonfarm sectors of the economy increases. The increased employment of undocumented workers, about which we have only anecdotal and indirect evidence, can be interpreted as a substitution of foreign workers for domestic workers who are seeking to satisfy their aspirations in the nonfarm sectors of the economy or are leaving the labor market.

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TABLE 3. Workers on California farms by number of employers, 1978

Agricultural employers	Number of employers worked for by hired farm workers					Total
	Nonagricultural employers				Total	
	0	1,2	3-5	6-10		
----- Number of workers and percent -----						
1	No. workers	261,820	69,230	9,910	1,090	342,050
	% of total	42.48	11.23	1.62	.17	55.50
2	No. workers	57,530	33,130	7,740	950	99,350
	% of total	9.34	5.38	1.25	.15	16.12
3	No. workers	25,210	18,980	5,640	1,020	50,850
	% of total	4.09	3.08	.92	.16	8.25
4	No. workers	14,740	12,250	4,460	800	32,250
	% of total	2.39	1.99	.72	.14	5.23
5	No. workers	8,970	8,720	3,640	680	22,100
	% of total	1.46	1.41	.59	.13	3.59
6	No. workers	5,630	6,820	2,830	690	15,970
	% of total	.91	1.10	.46	.10	2.59
7	No. workers	3,910	4,560	2,370	650	11,490
	% of total	.63	.74	.38	.09	1.86
8	No. workers	3,010	3,980	1,920	540	9,450
	% of total	.49	.64	.31	.08	1.53
9	No. workers	1,810	2,800	1,620	540	6,770
	% of total	.29	.46	.25	.09	1.10
10 & more	No. workers	4,920	9,650	7,260	4,170	26,000
	% of total	.80	1.56	1.18	.68	4.22
TOTAL	No. workers	387,550	170,120	47,390	11,220	616,280
	% of total	62.89	27.61	7.69	1.82	100.00

Source: California. Employment Development Department.

TABLE 4. Labor: total hours used for farm work by selected enterprise groups, Pacific region, 1950-79

Year	All farm work	Meat animals	Milk cows	Poultry	Vegetables	Fruits and nuts	Cotton
----- Million hours -----							
1950	1,093	53	152	71	124	291	59
1955	953	61	140	57	124	253	44
1960	871	60	104	50	126	238	45
1965	724	56	73	41	124	211	26
1970	649	50	48	34	129	203	16
1975	651	41	29	22	158	223	12
1976	635	39	25	19	142	233	13
1977	623	37	21	17	153	226	13
1978	598	36	17	15	149	219	10
1979	624	35	13	13	156	243	11

Source: U.S. Economics and Statistics Service. *Economic Indicators of the Farm Sector: Production and Efficiency Statistics, 1979*. Statistical Bulletin No. 657, February 1981. Table 43, p. 63.