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FARM RESTRUCTURING AND EMPLOYMENT IN CALIFORNIA AGRICULTURE

Don Villarejo
California Institute for Rural Studies

DISCUSSION CHANGING STRUCTURE OF CALIFORNIA AGRICULTURE

Moderator: Suzanne Vaupel
Discussants: Bill Friedland
Ralph de Leon
Ben Maddock

California Institute for Rural Studies
P.O. Box 2143
Davis, California 95617

(916) 756-6555

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The Working Group on Farm Labor and Rural Poverty was formed in 1987 by professors at various campuses of the University of California in collaboration with the California Institute for Rural Studies, a non-profit research and educational institute located in Davis, California. The Working Group advisory board is composed of eight members from the University of California and nine members from the California community. The Working Group has four main goals: (1) to encourage and support policy-oriented research on rural labor and poverty in California; (2) to bring together academics, activists and policy-makers, both to define the research agenda and to carry on a continuing dialogue over policies; (3) to encourage, fund and assist organizational development and action-oriented research in rural California community groups; (4) to act as a clearinghouse for information on rural labor and poverty in the West. A library and other resources available to the public are maintained at CIRS in Davis.

The Working Group publishes a newsletter, Rural California Report, which is available free of charge, and it has issued the following papers:

Working Paper 1 – Don Villarejo
Farm Restructuring & Employment in California Agriculture

Working Paper 2 – Paul G. Barnett
Survey of Research on the Impacts of Pesticide on Agricultural Workers and the Rural Environment

Working Paper 3 – Michael Kearney & Carol Nagengast
Anthropological Perspectives on Transnational Communities in Rural California
J. Edward Taylor
Illegal Immigrants, California Agriculture and the Mexican Economy

Working Paper 4 – Philip L. Martin
The California Farm Labor Market

Working Paper 5 – Miriam J. Wells & Martha S. West
Regulation of the Farm Labor Market: An Assessment of Farm Worker Protections Under California's Agricultural Labor Relations Act

Working Paper 6 – Susan Peck
California Farmworker Housing

Working Paper 7 – Douglas B. Gwynn, Yoshio Kawamura,
Edward Dolber-Smith & Refugio I. Rochin
California's Rural Poor: Trends, Correlates, and Policies

Working Paper 8 – Paula Cruz Takash & Joaquin Avila
Latino Political Participation in Rural California

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EXECUTIVE SUMMARY

California's share of national crop production has been increasing over the past twenty years. This trend reflects a crop mix in the state that is now one-third field crops and two-thirds vegetable, fruit, nut and nursery products. By contrast, U.S. crop production is two-thirds field crops and one-third in the other crops. Clearly, California's agriculture is now dominated by labor-intensive crops.

In the period 1969-1987 California vegetable production (weight measure) increased by 78%, grape production increased by 33%, and tree fruit production increased by 9%. Nursery product output shows much greater increases in this same period but the changes can only be measured by farm market value, not by physical volume. Crops showing especially large increases in production include broccoli, cantaloupes, wine grapes and strawberries.

Consideration of labor needs for crop production shows that the crops with the greatest overall labor demand are, in order, grapes (all varieties), citrus, lettuce, strawberries, broccoli, cantaloupes, fresh tomatoes, Freestone peaches, avocados, carrots, canning tomatoes and cauliflower. Measures of overall labor demand are not available for nursery products or livestock products (dairy, poultry and eggs).

Direct employment of hired farm workers by farm operators in California declined throughout the 1980's, whether measured by total wages paid or annual average monthly employment (jobs). Strong increases in employment by farm labor contractors occured in the same period. It is shown that at least 40% of all wages paid for farm work in California today are paid by non-farm employers. This group of employers includes farm labor contractors, farm management companies, fresh fruit packing houses, and produce dealer-handlers. It is suggested that this pattern of increased reliance on labor market intermediaries is a response to labor market factors.

It is shown that the Census of Agriculture fails to adequately account for either wages or employment. Data for 1982 demonstrate that wages paid in California agriculture are at least 70% larger than reported to the Census. The most important reason for this discrepancy is that the Census collects data only from farm operators and not from non-farm employers.

Wage data reported by type of work activity on California farms in 1982 show that the share of all wages by type of crop is as follows: truck crops (vegetables), 24%; vineyards, 16%; orchards, 14%; horticultural crops, 11%. The remaining 34% of wages paid are distributed over a range of commodities.

Wage data for agricultural work are reported by all types of employers in connection with Workers Compensation Insurance and can be analyzed by size of employer payroll. During 1982 about $2.86 billion in wages for farm work were reported by 31,815 employers. The biggest 1,031 employers, each paying more than $500,000 in wages, account for just 3.2% of all employers paying wages for agricultural work, but they were responsible for 53.2% of all agricultural wages paid in 1982. The biggest 2,506 employers (7.9% of the total) paid 69.2% of all agricultural wages. This remarkable degree of concentration among California agricultural employers is shown to be characteristic of nearly all crop industries.

I. INTRODUCTION

Examination of California's large-scale agricultural production for 1978 makes it possible to identify most of the state's largest farming operations in existence at that time.[1] Of the twenty largest firms on that list, only seven remain intact today. Some are now out of business, others have sold most of their land, and still others now lease out all, or nearly all, of their land to other farm businesses. While the recent national farm recession may have been a significant factor in these changes, virtually all of the land involved remains in production, albeit with new management. The purpose of this paper is to draw attention to the structural changes taking place in California agriculture and their impact on the farm labor market.

II. DEMAND FOR AGRICULTURAL LABOR IN CALIFORNIA

Demand for labor is often examined by determining either the level of employment or total hours worked, both direct measures of labor expenditure. Since agriculture is essentially a seasonal activity and accurate data measuring labor input are generally not available, we must consider other, indirect, measures of agricultural labor demand.

The most important factors in determining labor demand for a particular crop are the average hours of labor required per unit area of production and the total production area. These can be expressed in hours of labor per crop-acre and production acres. Estimates of the first factor for most fruit, nut and vegetable crops under California production practices have been published.[2] Current data for the second factor are also available.[3] Using these data to compute an estimate of demand by crop, we can identify differential labor demand for various crops. Table I presents the result of such a computation for the 15 crops with the largest inferred labor demand in California.

TABLE I
Total Labor Demand by Crop, California, 1986

Crop	Hours/Acre	Acres	Demand (Million hours)
Wine grapes	112	312,300	35
Raisin grapes	103	276,900	29
Lettuce	145	145,500	21
Strawberries	1,286	15,600	20
Broccoli	185	106,400	20
Cantaloupes	231	79,100	18
Table grapes	202	81,600	16
Oranges	89	174,700	16
Tomatoes-pole	1,443		
bush	420	28,600	15
Lemons	274	48,700	13
Freestone peaches	401	24,800	10
Avocados	131	74,800	10
Carrots	235	40,000	9
Canning tomatoes	43	210,400	9
Cauliflower	162	53,000	9

The data in Table I should be regarded as estimates that merely help to identify those crops which, at present, offer the greatest demand for agricultural labor in California. Estimates of labor demand are not available for such important commodities as environmental horticulture crops or poultry products. Data concerning these commodities are discussed later in this paper.

III. TRENDS IN CALIFORNIA CROP PRODUCTION

The dominance of California agriculture in the production of fruits, nuts and vegetables is well established. Less well known is the emergence of California as the nation's leader in the production of environmental horticulture crops such as nursery products, flowers, foliage and mushrooms.[4] In addition, our state's production and harvested acreage of fruits, nuts and vegetables has increased markedly in the past 18 years with the important consequence that our share of national production of these crops has also increased significantly.

Figures 1 and 2 show the share segments for different types of crops in California and in the U.S. as a whole. Based on farm cash receipts, the distribution of national crop production can be compared to the distribution of California crop production as follows (national, California): field crops, 63%, 31%; vegetables, 12%, 31%; fruits and nuts, 10%, 29%; nursery crops, 8%, 9%; other crops, 7%, 0%. Thus, in California, roughly 2/3 of crop production is in fruits, nursery products, nuts, and vegetables and 1/3 in field crops. For national production the figures are, roughly, reversed: 2/3 in field crops and 1/3 in fruits, nursery products, nuts, and vegetables. It is of more than passing interest that the value of California's fruit, nut and vegetable crops, measured by combined farm cash receipts, now exceeds that of all U.S. wheat production, including the value of CCC loans.[5]

Recent shifts in the types of crops produced in California are illustrated in Figure 3. Declines in small grain, cotton and other field crop acreages more than offset increases in vegetable and fruit crop and set-aside acreages. Overall, California has seen a small decrease in irrigated crop production in the six-year period from 1980 through 1985.

Two major factors were responsible for the decline in field crop production. First, price declines for grains and cotton made their production less attractive. Decisions to switch to other crops, such as vegetables, have been encouraged by market forces. Second, government price and income support programs in the agricultural sector require that producers seeking program benefits "set aside" and not plant a certain fraction of their established base acreage of the crop for which they seek benefits. For example, the 1986 cotton program required that producers agree to reduce their cotton plantings by 25% in order to establish program eligibility.

Fruit and Vegetable Crops

Current data showing the rapid growth in both acreage and production of fruits and vegetables are available from a variety of sources.[6] Table II shows the increases of harvested acreage and production of grapes, tree fruits and vegetables for the period 1969-1987.

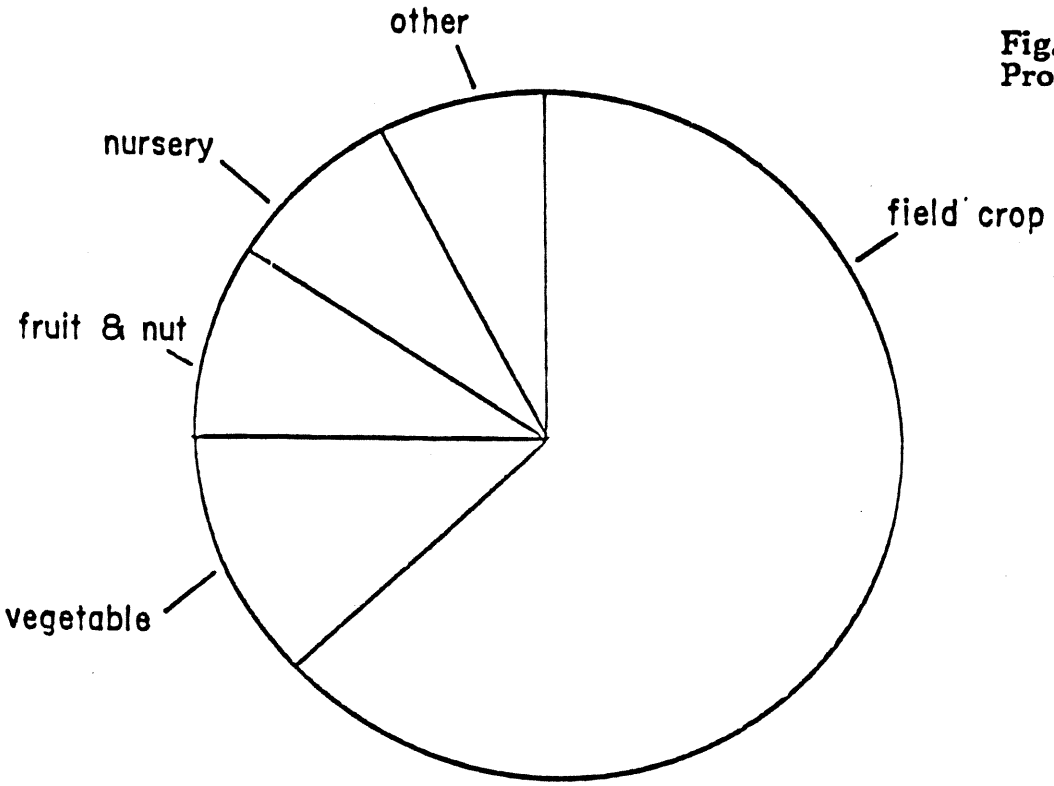


Fig. 1: U.S. Crop Production, 1985

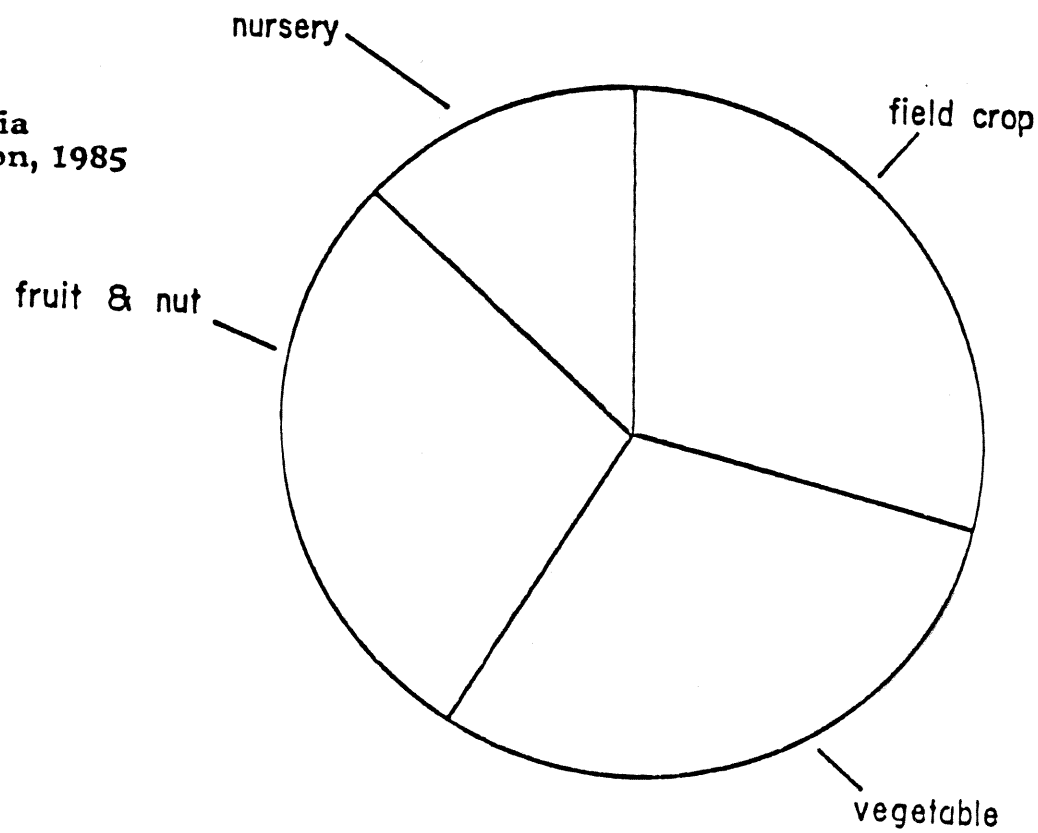
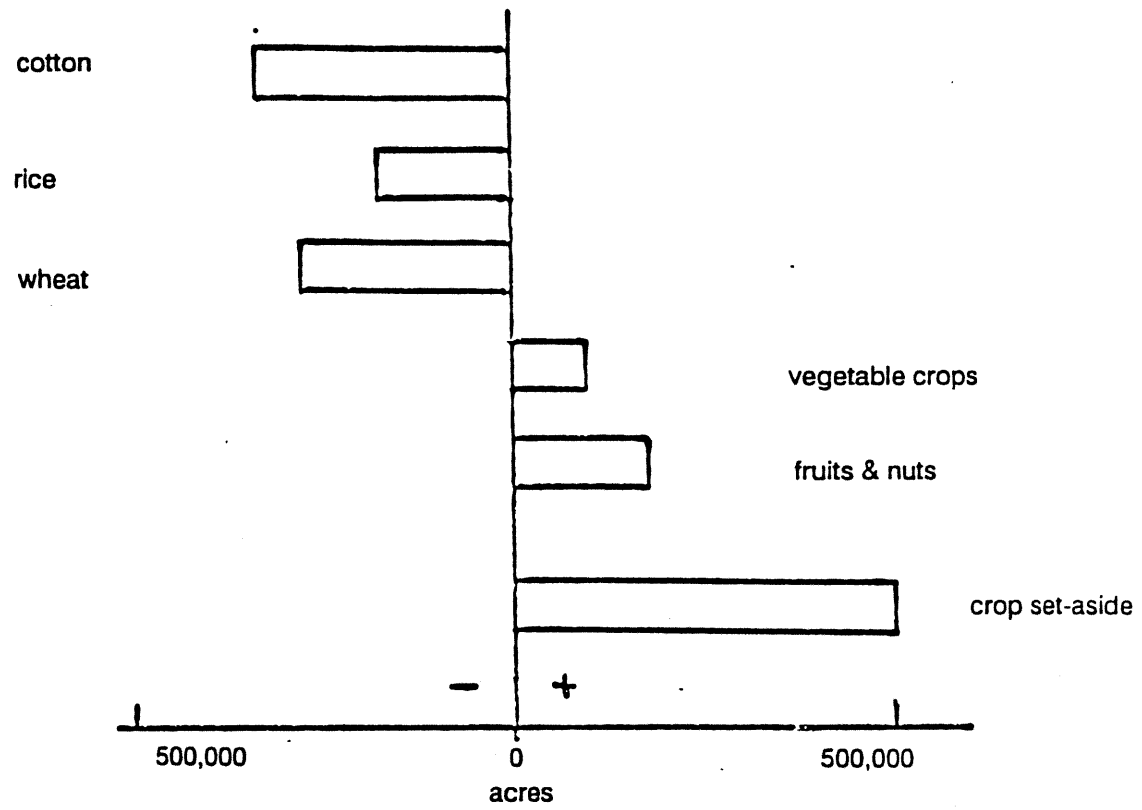


Fig. 2: California Crop Production, 1985

Figure 3

Change in Crop Land Use, California 1979-81 vs 1984-86



Expansion of production in this period was especially pronounced for grapes and vegetables, amounting to increases of 47% and 69%, respectively (Table II). Since the increase of vegetable production is roughly *twice* the increase of harvested vegetable acreage, we can attribute half of the increased production to expanded acreage and half to improved yields. In contrast, the increase of bearing fruit acreage differs much less from the increase of expanded fruit production. Especially in the case of grapes, nearly all of the expanded production is attributable to new plantings and not to changes in yield.

TABLE II
California Fruit and Vegetable Production, 1969-1987

BEARING OR HARVESTED ACRES (ANNUAL AVERAGE)

Commodity	1969-71	1985-87	Change	Per Cent
All Fruits	1,034,000	1,328,000	+294,000	+28.4
Grapes	450,000	674,000	+224,000	+49.7
Vegetables	728,000	1,003,000	+275,000	+37.8

PRODUCTION (SHORT TONS, IN THOUSANDS, ANNUAL AVERAGE)

Commodity	1969-71	1985-87	Change	Per Cent
All Fruits	7,660	10,663	+3,003	+39.2
Grapes	3,291	4,850	+1,559	+47.4
Vegetables	8,674	14,675	+6,001	+69.1

Source: California Crop and Livestock Reporting Service, *California Vegetable Crops, California Fruit and Nut Statistics,* various years.

Figure 4 shows the trend in harvested acreage of fruits and vegetables in California on a statewide basis for the period 1969-1986. The data is divided into three commodity groups: grapes, tree fruit and vegetables. The tree fruit group has experienced only a small increase over the period in question. The other two groups expanded rapidly. Increases in semi-tropical tree fruit plantings were nearly offset by a small decline in deciduous tree fruit production, mostly due to reductions in apricot and canning peach acreage. The reduction of canning fruit acreage was a direct result of earlier decisions by the leading fruit canning company to relocate some of its packing operations to Europe and South Africa, as well as falling U.S. per capita demand.[7]

Figure 5 shows the corresponding production data for the same period. Despite some dramatic swings in production due to climatic variations, the overall trend in the three groups is toward increased production.

The overall summary data for fruit and vegetable production shown in Figure 5 mask trends for specific crops. Important regional shifts in production have occurred for a number of crops in this period. Data concerning regional production of the most important fruit and vegetable crops are presented in Appendix I.

Figure 4

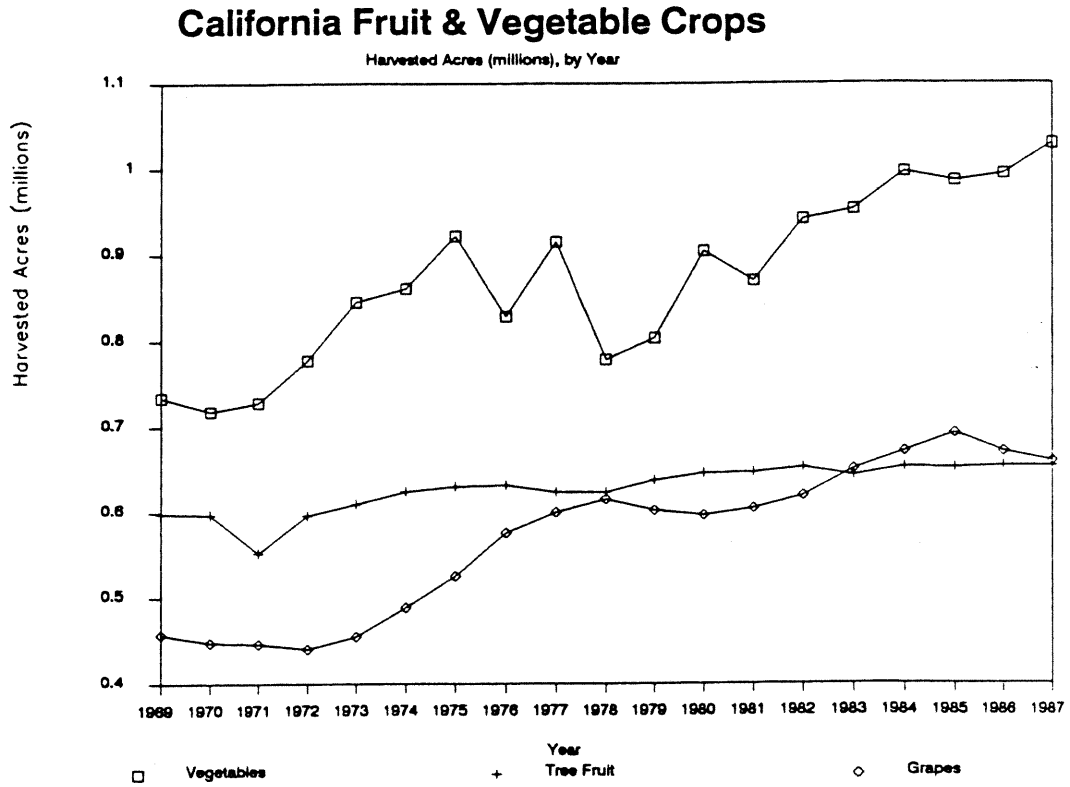
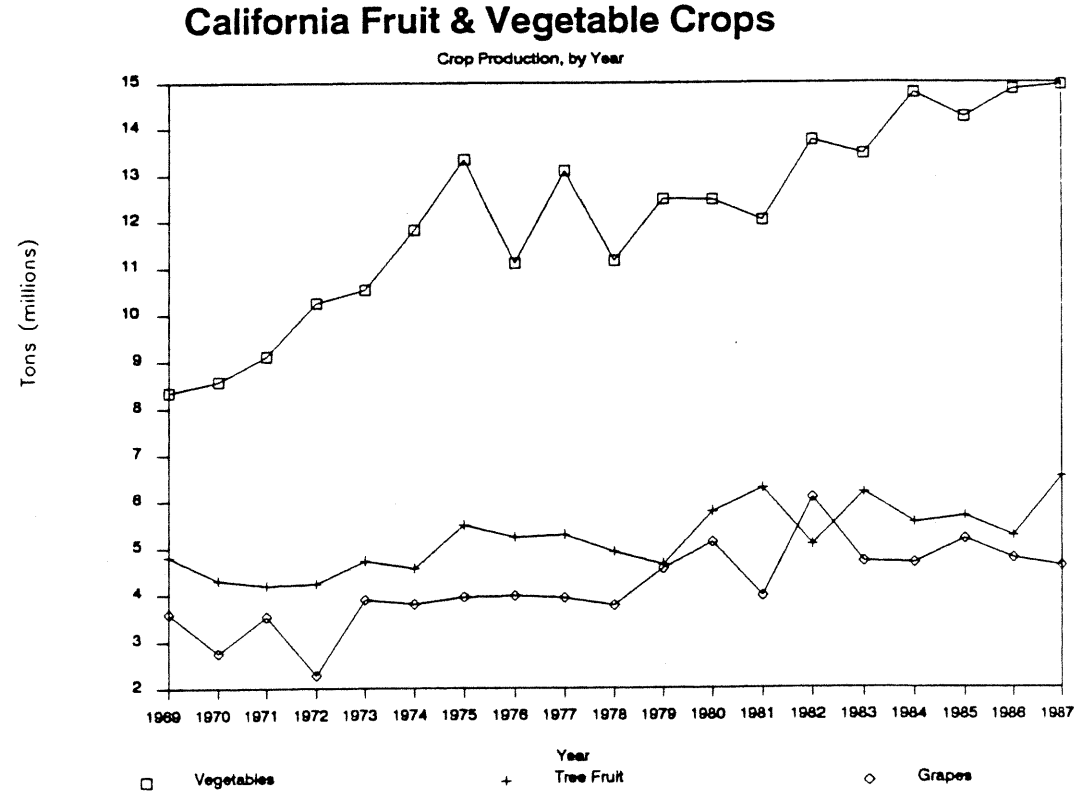


Figure 5



IV. TRENDS AMONG AGRICULTURAL EMPLOYERS

Analysis of employers in California agriculture is limited due to the paucity of data. However, the traditional reliance on Census of Agriculture data is, for California, no longer necessary. With the inclusion of agricultural employees in the state Unemployment Insurance (UI) program in 1976, data regarding wages, number of employers and so on became accessible. Martin has made extensive use of this new data source in his published works.[8]

We have identified an additional independent source of data for wages and number of employers by crop category. Workers Compensation Insurance laws protecting agricultural workers were enacted in California in the 1970's. As a result, employers must now report their annual wages by type of work activity (called "risk category") to their insurance carrier. In turn, all insurance carriers report these data to the Workers Compensation Insurance Rating Bureau, an industry-wide actuarial body that determines premium rates based upon the incidence of occupational injury for each category. We have been able to obtain a complete set of this reported information for the 1982 calendar year, as well as summary data for the period 1978-85, the latest year for which such data are available.[9]

Each of the three data sources described above provides certain unique elements. While some data overlap, there are aspects covered by each not reported by the others. For example, Census of Agriculture data refer to *farm operations*. Thus, agricultural activities conducted by non-farm businesses are not reported. Unemployment Insurance data, which are classified by the Standard Industrial Classification (SIC) code of the employer, refer only to the activity responsible for the largest portion of the firm's sales.[10] Thus, a diversified crop farm producing grapes, oranges and vegetables would be classified as just one of these three types, or as a general crop farm. UI data can not be used to determine the number of employers in a particular crop category or even the total wages paid in that crop category. But data are available for certain categories of agricultural service businesses, such as farm management companies and packing houses, that are not reported in the Census. Finally, while Workers Comp data do refer to the actual work activity of the employee, e.g., vineyard or orchard work, they do not identify the SIC code of the employer.

Summary UI data on major SIC categories for the period 1981-1987 have been published.[11] Figure 6 shows the UI annual average number of employees reported each month for "Agricultural Production - Crops." Figure 7 shows total wages paid by all reporting units classified as "Agricultural Production - Crops." Total wages paid by employers in the crop production category peaked in 1984. Since a worker may be hired by several employers in the course of a given time period, annual average employment is a measure of the number of *jobs* held and not a measure of the number of individuals holding these jobs.

The most striking feature of these data is the steady decline in the number of jobs. At the same time, the wages per job have increased. When seen from this point of view, the simplest interpretation of the data is that there has been a significant attrition (15%) of California crop-farm hiring in this seven-year period. However, other possibilities must also be considered.

One such possibility is that reductions in crop plantings are responsible. Figure 3 shows that reductions in plantings did occur for field crops, but there were expansions in plantings of vegetable and fruit and nut crops. Thus, one would expect that annual average monthly employment in field crops would be reduced but that the figures for fruits and vegetables would

Figure 6

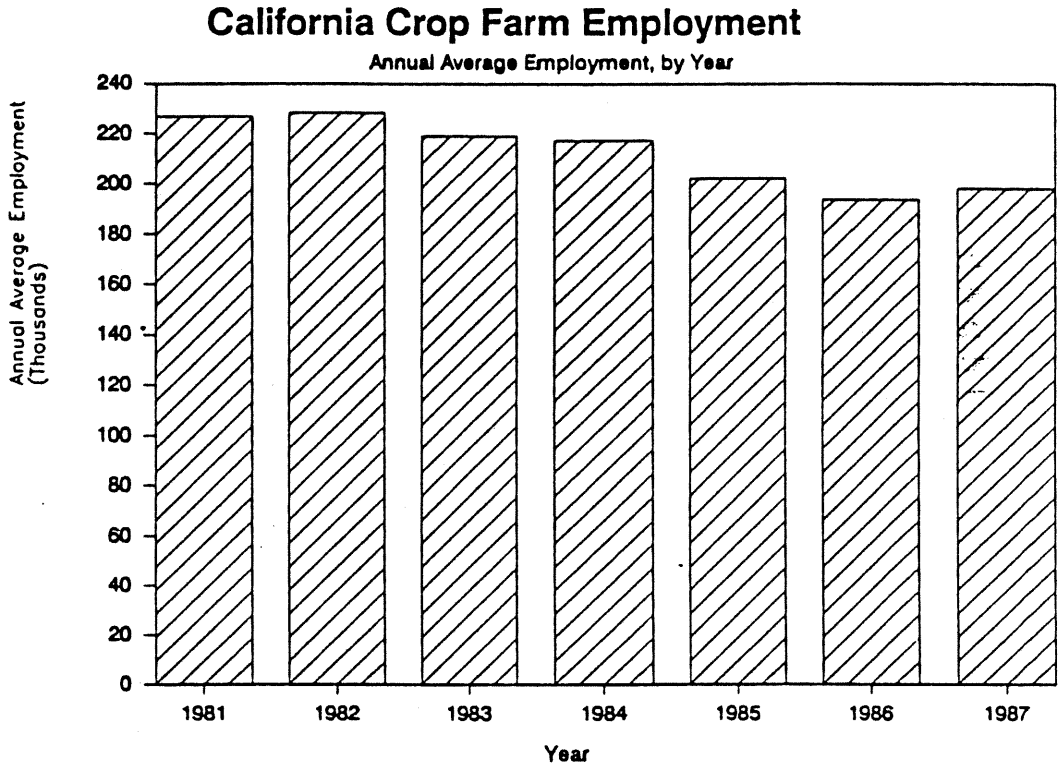


Figure 7

have increased. As shown in detail below, this expected employment increase in the labor-intensive crops did *not* occur. In fact, the opposite occurred: employment actually declined significantly in both the fruit and nut segment and the vegetable and melon segment. Hence, another explanation must be sought.

A partial explanation can be found by considering certain categories of employers: those whose major business activity does not involve the sale of agricultural commodities. Since UI data for "Agricultural Production - Crops" refers only to wages, employment and so forth for businesses deriving the *largest* share of their gross income from the sale of agricultural crops, it is necessary to consider the possibility that non-agricultural businesses have become more important employers during this period. Following Vaupel and Martin, we have obtained data for all Farm Labor Contractors reporting through the UI system (SIC Code 0761).[12]

Figure 8 shows the average annual number of employees (jobs) reported by farm labor contractors, taken from monthly reports. Figure 9 shows the total wages paid by all California farm labor contractors as reported through the UI system for the period 1978-1987. The steady increase in total wages is in marked contrast to the rather flat data for crop farm employers. The increase in jobs (+17,000) is also quite striking and corresponds to nearly 60% of the decline (-29,000) in direct-hire farm jobs shown in Figure 6.

Similar data for farm management companies have also been obtained from UI reports (SIC code 0762). Figure 10 shows the trend in the annual average number of employees (jobs) reported by farm management companies. Finally, Figure 11 shows the trend in total wages paid by this category of employer. While there is some fluctuation, there is little doubt that the overall trend has been an increase in wages paid by these employers. In this case the number of jobs seems to have been essentially constant. When combined with the wage data, this implies that income per job increased, probably indicating that the duration of jobs increased. Though important, it appears that farm management companies in California are no more significant today than they were a decade ago. This contrasts with the conclusion we derive from Figure 8 regarding farm labor contractors. The latter are much more important employers today than ten years ago.

In order to obtain a more complete picture of employment in all segments of agriculture, we need to add data for the livestock sector to the information already presented. These data are presented in Figures 12 and 13 which show, respectively, total wages paid by California livestock employers (SIC code 02) in the seven-year period 1981-1987 and, separately, annual average employment (jobs) for the same employers and time period.

Taken together, these data should account for the bulk of California agricultural employment. The only segment missing are those non-agricultural employers who are also active in farming. For example, fresh fruit packing houses often conduct picking operations for farm businesses. In this case, their agricultural activities are reported under the SIC code corresponding to fresh fruit packing (5148), artificially increasing reported wages for that activity while leaving the wages for picking unaccounted for.

Using UI wage data, Table III shows that the total of all wages paid by farm management companies and labor contractors increased by 56% while direct-hire farm wages increased by just 7%. Total wages increased by 13.5% over the same period, but when inflation is removed, they declined by over 9% (Table III, final column).

Figure 8

Figure 9

Figure 10

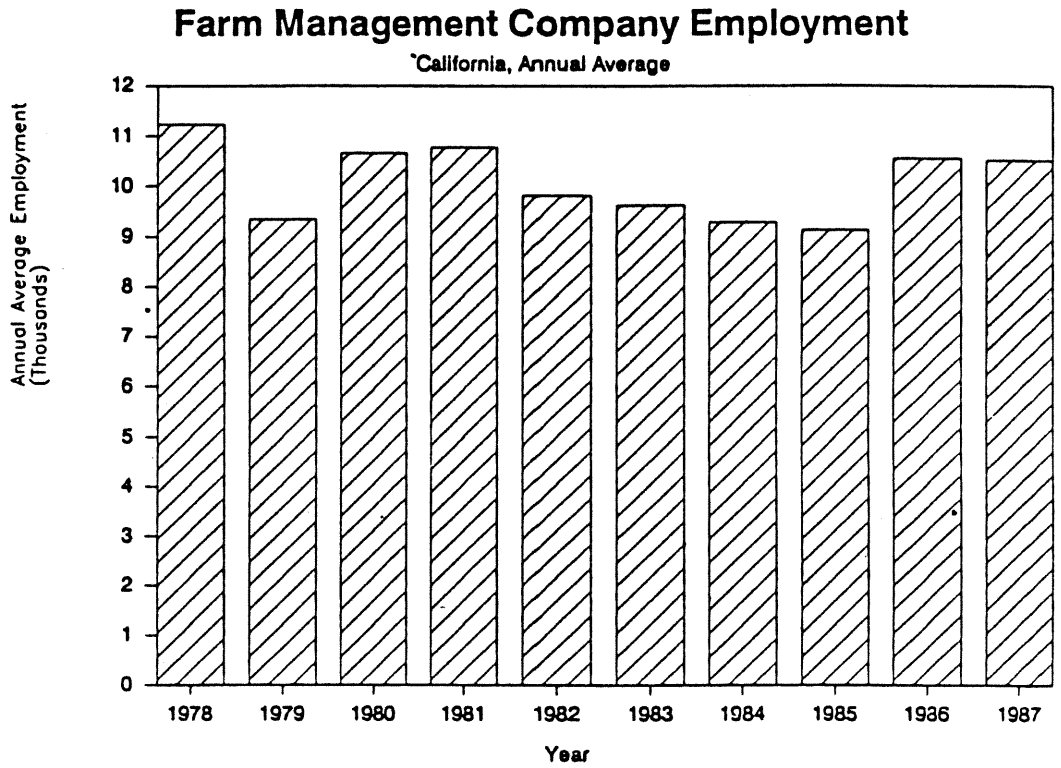


Figure 11

Figure 12

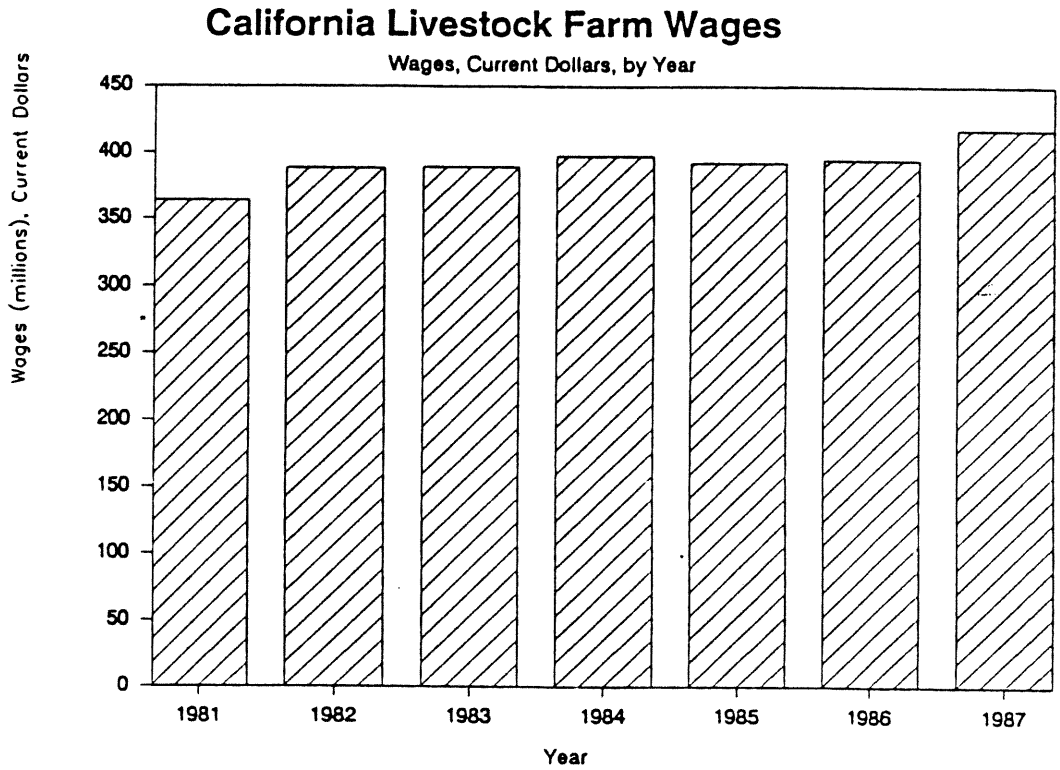


Figure 13

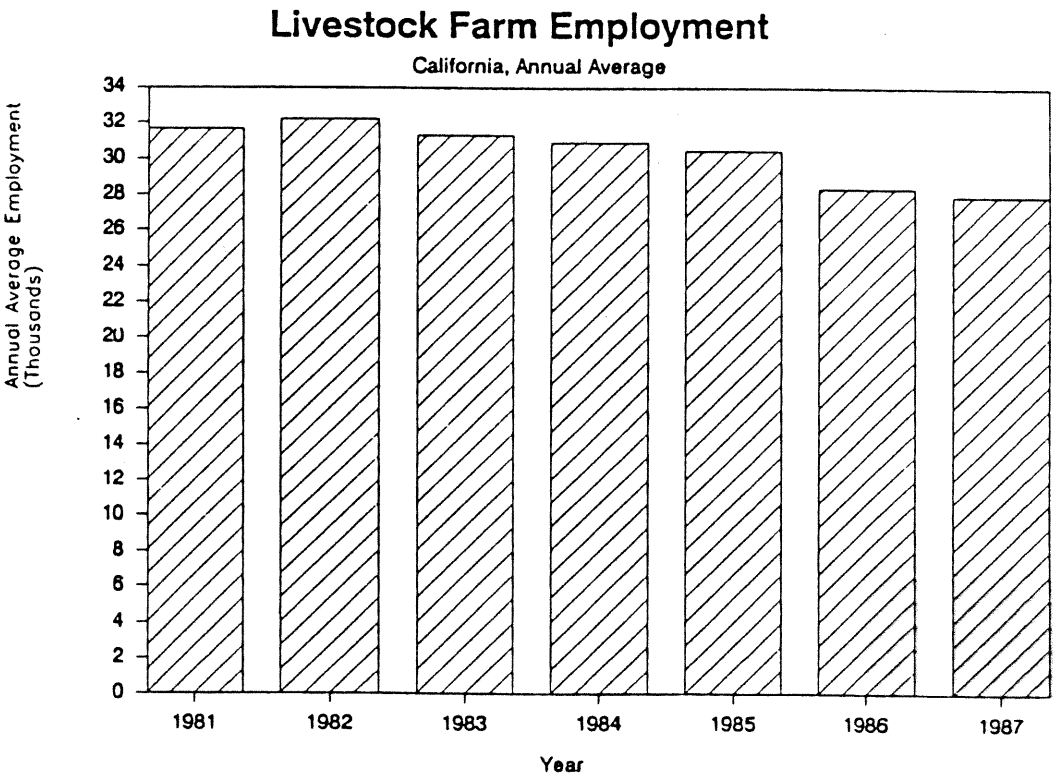


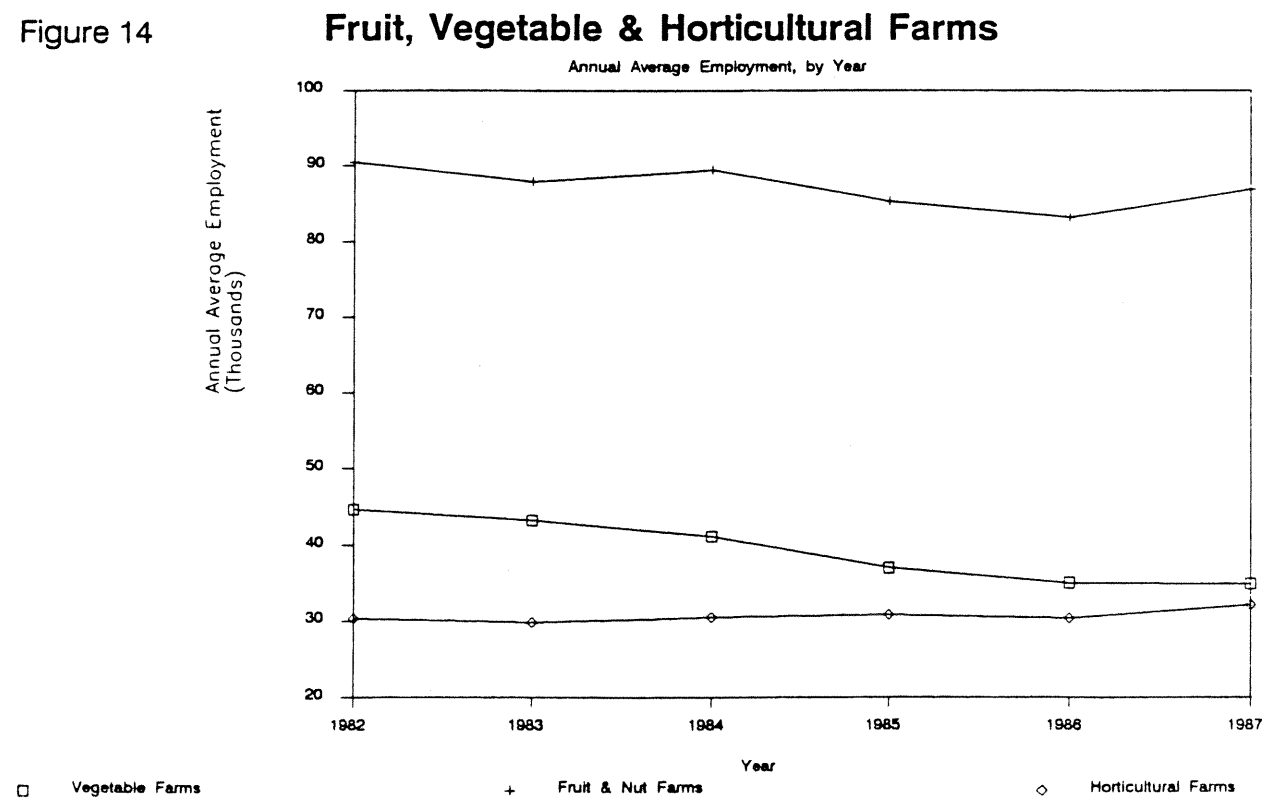
TABLE III
UI Wage Reports for California Crop and Livestock Farms and Farm Labor Contractors and Managers
(Wages in Millions of Dollars)

Year	Crop & Livestock Farms	Farm Management & Labor Contractors	Total Wages	Total Real Wages* (1981 $)
1981	2,508.8	367.4	2,876.2	2876.2
1982	2,613.8	373.1	2,986.9	2815.2
1983	2,613.5	391.7	3,105.2	2835.8
1984	2,699.4	412.6	3,112.0	2725.0
1985	2,583.6	434.7	3,018.3	2551.4
1986	2,525.7	462.8	2,988.5	2478.0
1987	2,693.5	571.5	3,265.0	2612.0

*Deflated by the Consumer Price Index for all items

Sources: State of California, Employment Development Department, Report 352, annual. Farm Management & Labor Contractor data furnished by EDD, private communication. CPI from Economic Report of the President, February 1988.

Figure 14



It is possible to use UI wage reports to examine trends in broad crop categories. We have obtained data for the following crop industries in California: Fruit & Nut Crops (SIC code 017), Vegetable & Melon Crops (SIC code 016), and Horticultural Specialty Crops (SIC code 018). Figure 14 shows annual average employees (jobs) for each of these three crop industries for the years 1983-1987. A decline in direct employment by fruit & nut farms and vegetable & melon farms is clearly evident. On the other hand, there is no significant change in the number of jobs in horticultural specialty crops.

There is an additional published source of data that bears on the question of the attrition of farm businesses. The California Employment Development Department publishes summary data for the third calendar quarter of each year.[13] These data show similar declines of reported wages, annual average employment and number of reporting units (employers), as described above for the period 1983-1986. One item reported in these third-quarter summaries is not available elsewhere: the size breakdown of employers.

Table IV shows comparative data on the size distribution of crop farm employers (SIC code 01) by the number of employees reported in the third calendar quarter. What is particularly interesting about Table IV is that it shows that the number of very large farm employers (500 employees or more) did not change in the eighteen-year period. On the other hand, the greatest percent decrease in number of farm employers between 1978 and 1986 is among farms with middle-size work forces. The overall decline in crop farm employers occurred primarily among moderate-size operations.

TABLE IV
Size Distribution of Crop Farm Employers

Number of employees	Number of Crop Farm Employers 1969	1978	1986	Change (%) 1978-1986
Less than 10	18,942	13,106	11,415	-13
10-19	2,792	2,626	2,141	-18
20-49	2,315	2,385	1,816	-24
50-99	696	959	653	-32
100-249	247	394	295	-25
250-499	35	82	56	-32
500 or more	26	26	26	0
Total	25,053	19,578	16,402	-16

Source: State of California, Employment Development Department, Report 524, 1978 & 1986. State of California, Department of Human Resources, Report 529, 1969 (Disability Insurance data).

A similar result is obtained by examining the aggregate number of *employees* in each size category. In this case UI data are only available for the period 1979-1986 (Table V).

While the aggregate employment among crop farms in the two largest size categories shows relatively small changes in the eight-year period, the changes in the moderate-size categories are quite substantial. The decline in the 250-499 size group amounts to 33%; in the 50-99 size group it is 24%. But among the smallest size group it is only 12%. In the largest size groups, 500 or more employees, there has been a decline amounting to just 3% over the period.

TABLE V
Size Distribution of Crop Farm Employees

Crop Farm with Specified Number of Employees	Aggregate Employees 1979	Aggregate Employees 1986	Change 1979-1986
Less than 10	38,683	34,155	-4,528
10-19	36,344	29,143	-7,201
20-49	72,128	55,999	-16,129
50-99	57,518	43,810	-13,708
100-249	56,490	43,261	-13,229
250-499	28,345	18,885	-9,460
500-999	11,286	12,207	+921
1000 or more	12,019	10,305	-1,714

Source: State of California, Employment Development Department, Report 524, July-September Quarter, 1979, 1986.

We conclude from this analysis that the attrition in farm businesses described at the outset of this section has been more noticeable among moderate-size farms than among the very largest or the very smallest crop-farm employers. This differential effect of greatest stress on moderate-size farm businesses has been noted elsewhere in descriptions of the farm debt crisis of the early 1980's.[14]

At this point it is useful to compare UI wage data with data reported by the Census of Agriculture. Census data include Hired Labor Expense, which refers to the total cost of direct-hire employees. In California this will include wages, employer taxes, and employer-paid benefits. Since UI wage data reflect only the first of the three items, it is necessary to determine the amounts of the second two items in the Census' Hired Labor Expense. We have been able to determine the exact value of required employer taxes as well as required Workers Compensation Insurance premiums. No estimates are available for the employers' costs of medical insurance, pension or retirement plan contributions or other similar benefits. Table VI shows this analysis for crop-farms reported in the 1982 Census of Agriculture.

TABLE VI
Hired Labor Expense and Wages, California, 1982
Census of Agriculture Data

Crop Farm Hired Labor Expense	$1,550,710,000
Estimated employer taxes	(166,190,000)
Estimated Workers Comp premiums	(76,668,000)
Net estimated wages - Crop Farms	$1,307,842,000

Source: *Census of Agriculture, 1982;* Employer taxes are obtained from USDA estimates of Social Security tax payments by crop farms (private communication) and from reported UI tax payments by crop farms, State of California, Employment Development Dept, Report 352, 1982, August 1983; Workers Comp premiums reported by Workers Compensation Insurance Rating Bureau (private communication).

When this figure of Crop Farm estimated wages is compared with the figure for 1982 UI wage reports, we find a very substantial discrepancy: UI wages for crop farms is reported to be $2,225,556,900. This latter figure is 70% larger than the figure reported by, presumably, the same farms to the Census. It is important to note that this estimate of the discrepancy is likely to be *understated* because no account has been taken of voluntary employer-paid benefits such as medical insurance and retirement plan contributions. A similar analysis applied to livestock farms (SIC code 02) shows that there is again a large discrepancy, but the difference amounts to just 51% in this case. We conclude that there is a large and unexplained systematic discrepancy between wages reported to the California UI system and wages reported by the same farms in the Census of Agriculture as Hired Labor Expense.

Workers Compensation Insurance Wage Reports

Table VII shows both the number of employers and total wages, as reported to the Workers Compensation Insurance Rating Bureau, for each agricultural job classification in 1982. We have separated on-farm activity from packing and handling activity where a significant, but unknown, share is performed off farm in packing houses, sheds and warehouses. These data demonstrate that truck crops (vegetables) account for the largest portion of aggregate wages paid to hired farm workers in California, followed in importance by vineyard wages, orchard crop wages and horticultural crop wages. Surprisingly, poultry and egg aggregate wages are nearly as large as aggregate wages reported by strawberry crop employers. This suggests that poultry and egg production must be regarded as just as significant an employer as is the strawberry crop industry. In this context, the large Horticultural crop wages confirm the previous observation of the major importance of this industry as an agricultural employer.

TABLE VII
Employers and Wages Reported by Workers Comp Insurers
California Agricultural Employers, 1982

Job Category	No. of Employers	Wages (millions)
Truck crops	3,649	$676.272
Vineyards	7,267	471.225
Orchard crops	10,924	401.056
Nursery crops	2,340	184.847
Cotton	2,382	152.733
Dairy	2,436	142.657
Florists-cultivation	1,140	125.218
Field crops	4,143	111.975
Strawberries	512	93.366
Poultry, eggs	1,164	81.142
Stock farms, feed lots	2,546	65.588
Contract machine work	1,641	51.633
Potato crops	968	43.031
Orchard-contract pruning	81	3.700
Orchard-contract spray	67	1.831
Sub-total	41,260	2,606.274
Produce dealers	379	98.428
Fresh fruit packing	368	53.220
Citrus fruit packing	100	52.944
Dried fruit packing	75	47.457
Sub-total	922	252.049

Figure 15 shows the distribution of total wages reported for each crop industry in 1982. Truck crop and vineyard wages together account for 40% of all hired farmworker wages. Orchard crop and horticultural wages account for a combined total of 25%. Thus, these four crop industries are responsible for 2/3 of all wages paid to California farmworkers.

We obtained the 1982 Workers Comp wage data in a form that made it possible to aggregate wages for each employer, irrespective of job category. Thus, an employer with both vineyard and orchard crop employment appears as two entries in Table VII. Consequently, the total number of employers reporting wages for agricultural activities is less than the total of 42,182 inferred from Table VII. Our analysis indicates that the actual number of employers is 31,815. Clearly, a large number of employers paid wages in 1982 in two or more job categories.

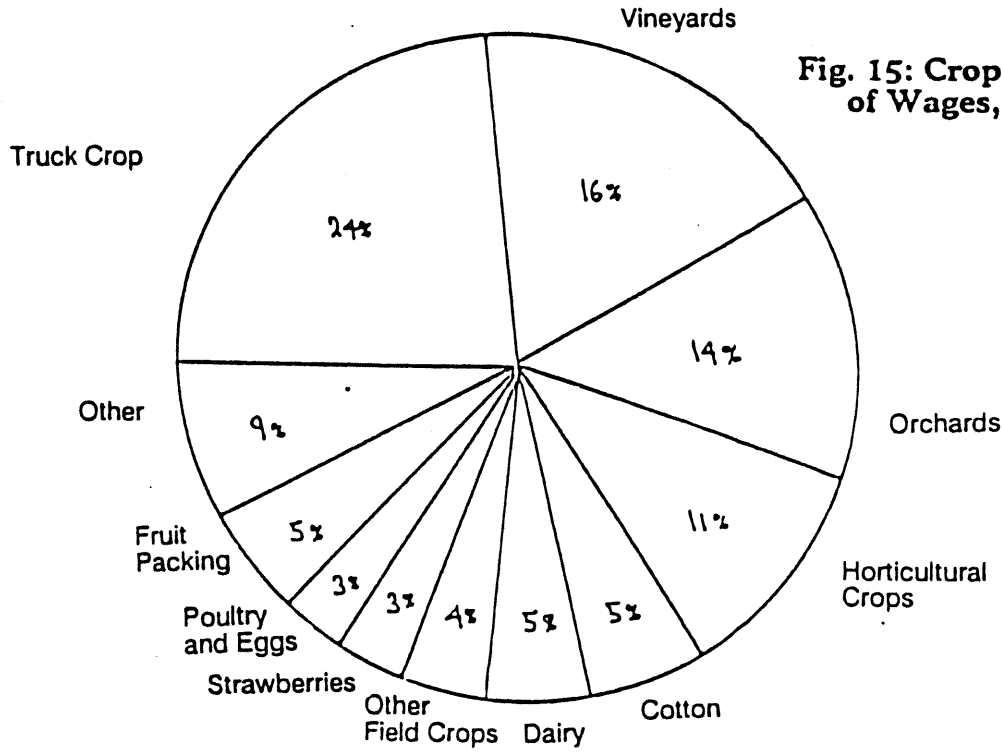


Fig. 15: Crop Industry Shares of Wages, California, 1982

Table VIII shows our data for the size distribution of wages paid, classified by the size of total payroll for agricultural job categories.

TABLE VIII
Size Distribution of Agricultural Employer Payrolls
California Employers, 1982

Size of Payroll	No. of Employers	Wages (millions)	Per Cent
$10,000 or less	12,850	$46.883	1.6
$10,001-$50,000	10,620	259.393	9.1
$50,001-$100,000	3,525	250.757	8.8
$100,001-$200,000	2,314	324.244	11.3
$200,001-$500,000	1,475	456.025	16.0
$500,001-$1,000,000	576	397.747	13.9
$1,000,001-$2,000,000	277	377.457	13.2
$2,000,001-$5,000,000	143	425.609	14.9
Over $5,000,000	35	320.209	11.2
Total	31,815	$2,858.324	100.0

Source: Workers Compensation Insurance Rating Bureau of California data tape furnished to CIRS.

The most striking feature of Table VIII is the concentration of wages. The 455 largest employers (measured by size of payroll) account for 39.3% of all wages paid to hired farmworkers but represent only 1.4% of the employers. The biggest 1,031 agricultural employers (3.2% of the total) paid 53.2% of all agricultural wages in 1982. Further, the biggest 2,506 employers (7.9% of the total) paid 69.2% of all wages.

The only other data available to measure the degree of concentration by size of wage expense are found in the Census of Agriculture. However, the wage expense categories used there refer to very small expenditures as compared with our findings shown in Table VIII. For example, the largest labor expense category in the Census data is the size group $50,000 or more. The 1982 Census reports 5,825 farms with direct employee expenses in this size range, and the total direct farm labor expense for these farms was $1,540.626 million. Our data show 8,345 employers with *wages* in the size range $50,000 or more and their total *wage* payments were $2,552.048 million.

As noted previously in comparing UI wage reports, the Census data substantially understate total wages. Even if all contract labor expenditures reported by the Census are attributed to employers with direct-hire labor expenditures of $50,000 or more, the total would be just $1,954.492 million, far less than our findings from Workers Comp wage reports. The Census wage total is substantially *lower* than the total reported to Workers Comp insurance carriers. In this independent determination we find that the discrepancy amounts to at least 48%.

A comparison of wage data reported through Workers Comp insurance carriers and the data reported through the UI system is also possible. This is shown in Table IX.

TABLE IX
Total Hired and Contract Farm Labor Wages
Three Data Sources, California, 1982

Source	Total Wages (millions)
UI System wage reports	$2,986.9
Workers Comp wage reports	2,858.3
Census of Agriculture	1,937.1

Note: 1982 Census of Agriculture total of $2,233.089 million in hired and contract labor expense has been corrected for employer taxes and Workers Comp premium payments.

The most remarkable feature concerning the wage data for California presented in Table IX is the excellent agreement between the total wage figures reported through the UI system and through Workers Comp insurance carriers. The fact that the UI system wage data exceed the wage data reported through Workers Comp insurance carriers is also understandable. UI wage data are those reported for *all employees* whose employers' SIC codes correspond to 01, 02, 0761, and 0762. Thus, clerical employees' wages are reported together with those of field hands. On the other hand, Workers Comp insurance carriers insist that clerical employees' wages be separately tabulated under the appropriate job categories, so they are not included in the totals reported here.[15]

There are several types of employers not included in the Census of Agriculture which account for at least some portion of the roughly $1 billion discrepancy. First, as mentioned previously, packing houses frequently employ workers in the orchards and fields as well as in the packing houses. Second, employees of farm management companies are excluded from Census totals.[16] As determined from UI wage reports, this latter category amounted to $109.7 million in 1982.

Agricultural Activities of Packing Houses

It is possible to make use of the Workers Comp wage data to analyze the types of work activities, and corresponding wages, reported by employers who paid wages for fruit packing. There are three job categories of fruit packing employers: Fresh Fruit, Citrus Fruit and Dried Fruit. We consider here only the first two categories.

Mines and Anzaldua studied the role of the citrus packing house in the citrus industry and have noted the importance of picking crews employed by packing houses.[17] We used the wage data reported through the Workers Comp system to select those employers who paid at least some wages in the two fruit packing categories (Fresh Fruit or Citrus Fruit) and then determined the wages paid in all other categories of job activity by these employers. It was found that 455 employers reported wages paid in either the Fresh or Citrus fruit packing categories (including 13 reporting wages paid in both). Of that number, 332 reported additional wages paid in either Orchard or Vineyard job categories. Thus, 73% of fresh or citrus fruit packers also report direct in-field agricultural activities as well as packing. While some of these employers are likely to report to the Census or to UI as farm businesses, it is certain that many among them do not. The total wages reported by these 332 packing employers in the orchard and vineyard job categories was $167.9 million, approximately 19% of *all* vineyard and orchard wages. It is not possible to determine which, if any, of these 332 packing businesses reporting through the Workers Comp system are farms as defined by the Census of Agriculture. Thus, we can not precisely determine the fraction of all orchard and vineyard wages overlooked in the Census of Agriculture. In any case, these "missing" wages appear to be quite significant.

Table X shows the size distribution of Orchard wages paid by the citrus and fresh fruit packing employers. Note especially the large concentration of employers among the higher payroll sizes.

TABLE X
Size Distribution of Orchard Work Payrolls
California Citrus and Fresh Fruit Packing Employers, 1982

Size of Orchard Payroll	No. of Employers	Wages (millions)
$10,000 or less	18	$0.1
$10,001-$50,000	87	2.5
$50,001-$100,000	62	4.5
$100,001-$200,000	48	7.2
$200,001-$500,000	48	15.5
$500,001-$1,000,000	15	9.7
$1,000,001-$2,000,000	17	24.0
$2,000,001-$5,000,000	4	12.7
Over $5,000,000	-	-
Total	299	$76.1

Source: Workers Compensation Insurance Rating Bureau, data tape furnished to CIRS.

Comparing this result with that presented in Table VII for all orchard employers, we find that the citrus and fresh fruit packing employers comprise only 2.9% of all orchard employers but are responsible for 19% of all orchard job wages. And of the 41 orchard employers with wage bills exceeding $1,000,000, there are 21 that are citrus or fresh fruit packing employers, demonstrating the importance of packing houses in direct in-field agricultural employment.

Table XI presents similar data for vineyard activity wages paid by citrus and fresh fruit packing employers.

TABLE XI
Size Distribution of Vineyard Payrolls
California Citrus and Fresh Fruit Packing Employers, 1982

Size of Vineyard Payroll	No. of Employers	Wages (millions)
$10,000 or less	24	$0.1
$10,001-$50,000	38	1.1
$50,001-$100,000	20	1.5
$100,001-$200,000	19	2.8
$200,001-$500,000	24	7.2
$500,001-$1,000,000	14	9.8
$1,000,001-$2,000,000	12	15.6
$2,000,001-$5,000,000	8	25.0
Over $5,000,000	3	28.7
Total	162	$91.8

Source: Workers Compensation Insurance Rating Bureau, data tape furnished to CIRS.

As with orchard wages, we find that citrus and fresh fruit packing employers pay a considerable share of all vineyard wages. Comprising just 2.2% of all vineyard employers, those with packing activities account for 19.5% of all vineyard job wages. They also have a disproportionate share of the very largest vineyard payrolls. Of the 63 employers with payrolls exceeding $1,000,000 for vineyard work, 23 are also citrus or fresh fruit packers.

Our finding of orchard or vineyard payrolls totalling some $167.9 million for citrus or fresh fruit packing employers can be compared with the discrepancy of $146 million in estimated Census of Agriculture wage reports. It appears likely that non-farm businesses excluded from the Census because they are not farms, such as packing houses, could readily account for most, if not all, of the wages missing from Census tabulations. It is not possible for us to allocate the orchard and vineyard payrolls of citrus and fresh fruit packing employers among "farm" and "non-farm" businesses to further refine our analysis. The California Agricultural Labor Relations Board has been made fully aware of the role of packing house employers and has issued special regulations for this group of agricultural employers.[18]

There is one additional category of job activity for which citrus and fresh fruit packing employers report substantial wages in addition to the orchard and vineyard activities reported above. Some 42 of the employers with citrus and fresh fruit packing activity report paying wages for truck crop work. The total wages they report in the truck crop category is $41.0 million. It is likely that at least some portion of this latter sum represents wages not reported to the Census.

Finally, it is worth noting that the total wage bill of the citrus and fresh fruit packing employers for all direct agricultural activities is $220.6 million. About 95% of this sum represents wages paid for orchard, truck crop or vineyard work. The discrepancy between reported Census wages and the other two direct sources of wage reports for these categories of employment is $450.3, still too large to be fully accounted for by considering the agricultural activities of non-farm citrus and fresh fruit packing businesses alone.

Farm Labor Contractors as Major Employers

Vaupel and Martin have provided an extensive analysis of the increased importance of farm labor contractors (FLCs) in California agriculture in recent years.[19] However, their data extend only through 1983. As demonstrated earlier in this paper, statewide employment by FLCs has continued to expand. Vaupel and Martin reported that 2/3 of all California FLC wages paid in 1983 were for activity in the San Joaquin Valley.[20] To illustrate the rapid changes in employment patterns in the period subsequent to 1983, we show in Table XII data for the third calendar quarters of 1983 and 1987 regarding wages and employment in the San Joaquin Valley.

TABLE XII
Wages and Employment, San Joaquin Valley, 3rd Quarter
Fruit and Vegetable Farms, Farm Management and FLC Employers

Employer	EMPLOYMENT July	August	September	Wages (millions)
3RD QUARTER, 1983				
Vegetables (direct hire)	11,786	11,057	11,323	$26.4
Fruits (direct hire)	51,650	75,769	110,296	138.3
FLC	44,449	48,671	63,624	70.9
Farm management	5,548	4,382	5,216	15.0
Total wages				$250.6
3RD QUARTER, 1987				
Vegetables (direct hire)	8,398	8,025	7,010	$23.1
Fruits (direct hire)	49,555	71,314	83,510	129.1
FLC	59,308	64,489	72,488	94.9
Farm management	8,276	8,426	7,878	23.3
Total wages				$270.5
CHANGE, 3RD QUARTER, 1983-87, PER CENT				
Vegetables (direct hire)	-29%	-27%	-38%	-12%
Fruits (direct hire)	-4%	-6%	-24%	-9%
FLC	+33%	+32%	+14%	+34%
Farm management	+49%	+92%	+51%	+56%
Total wages				+8%

Source: State of California, EDD, private communication.

These data directly demonstrate that labor contractors and farm management companies are taking the place of direct hire employment. Of particular interest in this set of data is the fact that total wages increased by 8% between 1983 and 1987, but aggregate wages paid by direct farm employers in fruits and vegetables declined by 12% and 9%, respectively. In the same period, aggregate wages paid by farm labor contractors and farm management companies rose by 34% and 56%, respectively. Corresponding to these changes in wage patterns we also note a parallel set of changes in reported employment.

The sheer size, in wages and employment, of labor contractors and farm management businesses is quite impressive. They accounted for 34% of total wages paid in these four categories in 1983, but their share had reached 44% just five years later. Mines and Martin found that wage rates paid by FLCs were about 20% lower than those paid to direct hire employees.[21] If this differential, derived from statewide worker interviews in 1983, is accurate for the San Joaquin Valley in 1987, then we conclude that labor contractors and farm management companies may currently be responsible for a *majority* of all fruit and vegetable work in the San Joaquin Valley during the 3rd calendar quarter.

Statewide field interviews with farmworkers conducted by Mines and Martin in 1983 ascertained that 36% of all farmworker jobs in the San Joaquin Valley were performed in the employ of labor contractors.[22] Thus, the data described above and their interpretation are consistent with direct reports from workers concerning their employment experience.

In 1978, Sosnick observed that for processing tomato producers in the Sacramento Valley there was a direct correlation between farm size and the extent to which farm labor contractors were used.[23] Sosnick's discussion is based on data developed by Thompson and Scheuring.[24] What Sosnick found was that among the 42 farmers with 600 acres or fewer of tomatoes, about 52% used farm labor contractors. On the other hand only 23% of the 13 farmers who had 700 acres or more of tomatoes used farm labor contractors.

During the most recent period, we have noted a close correlation between farm size and a decline in the number of farms which hire labor directly. Since this period also corresponds to a rapid increase in the use of farm labor contractors, it is possible that this size- dependent tendency to utilize labor contractors first noted by Sosnick may be a contributing factor.

V. FARM STRUCTURAL CHANGES AND THEIR EFFECTS ON LABOR

There has been a substantial reduction in the number of direct-hire farm employers in California. At the same time, both farm labor contractors and farm management companies have become substantially more important employers. Figure 16 shows the estimated distribution of California farm work wages paid by different categories of employers in 1987. Only 60% of wages are paid by direct-hire farm employers. Some 15% are paid by labor contractors, and another 25% are paid by farm management companies and other intermediaries.

There is evidence that the use of intermediaries of these and other types has increased considerably in recent years in many sectors of California agriculture. We must also consider other possible factors contributing to the attrition of farm businesses, e.g., the national "farm debt crisis" of the early 1980's.

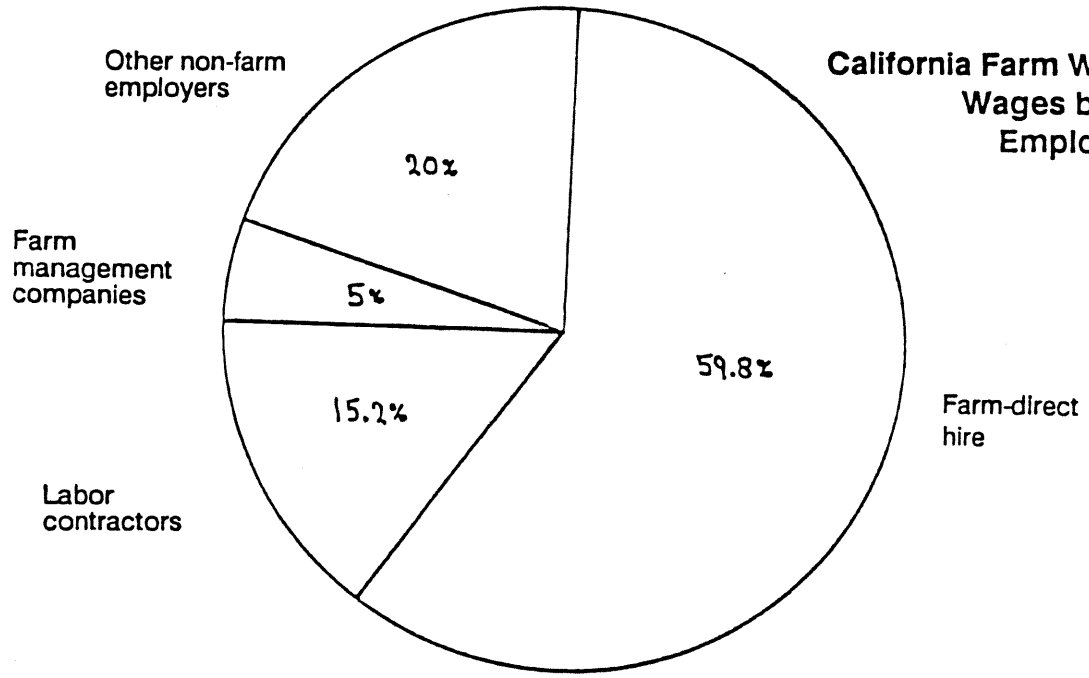


Figure 16
California Farm Work Cash Wages by Type of Employer, 1987

Wells has studied the rise and decline of sharecropping in the California strawberry industry.[25] Linder and Norton have described similar patterns of labor utilization in the pickling cucumber farms of the Rio Grande Valley of Texas.[26] Very recently, the California State Supreme Court agreed to hear arguments of a case in California involving pickling cucumber workers who had been hired as independent contractors in a share farm agreement.[27] Briefly, if the share farmers are truly independent contractors, as opposed to employees, then they are not subject to many worker protection laws. Employers thereby avoid paying social security taxes, unemployment insurance taxes, and workers compensation insurance premiums, as well as being exempt from minimum wage, collective bargaining, safety and health inspections, and race, sex and age discrimination regulations.

We have examined available wage report data in an effort to measure the extent of such sharecropping activity. Inferential support has been found which indicates that indirect hire, whether labor contractors or sharecroppers, is important in two counties: Monterey and Santa Barbara. This evidence is from UI wage reports for the SIC code 0171 (berry farms). We have analyzed these reports for 1985, 1986 and 1987 and have compared total reported employment and wages with production data. The analysis is presented in Table XIII. According to these data, production per job was very much higher in Monterey and Santa Barbara than in the other four counties. Either workers in Monterey and Santa Barbara counties have very great productivity as compared to the other four counties or a significant amount of work is being performed by indirect-hire workers -- either sharecroppers or labor contractor employees -- who are not reported to EDD as 0171 workers. Anecdotal evidence suggests that Monterey and Santa Barbara counties now have a large share of strawberry crop work performed by these indirect-hire employees.[28]

There are at least two other factors tending to increase the number of farms and which may also influence increased use of labor contractors and farm management companies. Administrators of USDA income and price support programs report a substantial increase in the number of

"paper farms" as a result of restrictions on the size of farm program payments.[29] Farm program regulations in place during 1987 limited price deficiency and diversion payments to $50,000 for any eligible producer. However, a loophole permitted any individual owning 50% of a corporation to qualify for payments through the corporation. By establishing a number of such corporate entities it is possible to multiply maximum program payments by the number of such entities, a phenomenon that has come to be known as the "Christmas Tree."

Table XIII
Strawberry Production and Annual Average Employment, 1985-87
Six Leading California Counties

County	Production (tons)	Employment	Production/Job
Orange	240,781	5,583	43.13
San Diego	81,140	2,009	40.52
Santa Cruz	145,372	6,149	23.64
Ventura	266,699	7,158	37.26
Monterey	318,228	5,290	60.16
Santa Barbara	167,565	2,434	68.84

Sources: Production data from Annual Crop Production reports prepared by County Agricultural Commissioners; Employment data from State of California, Department of Employment Development, quarterly summaries, by county and four-digit SIC code (private communication).

Second, recently promulgated regulations intended to limit the amount of federal water subsidies (to eligible water recipients) to the equivalent of 960 acres worth of irrigation water per recipient have stimulated the same kind of "paper farm" divisions in California.[30] In this case, farm management companies are established to manage the various 960-acre entities created by a larger parent farm. The net effect is the creation of additional "farms" and the substitution of a farm management company for a farm as the employer. Wage reports through the UI system for the 3rd calendar quarter of 1987, after the acreage limitation regulations went into effect, showed 141 farm management companies currently active in the San Joaquin Valley.[31] This represents a 29% increase in the number of such firms since 1983. So while the number of direct farm employers is decreasing, there is a significant increase in the number of farm management firms active in the San Joaquin Valley.

The California Agricultural Labor Relations Board noted an increasing number of farm successorship cases in the early 1980's.[32] An important issue in these cases was the question of when a farm business under contract to a labor union has the right to go out of business. In many of these cases the company maintained that it was going out of business for economic reasons and that the successor company had no obligation to a labor union contract entered into by its predecessor. A distinction needs to be made between "genuine" economic stress and tactics to dodge unionization. In view of the very large number of employers that have disappeared from the roster of those directly hiring farm workers, this could well be one of the central issues that remains unresolved.

There is also the question of the "farm debt crisis" and its California manifestations. One indication of the extent of the mid-1980's farm crisis is that nearly 900 farm business bankruptcies were recorded in California in the period 1984-87. This represents roughly 10% of all farm bankruptcies reported nationally in the same period. Since California has only 4% of U.S. farms, the state's share of farm bankruptcies was disproportionately large.

By mid-1985, the United Farm Workers of America noted 54 instances of significant employers that had gone out of business while under union contract.[33] The list included 27 vegetable farms, 11 horticultural crop producers, 4 citrus companies, and 12 grape firms. In subsequent years, a very large number of farm businesses have vanished from the rolls of farm employers. Some, like McCarthy Farming Company and La Cuesta Verde Ranches (and related entities), were forced out of business by creditors. Others, such as S & J Ranch, Tenneco West and West Coast Farms, were acquired by outright purchase (all acquired by a single company, Castle & Cooke). But there is no systematic effort now underway to examine this restructuring and its impact on the farm labor market.

VI. TOPICS FOR FURTHER RESEARCH

It is evident from this discussion that substantial changes are taking place, both in the composition of businesses conducting farming and in their relationship to the agricultural labor market. Research has been conducted in the past on some specific crop industries. Friedland and his co-workers have studied the processing tomato, lettuce and grape industries, providing benchmark analyses for reference in subsequent work.[34] Palerm and co-workers are examining particular crop industries in the South Coast areas of Santa Barbara County and environs.[35] Wells is continuing a study of the Watsonville area strawberry industry.[36] Mines, and later Martin and his co-workers, has studied the Ventura County citrus industry.[37] But additional work is needed. We know comparatively little about the present structure of the vegetable industry and less about the grape industry in the wake of the bankruptcies and ownership changes of the early 1980's.

The need for study of farm labor contractors seems to become more urgent with each passing year. Vandeman has completed a dissertation on farm labor contractors active in the Salinas area.[38] However, relatively little is known about this rapidly growing segment of employers. For example, what drives particular farm businesses toward the choice of a labor contractor? Is there a size component? Can public policy be developed to handle the growing number of abuses of workers by contractors as is now reported by workers? Are labor contractors becoming particularly important in certain crop industries or regions? And how can we strengthen federal monitoring of farm labor contractor activity?

Finally, there are indications that farm management companies are becoming more significant in California. How do these firms deal with the labor market? To what extent do they rely on labor contractors? To what extent is the growing number of farm management companies a by-product of federal subsidy programs, and to what extent are other factors involved?

APPENDIX I

Regional Trends in the Production of Leading Crops

While the overall trend of vegetable production is toward increased harvested acreage and yields, there have been some important shifts in the location of production for certain crops. Figure I-1 shows the regional trends in production location for broccoli during the 12-year period 1976-1987. All four regions show sharp increases in the amount of harvested broccoli acreage, with the greatest increases occuring in the Central Coast production areas. At the same time, the Southern California and San Joaquin Valley areas, unimportant production areas in 1976, have emerged as significant contributors.

Figure I-2 shows similar data for regional lettuce production. The Central Coast, South Central Coast and San Joaquin Valley production areas have experienced roughly constant production in this period with season-to-season fluctuations due primarily to climatic factors. On the other hand, the Southern California region, consisting mainly of the Imperial Valley, has seen a 20% decline in lettuce production in this period. As is evident from the figure, most of the decline occurred in the period 1984-1986.

Figure I-3 shows the regional production data for cantaloupes. Both the Southern California and San Joaquin Valley regions show sharp increases in harvested acreage. On a statewide basis, production of cantaloupes has more than doubled in the twelve years.

Figure I-4 shows data regarding the regional production of fresh market tomatoes over the same period. Dramatic declines in production are seen to have occurred in both the Southern California and South Central Coast regions, in the latter case all but abandoned. In contrast, production in the San Joaquin Valley has expanded to the point where 65% of the state's production is now located there, up from a figure of 46% just 11 years earlier.

Figure I-5 shows the regional distribution of the production of processing tomatoes, traditionally one of the state's leading crops. There have been steady declines in production in four regions: Southern California, South Central Coast, Central Coast and Sacramento Valley. As correctly predicted by Friedland and Barton, production in the San Joaquin Valley region has continued to expand.[39] Equally significant, the San Joaquin Valley has replaced the Sacramento Valley as the state's most important production area. An important factor in these shifts in production region is the transition from hand picking and sorting to mechanical picking and electronic sorting.[40] The disappearance of production from Orange County, by contrast, is largely associated with the rapid development of housing sub-divisions on land that had been used for agricultural purposes.

Figure I-6 shows data on regional changes in bearing acreages of wine grapes in the period 1976-1987. All three segments of the grape industry have experienced significant acreage increases, the largest change having been in wine grapes. Important regional shifts were limited to the wine grape segment, with the San Joaquin Valley experiencing the largest growth. It is important to note that premium varietal wine grapes are largely confined to the coastal regions and that the expansion of wine grape production in the San Joaquin Valley impacts bulk wine grape production but not premium wines.

Figures I-7 and I-8 show data on the raisin and table grape segments of the grape industry. While both experienced increases in bearing acreage, the limited regional scope of plantings of these crops simply means that there are no regional shifts in production.

Figure I-9 shows data on changes in the regional distribution of strawberry production. Though there are considerable fluctuations in the data, it is clear that the overall trend in all regions is toward increased production.

Environmental Horticulture

Measures of the production of environmental horticulture crops are quite limited. Unlike fruits, nuts or vegetables, data reflecting production volume such as area (acres) or weight (tons) are not compiled. Only farm cash receipts are determined. Obviously, this measure is influenced by price and, indirectly, by inflation in the whole economy. In the absence of a more objective measure we must utilize this surrogate for production volume, with the clear understanding that it is of limited usefulness.

Figure I-10 shows regional data for all environmental horticulture commodities for the six-year period 1980-1985 (in constant 1985 dollars). The steady increase in the Southern California production is largely due to the rapid development of this industry in San Diego County. This county ranked fourth in the state in the production of these commodities in 1980, but by 1985 had emerged as the state's leader. In fact, its growth in this segment has been so strong that San Diego County now ranks 11th in the state in agricultural production, ahead of such traditional agricultural counties as Madera and Kings.

Figure I-1

California Broccoli Production

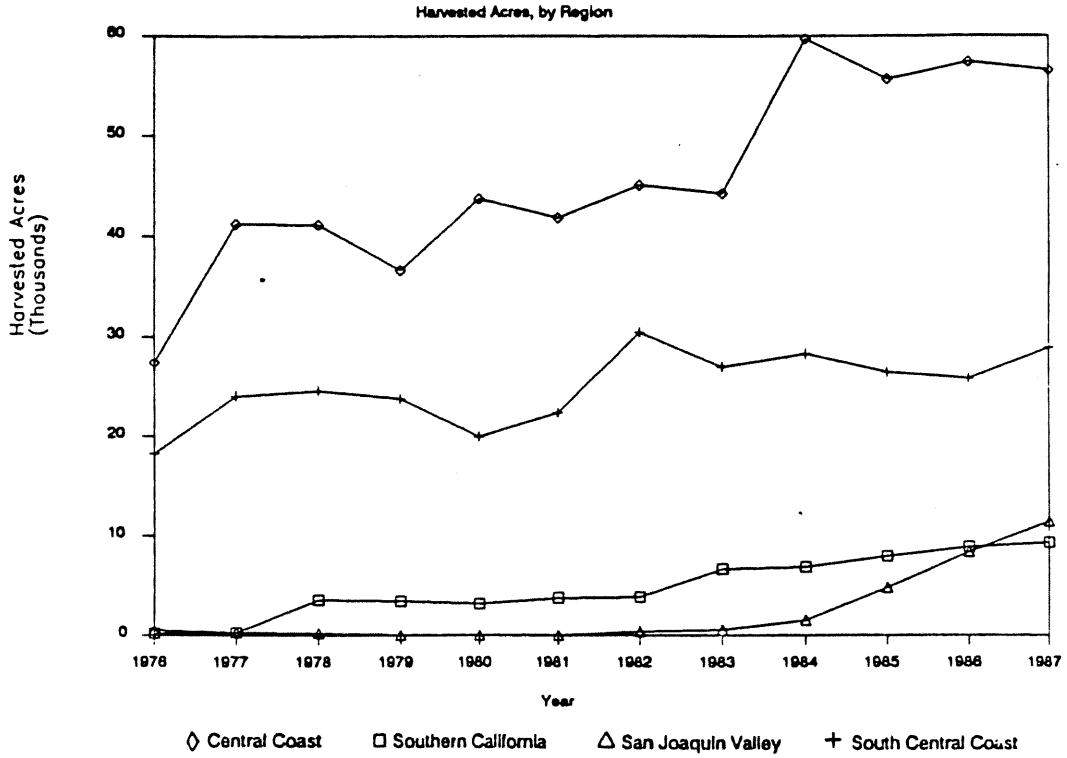


Figure I-2

California Lettuce Production

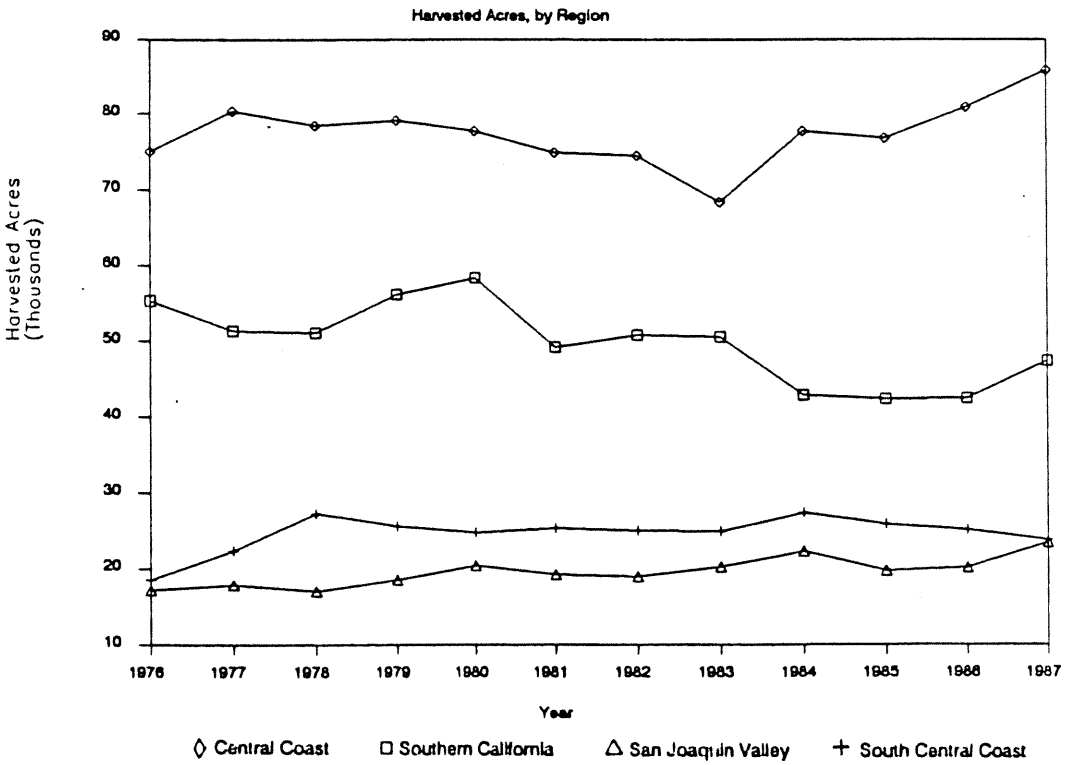


Figure I-3

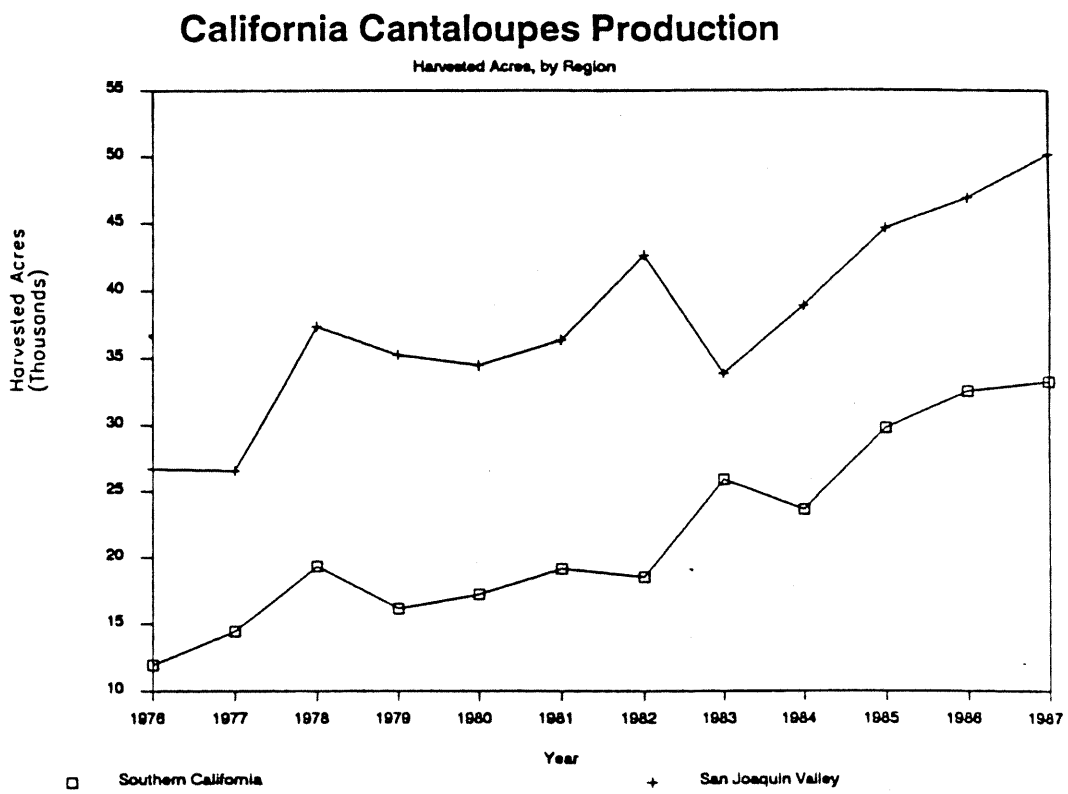


Figure I-4

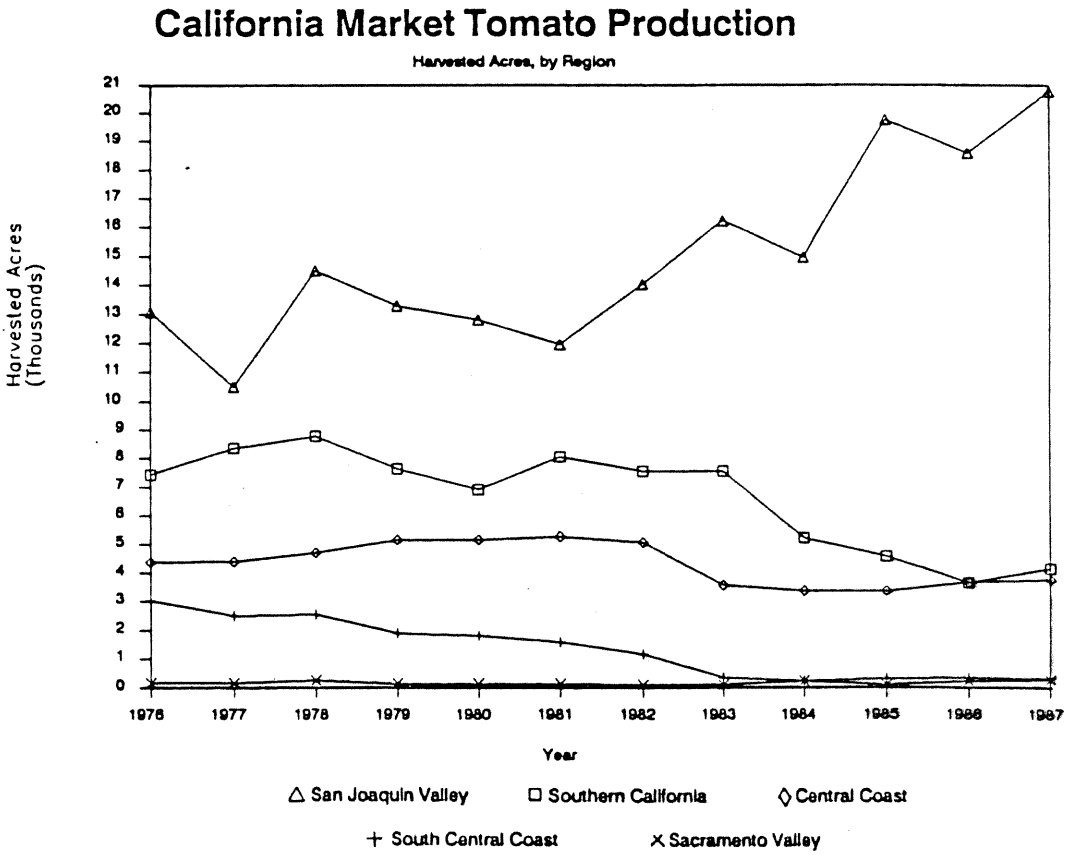


Figure I-5

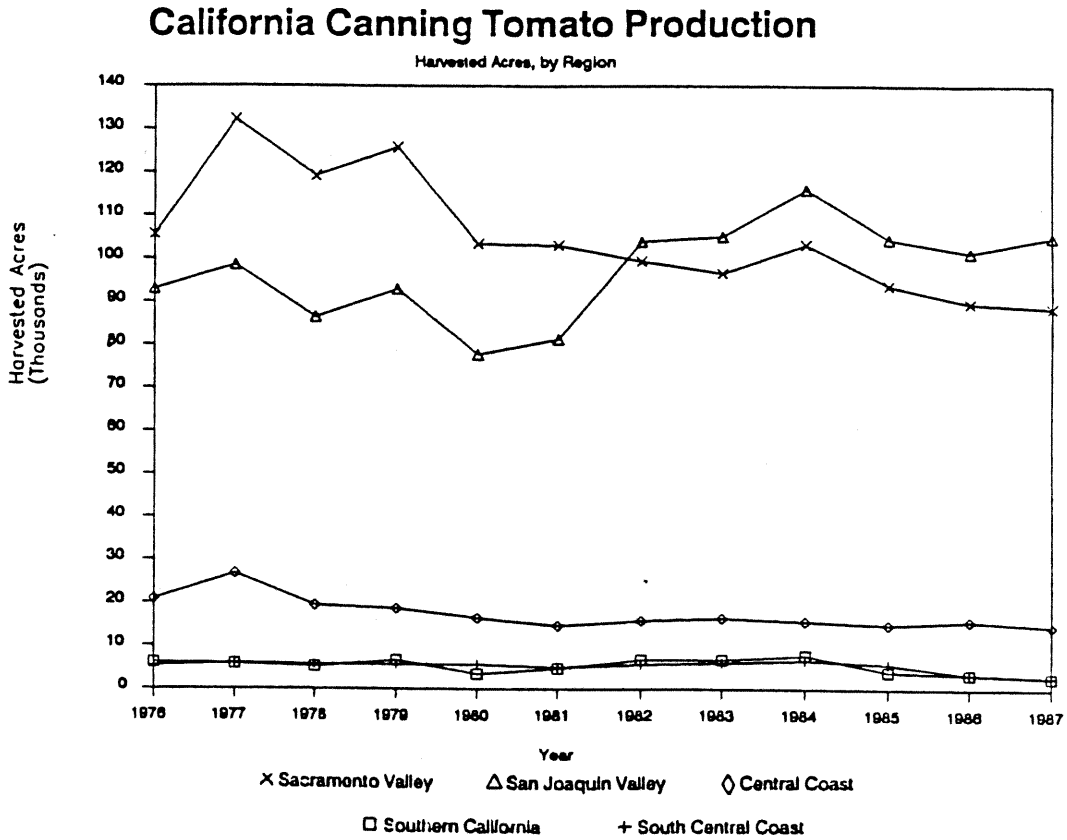


Figure I-6

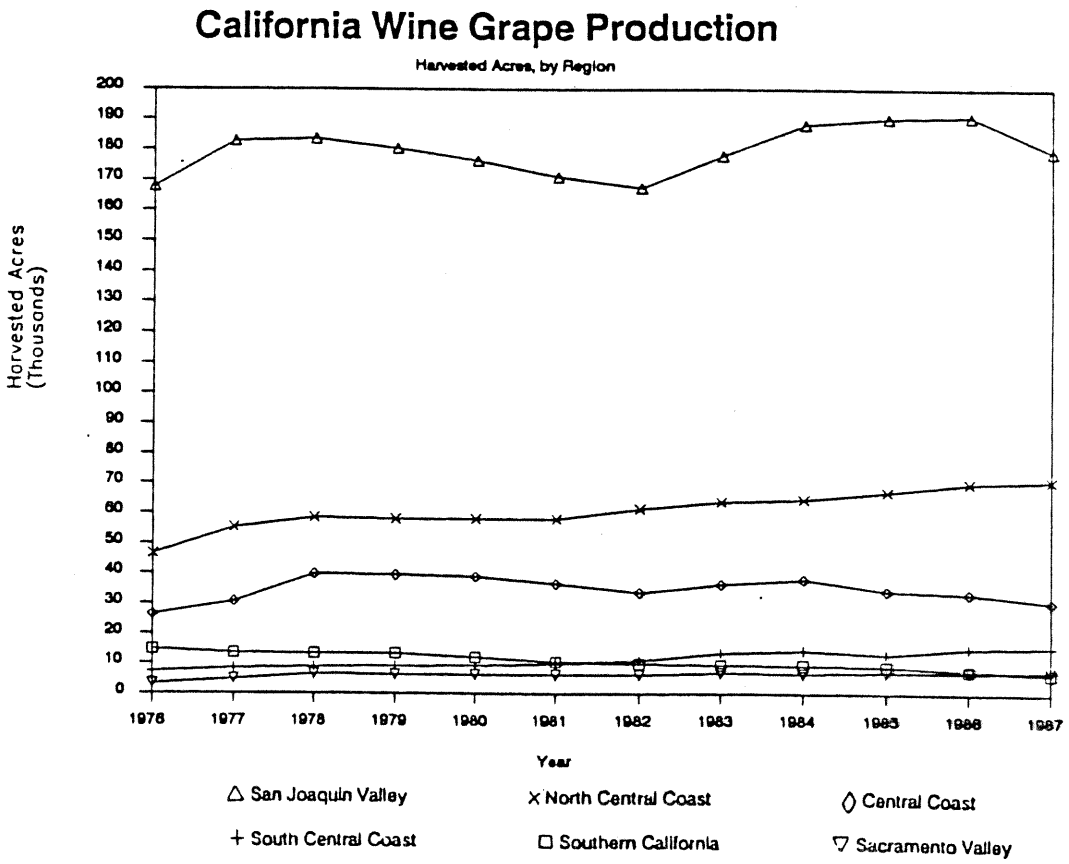
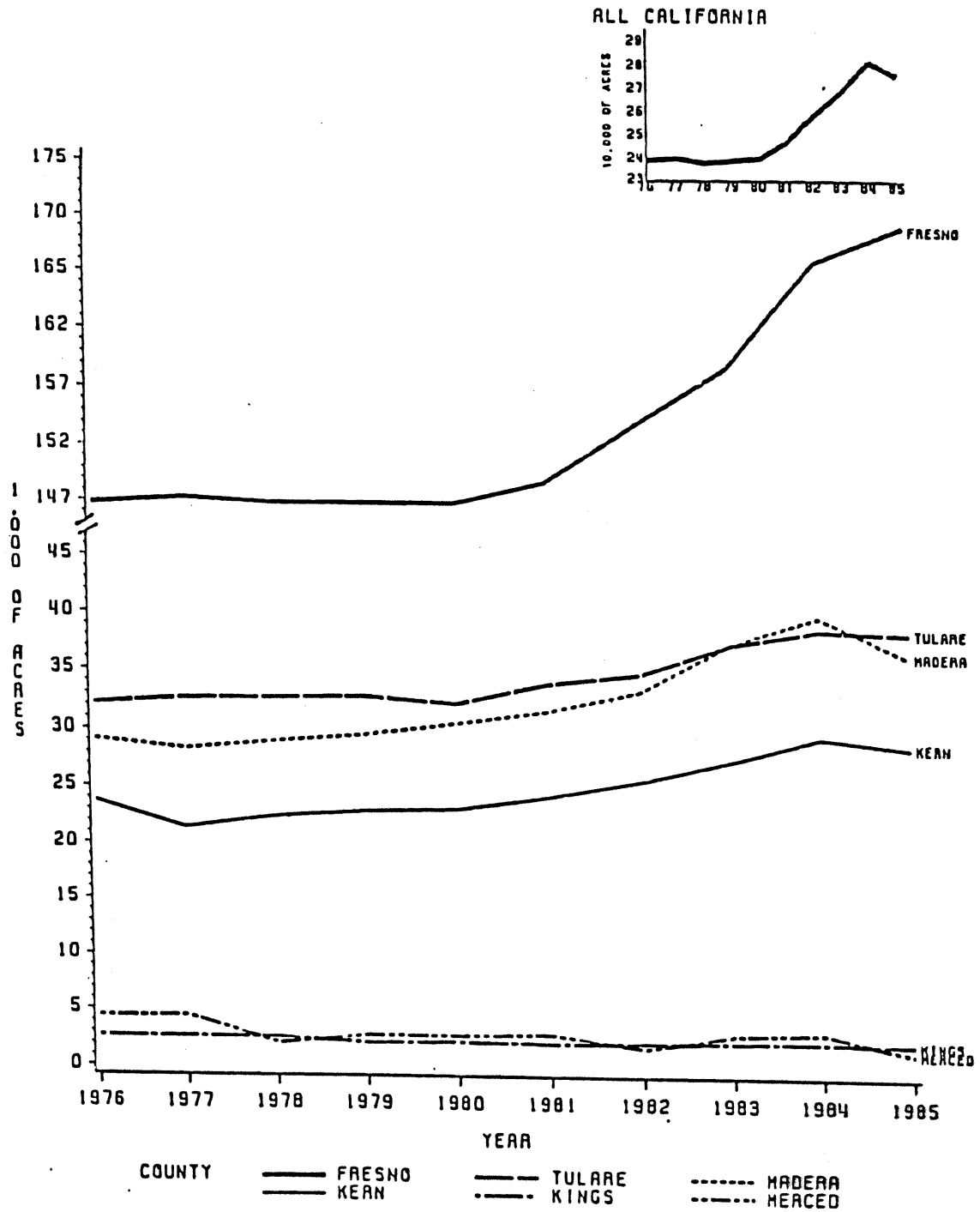
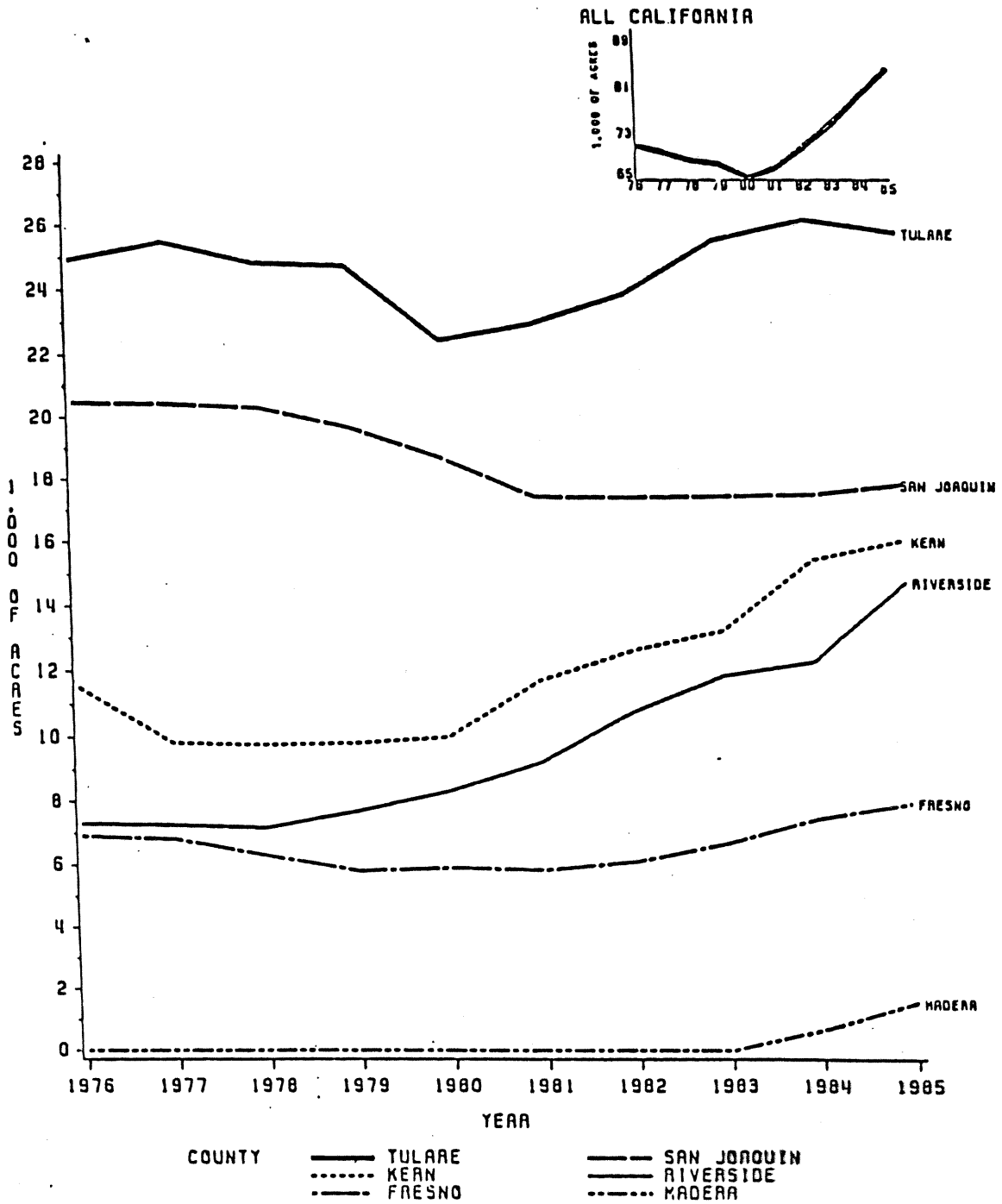


Fig. I-7: California Raisin Grape Production 1976-1985



Source: *Statistical Summary of California Agriculture Selected Commodities, 1976-1985,* Cooperative Extension, University of California, Division of Agriculture and Natural Resources Publication 3323. Prepared by Stacy Wilson and Milton Fujii; June, 1987.

Fig. I-8: California Table Grape Production 1976-1985



Source: *Statistical Summary of California Agriculture Selected Commodities, 1976-1985*, Cooperative Extension, University of California, Division of Agriculture and Natural Resources Publication 3323. Prepared by Stacy Wilson and Milton Fujii; June, 1987.

Figure I-9

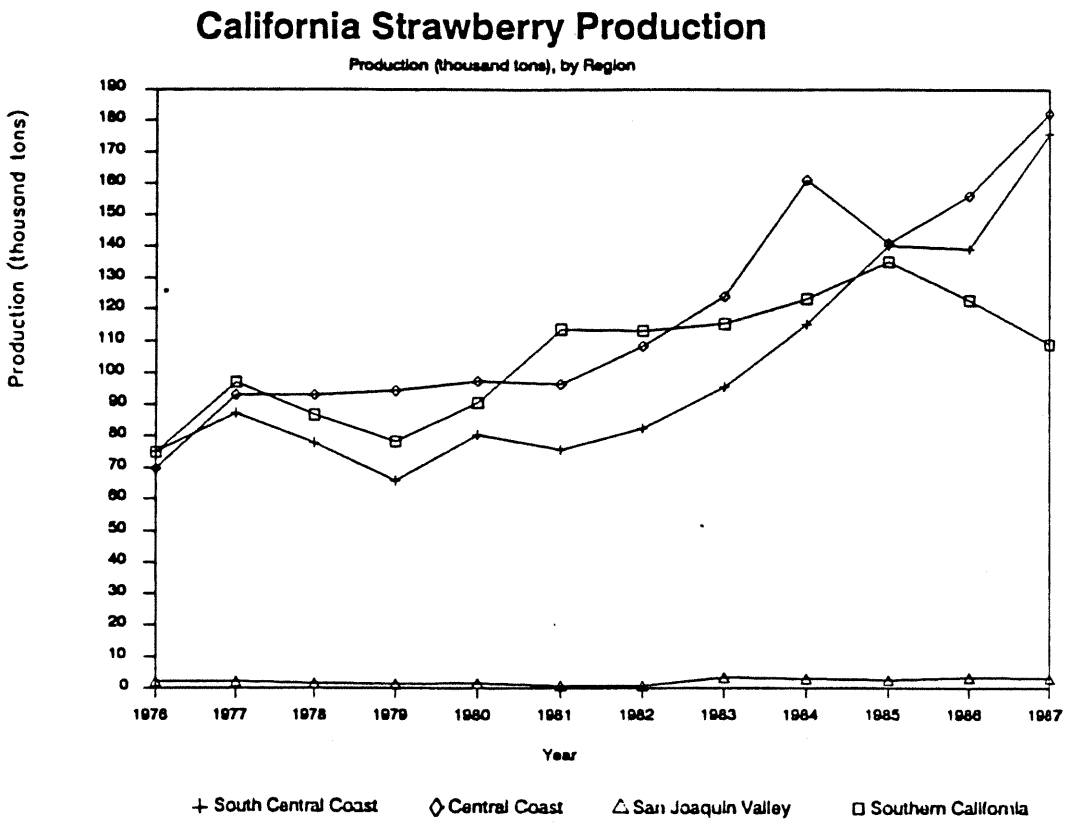
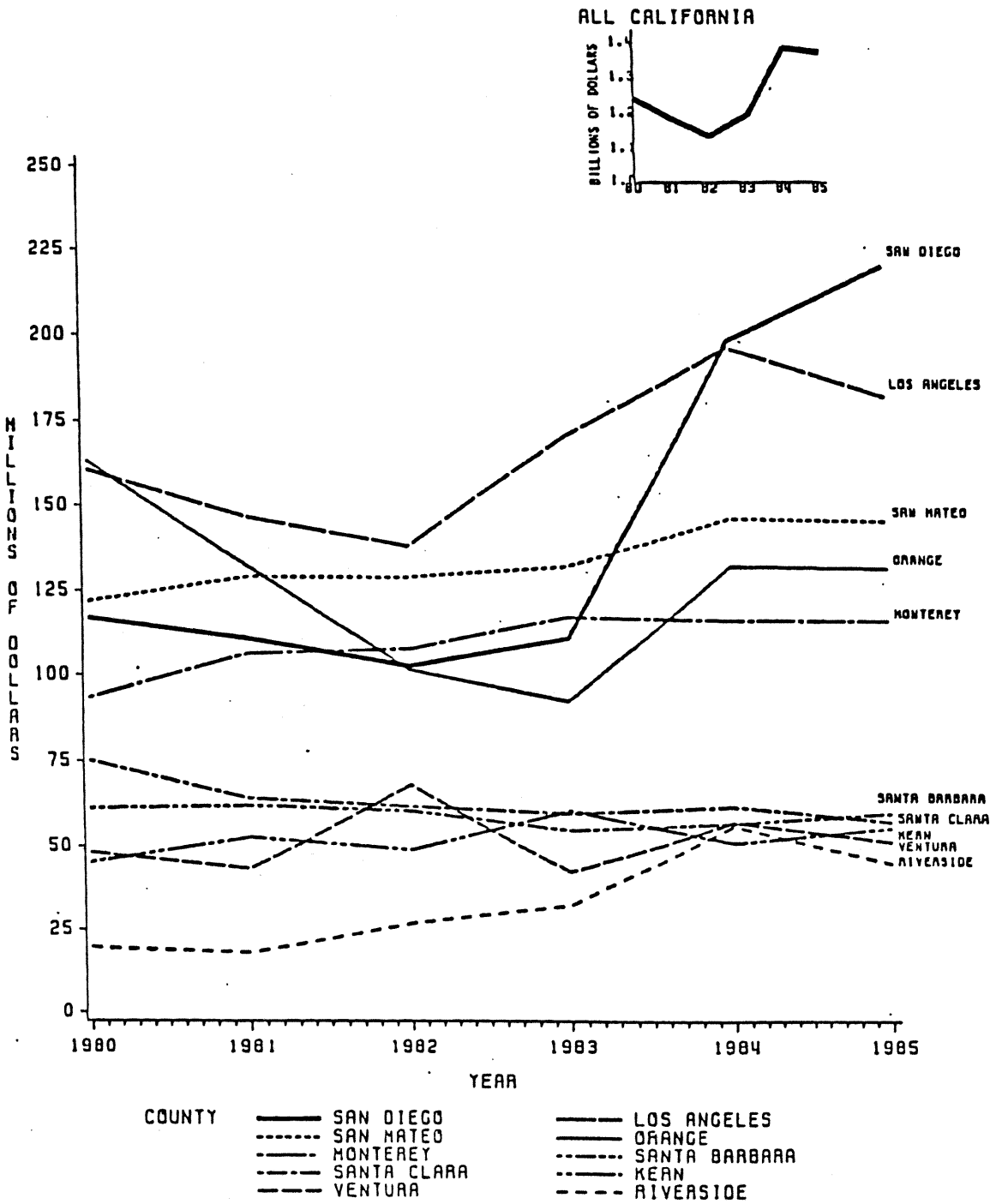

California Strawberry Production
Production (thousand tons), by Region
Production (thousand tons)
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
Year
South Central Coast
Central Coast
San Joaquin Valley
Southern California

Fig. I-10: All Environmental Horticulture Crops Value of Production: 1980-1985

(1985 millions of Dollars)



Source: *Statistical Summary of California Agriculture Selected Commodities, 1976-1985,* Cooperative Extension, University of California, Division of Agriculture and Natural Resources Publication 3323. Prepared by Stacy Wilson and Milton Fujii; June, 1987.

APPENDIX II

Crop Industry Profiles - Workers Comp Wage Reports

Since our data tape of Workers Comp wage reports classifies each employer by the amount of wages in each job category, we can construct crop industry profiles showing the size distribution of wages paid by payroll size. This merely extends the type of presentation shown in Table IX above to each of the major agricultural job categories. These data are shown in Tables II-1 through II-9.

TABLE II-1

Size Distribution of Truck Crop Employer Payrolls: California Employers, 1982

Size of Payroll	No. of Employers	Wages (millions)
$10,000 or less	1,005	$3.9
$10,001-$50,000	1,102	28.2
$50,001-$100,000	492	35.6
$100,001-$200,000	452	65.1
$200,001-$500,000	317	99.1
$500,001-$1,000,000	148	103.8
$1,000,001-$2,000,000	76	100.8
$2,000,001-$5,000,00	47	143.7
Over$5,000,000	10	96.6
Total	3,649	$676.3

Source: Workers Compensation Insurance Rating Bureau of California, data tape furnished to CIRS.

The 133 employers with the largest truck crop payrolls (3.6% of employers of this type) account for 50.4% of truck crop wages.

TABLE II-2

Size Distribution of Vineyard Employer Payrolls: California Employers, 1982

Size of Payroll	**No. of Employers**	**Wages (millions)**
$10,000 or less	3,397	$13.8
$10,001-$50,000	2,411	58.2
$50,001-$100,000	649	46.1
$100,001-$200,000	391	55.5
$200,001-$500,000	249	76.3
$500,001-$1,000,000	95	66.7
$1,000,001-$2,000,000	43	59.8
$2,000,001-$5,000,000	16	53.1
Over $5,000,000	4	41.9
Total	7,255	$471.2

Source: Workers Compensation Insurance Rating Bureau of California, data tape furnished to CIRS.

The 158 largest vineyard employers (2.2% of the total) account for 47% of all wages paid for vineyard work.

TABLE II-3

Size Distribution of Orchard Employer Payrolls: California Employers, 1982

Size of Payroll	**No. of Employers**	**Wages (millions)**
$10,000 or less	6,169	$19.1
$10,001-$50,000	3,199	74.6
$50,001-$100,000	774	54.7
$100,001-$200,000	420	58.6
$200,001-$500,000	251	76.6
$500,001-$1,000,000	70	46.5
$1,000,001-$2,000,000	32	44.4
$2,000,001-$5,000,000	9	26.7
Over $5,000,000	--	--
Total	10,924	$401.1

Source: Workers Compensation Insurance Rating Bureau of California, data tape furnished to CIRS.

The biggest 362 orchard crop employers (3.3% of the total) account for 48% of all wages paid to orchard crop employees.

TABLE II-4

Size Distribution of Nursery Employer Payrolls: California Employers, 1982

Size of Payroll	**No. of Employers**	**Wages (millions)**
$10,000 or less	925	$3.4
$10,001-$50,000	812	19.4
$50,001-$100,000	260	18.7
$100,001-$200,000	178	24.1
$200,001-$500,000	97	30.8
$500,001-$1,000,000	37	26.6
$1,000,001-$2,000,000	24	33.1
$2,000,001-$5,000,000	4	8.4
Over $5,000,000	3	20.3
Total	2,340	$184.8

Source: Workers Compensation Insurance Rating Bureau of California, data tape furnished to CIRS.

The 68 largest nursery employers (2.9% of the total) are responsible for 48% of the total wages paid to nursery employees. Concentration among nursery employers is similar to other crops.

TABLE II-5

Size Distribution of Floral Crop Employer Payrolls: California Employers, 1982

Size of Payroll	**No. of Employers**	**Wages (millions)**
$10,000 or less	290	$1.2
$10,001-$50,000	388	9.9
$50,001-$100,000	195	14.1
$100,001-$200,000	142	20.2
$200,001-$500,000	82	25.5
$500,001-$1,000,000	25	16.1
$1,000,001-$2,000,000	12	17.1
$2,000,001-$5,000,000	5	14.8
Over $5,000,000	1	6.3
Total	1,140	$125.2

Source: Workers Compensation Insurance Rating Bureau of California, data tape furnished to CIRS.

The 43 employers with the largest floral crop payrolls (3.8% of the total) account for 43% of wages paid in this crop industry.

TABLE II-6

Size Distribution of Cotton Employer Payrolls: California Employers, 1982

Size of Payroll	No. of Employers	Wages (millions)
$10,000 or less	731	$3.0
$10,001-$50,000	975	25.0
$50,001-$100,0	352	24.5
$100,001-$200,000	193	27.2
$200,001-$500,00	95	27.5
$500,001-$1,000,000	25	15.9
$1,000,001-$2,000,000	6	8.3
$2,000,001-$5,000,000	4	11.8
Over $5,000,000	1	9.5
Total	2,382	$152.7

Source: Workers Compensation Insurance Rating Bureau of California, data tape furnished to CIRS

The largest 131 cotton crop employers (5.5% of the total) paid 48% of all cotton crop wages. The degree of concentration is somewhat less than has been found in the labor intensive crop industries.

TABLE II-7

Size Distribution of Dairy Employer Payrolls: California Employers, 1982

Size of Payroll	No. of Employers	Wages (millions)
$10,000 or less	421	$1.9
$10,001-$50,000	1,111	29.8
$50,001-$100,000	536	37.9
$100,001-$200,000	259	35.1
$200,001-$500,000	92	26.1
$500,001-$1,000,000	17	11.0
$1,000,001-$2,000,000	-	-
$2,000,001-$5,000,000	-	-
Over $5,000,000	-	-
Total	2,436	$142.7

Source: Workers Compensation Insurance Rating Bureau of California, data tape furnished to CIRS.

The 109 employers with the largest dairy payrolls (4.5% of the total) account for just 26% of all dairy wages.

TABLE II-8
Size Distribution of Other Field Crop Employer Payrolls: California Employers, 1982

Size of Payroll	No. of Employers	Wages (millions)
$10,000 or less	2,160	$7.7
$10,001-$50,000	1,450	33.4
$50,001-$100,000	314	21.6
$100,001-$200,000	153	20.9
$200,001-$500,000	57	16.7
$500,001-$1,000,000	6	3.9
$1,000,001-$2,000,000	2	2.9
$2,000,001-$5,000,000	1	5.0
Over $5,000,000	-	-
Total	4,143	$112.0

Source: Workers Compensation Insurance Rating Bureau of California, data tape furnished to CIRS.

The 219 largest Other Field Crop employers (5.3% of the total) account for 44% of all wages paid in this job category. As for the cotton and dairy industries, there is a significantly lesser degree of concentration of payroll size as compared with the more labor-intensive crop industries.

TABLE II-9
Size Distribution of Strawberry Employer Payrolls: California Employers, 1982

Size of Payroll	No. of Employers	Wages (millions)
$10,000 or less	1	$0.7
$10,001-$50,000	130	2.8
$50,001-$100,000	55	4.0
$100,001-$200,000	40	6.0
$200,001-$500,000	48	15.8
$500,001-$1,000,000	36	24.9
$1,000,001-$2,000,000	20	25.5
$2,000,001-$5,000,000	5	13.2
Over $5,000,000	-	-
Total	512	$93.4

Source: Workers Compensation Insurance Rating Bureau of California, data tape furnished to CIRS.

The 25 largest strawberry crop employers (4.9% of the total) account for just 41% of all wages paid in this job category. This is a substantially smaller degree of payroll concentration than has been found for other labor-intensive crop industries. This suggests that the strawberry industry is not as directly concentrated as are the fruit, nursery product and vineyard industries.

Comparing Data Sources

Comparison of wage data reported through the Workers Comp insurance system with that reported by either the Census of Agriculture or wage data reported through the UI system is difficult because both of these sources classify employers by primary SIC code, whereas the Workers Comp data is based upon classification of the job activity for which wages are paid. Nevertheless, for certain activities, such as dairy employment, comparisons will be more meaningful. This is because most dairy farms in California have only a limited amount of non-dairy activity. Thus, the Census of Agriculture reports total employment expense (hired plus contract labor) to be $129.2 million for the state's dairy farms in 1982. Dairy employment wages reported through the Workers Comp system (see Table II-7) total $142.7 million. Since Census data must be corrected for employer taxes, the actual difference in wages amounts to a difference of $23.9 million (16.7%). Considering the large differences found for crop wages, this is rather good agreement. It is likely that the difference can be accounted for by the employment costs of farms with a principal SIC code different from that for dairies but which also have a minor dairy operation.

An instance in which there is reasonable agreement between the Census data and the Workers Comp wage reports is in the fruit and nut sector. The total of labor expense reported in the Census for farms within this SIC code (017) is $862.7 million. Correcting this figure for employer taxes, we arrive at an estimate of $726.2 million for estimated wages paid in 1982. Wage data reported through the Workers Comp system (Orchards plus Vineyards) yields $872.2 million in wages. The difference of $146 million is substantial (20%). Among the factors to consider is the possibility of Fruit & Nut crop wages paid by farms whose SIC code corresponds to some other category. Another possibility to consider is wages paid by a non-farm business such as a packing house or farm management company.

In contrast to the reasonable agreement for wage data from the different sources for dairies, consider Vegetable and Melon farms. Census data suggest that labor expenses (hired plus contract labor) were $441.9 million in 1982. Wage data reported through the Workers Comp system place the wages paid for Truck crop activity at $676.3 million. Correcting for employer taxes leads to an estimate of Census wages of $372.0 million. The difference between the two sources of some $304.3 million (82%) is much larger than found for the other two farm categories considered. While there are likely to be a number of farms whose SIC codes correspond to a principal activity in another type of crop but who also grow vegetables and/or melons, the apparent discrepancy is quite substantial. We suggest that some non-farm employers, such as farm management companies, packing operations and harvest crews, are likely to account for a large fraction of the apparent wage difference.

The final comparison that is possible using the Census labor expense data and the Workers Comp data is that for Horticultural Specialty crops (SIC code 018). The total reported labor expense in the Census data is $277.0 million. Correcting this figure for employer taxes and perquisites we find $233.2 million to be the estimated wages paid in this category. The Workers Comp wage data totals $310.0 for the two categories Florists-cultivating and Nursery crop production. The difference of $76.8 million is of moderate size (33%) and is likely accounted for by the fact that various non-farm businesses have substantial activity in the production of horticultural products.

Note that in every case we have considered, the reported Census wages are smaller than the wages reported through the Workers Comp system or the UI system. The fact that this systematic effect applies to all labor-intensive crop industries cannot be accidental. We suggest that the most likely explanation is that the Census fails to properly account for the agricultural activities of non-farm businesses.

ENDNOTES

1 D. Villarejo, *Getting Bigger*, California Institute for Rural Studies, P. O. Box 530, Davis, CA 95617, 104 pp., 1980.

2 K. Moulton et al, *Competitiveness at Home and Abroad*, Report of a 1986-87 Study Group on Marketing California Specialty Crops: Worldwide Competition and Constraints, Agricultural Issues Center, University of California, Davis, CA 95616. 1988. 104 pp. See p. 6, Table 1.

3 California Department of Food and Agriculture, *California Agriculture, Statistical Review, 1986*, Sacramento, CA, October 1987.

4 U.S. Department of Agriculture, *Economic Indicators of the Farm Sector, State Financial Summary, 1986*, Economic Research Service, Report ECIFS 6-4, Washington, DC, 1988. See Table 5. California's share of U.S. Greenhouse/Nursery production averaged 23% in the five- year period 1982-1986.

5 See California Department of Food and Agriculture, *California Agriculture, Statistical Review, 1986*, Sacramento, CA, October 1987. The total value is $6.6 billion. The figure for all U.S. wheat production is $5.6 billion.

6 A particularly handy source is the recently published *Statistical Summary of California Agriculture, Selected Commodities, 1976-1985*, Cooperative Extension, University of California, Division of Agriculture and Natural Resources, Berkeley, CA, Publication 3323, June 1987. This document includes data on harvested acreage for the major commodities and data on farm cash receipts for environmental horticulture production.

7 See P. Barnett, K. Bertolucci, C. McNally and D. Villarejo, *Labor's Dwindling Harvest*, California Institute for Rural Studies, Davis, CA, 1979. See also, W. Braznell, *California's Finest: The History of the Del Monte Corporation and the Del Monte Brand*, Del Monte Corporation, 1982, 168 pp.

8 See P. Martin, *California's Farm Labor Market*, Agricultural Issues Center, University of California, Davis, CA 95616. AIC Issues Paper No. 87-1, July 1987, 103 pp. P. Martin and J. Holt, *Migrant Farmworkers: Number and Distribution*, Final Report to Legal Services Corporation, April 1987, prepared under contract dated April 1, 1986 between Legal Services Corporation and Philip L. Martin, Inc., 148 pp. plus numerical tables. S. Vaupel and P. Martin, *Activity and Regulation of Farm Labor Contractors*, Giannini Foundation of Agricultural Economics, Giannini Information Series No. 86-3, University of California, Division of Agriculture and Natural Resources, June 1986, 37 pp.

9 We are grateful to the Workers Compensation Insurance Rating Bureau of California for making this data available to us. We especially thank Mr. W.J. Gladwin, Manager, Systems & Programming, for preparing a custom data tape to our specifications.

10 SIC refers to the Standard Industrial Classification Code used by the Bureau of the Census and now widely adopted by virtually all providers of business information.

11 State of California, Employment Development Department, *California Unemployment Insurance Program. Wages, Benefits, Contributions and Employment by Industry*, Report 352, Annual (August). Data for the number of reporting units was omitted from the report for the year 1981.

12 S. Vaupel and P. Martin, *Activity and Regulation of Farm Labor Contractors*, op. cit. We are grateful to Mr. Tom Stassi, Employment and Payroll Analysis, Employment Data and Research Division, Employment Development Department, State of California, for furnishing this unpublished data.

[13] State of California, Employment Development Department, *California Unemployment Insurance Reporting Units by Size, Industry and County, July-September*, Report 524, Annual.

[14] U.S. Congress, Office of Technology Assessment, *Technology, Public Policy, and the Changing Structure of American Agriculture. A Special Report for the 1985 Farm Bill*, Report OTA-F-272, Washington, DC, March 1985, 91 pp. See Chap. 3, especially Table 3-3, p. 22.

[15] Workers Compensation Insurance Rating Bureau of California, private conversation with Mr. Peter Murray, Chief of Job Classification Section. According to Mr. Murray even firms with just a single agricultural job category are required to separate the wages of those employees, such as clericals, who do not normally enter the fields or orchards. On the other hand wages paid to managers, foremen, or company officials will be aggregated with those of field workers if the task requires them to enter fields or orchards at any time. Hence, most supervisorial wages are included.

[16] Bureau of the Census, Agriculture Section, private communication. Since farm management companies are hired to provide a service, the costs are classified as "Other Expenses." For unknown reasons this category is not reported to the Census.

[17] R. Mines and R. Anzaldua, *New Migrants vs. Old Migrants: Alternative Labor Market Structures in the California Citrus Industry*, Monograph in U.S.-Mexican Studies, 9, Program in United States-Mexican Studies, University of California, San Diego, La Jolla, CA 92093, 1982, 119 pp. See discussion on pp. 16 ff.

[18] California Agricultural Labor Relations Board, Citrus Access, ALRB Regulations Sections 20900 (e), 20915 (b) and 20915 (c). Effective January 3, 1985.

[19] S. Vaupel and P. Martin, *Activity and Regulation of Farm Labor Contractors*, op. cit.

[20] ibid. Table 11 on p. 25 shows $180.0 million in annual FLC wages reported for the San Joaquin Valley and a statewide total of $272.6 million.

[21] R. Mines and P. Martin, *A Profile of California Farmworkers*, Giannini Information Series No. 86-2, Giannini Foundation of Agricultural Economics, University of California, Division of Agriculture and Natural Resources, Berkeley, CA, July 1986, 97 pp. See Table IV-7, p. 63. Grower weekly wages were found to average $210.50 while FLC wages were an average of $166.98 per week.

[22] R. Mines and P. Martin, *A Profile of California Farmworkers*, op. cit., see Table IV-8, p. 64.

[23] S. Sosnick, "The Relation of Labor Costs to Farm Size," Chapter VII in *Farm Size Relationships, With an Emphasis on California*, Giannini Foundation Project Report, Giannini Foundation of Agricultural Economics, University of California, Berkeley, CA, December 1980, 170 pp. See p. 110.

[24] O.F. Thompson and A.F. Scheuring, *From Lug Boxes to Electronics: A Study of California Tomato Growers and Sorting Crews*, California Agricultural Policy Seminar Monograph No. 3, Department of Applied Behavioral Sciences, University of California, Davis, CA, December 1978.

[25] M.J. Wells, "The Resurgence of Sharecropping: Historical Anomaly or Political Strategy?", *The American Journal of Sociology*, Vol. 90, No. 1, July 1984, p. 1.

[26] M. Linder and L. Norton, "The Latest in Employer Scams,"*The Texas Observer*, Aug. 28, 1987, p. 12.

[27] S.G. Borello & Sons, Inc., vs. State Department of Industrial Relations, State of California, Court of Appeals, Sixth District, Case No. H001732, Dec. 16, 1987.

[28] Prof. M. Wells, Department of Applied Behavioral Sciences, University of California, Davis; M. Blank, Attorney, California Rural Legal Assistance, San Luis Obispo, private communications.

29 U.S. General Accounting Office, *Farm Payments, Farm Reorganizations and Their Impact on USDA Program Costs*, Report No. GAO RCED-87-120-BR, Washington, DC, April 1, 1987.

30 D. Villarejo and J. Redmond, *Missed Opportunities -- Squandered Resources*, California Institute for Rural Studies, Davis, CA, September 1988, 78 pp; D. Villarejo, *How Much Is Enough?*, California Institute for Rural Studies, Davis, CA, December 1986, 115 pp. See pp. 87ff. for specific examples of this development.

31 State of California, Employment Development Department, private communication.

32 California Agricultural Labor Relations Board, *Highland Ranch*, 5 ALRB No. 54 (1980); *Rivcom*, 5 ALRB No. 55 (1980).

33 United Farm Workers of America, AFL-CIO, memo from Mary McCartney to Cesar Chavez, June 19,1985.

34 W. Friedland and A. Barton, *Destalking the Wily Tomato*, Research Monograph No. 15, University of California, Santa Cruz, June 1975, 68 pp; Friedland, W., A. Barton and R. Thomas, *Manufacturing Green Gold; Capital, Labor, and Technology in the Lettuce Industry*, Cambridge University Press, 1981.

35 Palerm, J. and J. Urquiola, "A Binational System of Agricultural Production: The Case of the Mexican Bajio and California Agribusiness," presented at the conference, *Neighbors in Crisis: A Call for Joint Solutions*, Irvine, California, Feb. 9 and 10, 1989; Victor Garcia, *Surviving Farm Work: Economic Strategies of Chicano/Mexican Households in an Agricultural California Community*, Ph.D. dissertation, Dept. of Anthropology, University of California, Santa Barbara, forthcoming.

36 Wells, M., "Political Mediation and Agricultural Cooperation: Strawberry Farms in California," *Economic Development and Cultural Change*, v. 30, no. 2, January 1982; "Commodity Systems and Family Farms," paper prepared for the 1987 Annual Meeting of the Society for Economic Anthropology, University of California, Riverside, April 3-4, 1987.

37 Mines, R. and R. Anzaldua, *New Migrants vs. Old Migrants: Alternative Labor Market Structures in the California Citrus Industry*, Monograph no. 9, Center for U.S.-Mexican Studies, University of California, San Diego, 1982; Lloyd, J., P. Martin, and J. Mamer, *The Ventura Citrus Labor Market*, Giannini Foundation Information Series no. 88-1, University of California, Berkeley, 1988.

38 Vandeman, A., *Labor Contracting in California Agriculture*, Ph.D. dissertation, Dept. of Agricultural and Resource Economics, University of California, Berkeley, 1988.

39 Friedland, W. and A. Barton, op cit.

DISCUSSION

CHANGING STRUCTURE OF CALIFORNIA AGRICULTURE

Moderator: Suzanne Vaupel
Discussants: Bill Friedland
Ralph de Leon
Ben Maddock

CHANGING STRUCTURE OF CALIFORNIA AGRICULTURE

Paper: "The Changing Structure of California Agriculture and its Impact on Farm Labor," by Don Villarejo, California Institute for Rural Studies
Moderator: Suzanne Vaupel, Private Consultant, Sacramento
Discussants: Bill Friedland, Professor, Community Studies, U.C. Santa Cruz
Ralph de Leon, President, SAMCO, Farm Labor Contractor
Ben Maddock, Vice-President, United Farm Workers, AFL-CIO

The following statements are edited excerpts from the spoken comments of the three discussants. Changes in wording have been made on occasion for clarification. The questions and comments that follow are also included in edited form.

Bill Friedland, U.C. Santa Cruz

One of the interesting things in Don's paper is the discrepancies in the section dealing with agricultural labor. If you compare that section with the section on production data, what you see is a very interesting phenomenon. That is, that the production data are really quite good and the labor data are really quite lousy. I'm not blaming Don for this because this is obviously not his fault. In fact, in his paper, Don has very carefully tried to triangulate the various data sources to better understand why the data from some sources appear to be better than from other sources.

When we take the totality, we have an intellectual question which must be addressed. Why are the data on agricultural workers so lousy? The answer is very simple. The fox has been in charge of the chicken coop for too long a period of time.

In the past, I've looked at data for the United States from the USDA publication, *Hired Farm Labor Force*. That is a survey done every two years on behalf of the Department of Agriculture by the Bureau of the Census. It's a lousy data source. For example, it shows that Wisconsin and Michigan have no Mexican farm workers, which just isn't true. The same for Florida. Why is this data false? Very simple. The survey of farm workers is carried out in *December*. This is a very simple methodological problem which the USDA has failed to come to grips with.

One would think that it would be in the interest of *all* communities to have good data on an issue like farm labor. It apparently is not the case because after all these years, we have not yet produced adequate data sources.

The University of California has failed in its responsibility to generate good data because it has essentially been aligned with one segment of the community, the grower segment. The growers have had linkages into the centers of the University and its Agriculture Division for over fifty years.

The question is, why has the University not changed? The answer can be understood from the experiences of Fred Schmidt and Isao Fujimoto. Both of them deserve the honor that Jim Lorenz gave them today. Schmidt argued for years that the University should create a farm worker extension service. Fujimoto was one of the true pioneers in the 1960s in struggling with

U.C. Davis. There are other people too who have struggled from within the Agriculture Division and have not succeeded in the University of California because the University has not mended its ways.

Indeed, the only response of the University Extension Service, after years and years of protest about the issue of agricultural workers, was to create the Agriculture Personnel Management division. I don't know anybody who thinks that Personnel Management is a set of activities that fundamentally is concerned and dedicated to the cause of workers.

It is time to resuscitate Fred Schmidt's position, that the primary source for the generation of information must fulfill its responsibilities and in a way which will not be captured by the growers. The University of California should be creating an instrumentality which will, at a minimum, produce good data on farm workers. It must be organizationally isolated from "the fox." That is, it cannot be located within the Agriculture Division of the University.

Agricultural Extension in California and throughout the nation created the Farm Bureau. They said it was their responsibility to go out and organize growers, and they succeeded beyond belief. Now it is time for the University of California to create the mechanisms that will help to organize farm workers.

Ralph de Leon, SAMCO

I can see that farm labor contractors are becoming part of the spotlight. This is the first time that I have seen a farm labor contractor invited to a conference even though he has been an integral part of agriculture for many, many years. On the other hand, it might not be such a good idea to involve farm labor contractors, because maybe we don't want to be in the spotlight.

I would like to save most of my time for questions because I can see the eagerness in the eyes of many people who would like to get a contractor on the other side of the table. The union has been trying to do that for a long time and the growers are trying to hide us.

First, I would like to briefly give you a little bit of my history. I was born in Mexico and during the summer vacations my parents used to come over to Milpitas and San Jose to the apricot, peach and pear harvests, naturally illegally. Then we would go back to Ensenada where I was raised.

At 18 I came across the border to work in the fields, in a packing house, and for a large growers' association during the bracero program and after the bracero program.

I went to the Imperial Valley during the UFW strike of melons and asparagus. I was on the other side. After 1975 I became the manager of a grower association. In 1976 I saw that the union began to organize the citrus industry in Ventura County, and so I decided that was the best time for me to become a labor contractor. And here I am now, a successful millionaire labor contractor.

Ben Maddock, UFW

I'm going to talk about different structural change going on in California agriculture. Don put up

a list of large growers in the state of California. There are growers that are not on that list and are probably as large as anyone there. One is Sun World. If you look in all the records, Sun World owns very little. But if you punch in the address of Sun World in Bakersfield, some twenty to twenty-five companies come up on record.

The reason that we see this change in structure in agriculture, is because some growers are trying to hide from taxation or water restrictions or from unionization. You will see that today, with the use of computers and labor contractors, the large grower associations are disappearing. In reality, they don't disappear.

In Salinas, since 1977, we've had a contract with a place called VEGPAK. Two years ago VEGPAK went out of business, saying they were no longer going to be growing or shipping vegetables. That's wrong. VEGPAK is still around. But they were successful at getting away from the UFW and their contract. This is happening throughout California. Packinghouses in the citrus industry in Ventura County used to go to grower associations to hire workers and today they go to labor contractors.

The growers keep saying that there needs to be a stabilization of the work force. That's a big lie. If the workers get stabilized in an area and they begin to organize and their demands go up, California brings in other workers to keep costs down.

The work force in Ventura County was stable at one time and today it is controlled by labor contractors. Now with the new amnesty law, making immigrants legal, the next thing that is going to happen is to bring in H-2 workers to keep the wages down again.

The structure of agriculture has drastically changed so that growers can keep the wages down. It is much more expensive to direct hire than to use a labor contractor. It's like turning on the faucet. If you need labor today, you turn on the faucet. If you don't need it tomorrow, you turn it off. With direct hiring, you have to be a little more compassionate to know if you're going to get those workers back.

The wages in this changing structure reached a high about three years ago. The wages now are on the downside; with the surge in the use of labor contractors, wages are going backward.

The worker at the border pays $185 because he thinks he qualifies under the amnesty program, and he comes in to work for 90 days. That person signs up with a labor contractor, he works a little cheaper, and then the workers over here who were "stabilizing" no longer have work. There are over 12,000 of those cases coming across the border every day. Instead of stabilizing the work force, it is destabilizing. I would like to see a research paper on the real role of the farm labor contractor.

Look at all of the records and see, what are the abuses? ...what is really happening? Do we really need the farm labor contractor in our society?

I would also like to see research done (not just how many workers are hired or how many growers there are), on the large farm today in California, on the corporate farm and on the family farm.

Questions/Comments

Rick Mines
I would like to comment on the hired work force that Bill Friedland brought up. The responsibility for continuing that in the Department of Labor, where I work, was killed. It no longer exists. The survey called the Hired Farm Work Force was eliminated.

Suzanne Vaupel
(asked of Ralph de Leon) What do you think the effect of IRCA (Immigration Reform and Control Act) has been on farm labor contractors? Has it increased the number of growers who are turning to farm labor contractors? Has it increased or decreased the supply of workers available to contractors?

Ralph de Leon
There are no facts that support the idea of a scheme by growers to give business to farm labor contractors.

Let me tell you a little story about labor contractors. In Ventura County in 1976 there were no labor contractors in the citrus industry. I was the first. I convinced the growers that they would be better off working with me than facing the possibility of a union contract. So they had a choice. Eighty percent of the growers came with me, and SAMCO was born. Some of my foreman left to become contractors too. Today there are twenty-five labor contractors in the citrus industry. We are all competing for the same growers, the growers are not competing for labor contractors.

As far as wages are concerned, if I pay $6.22 an hour to a farm worker for harvesting citrus, why should he go to another contractor to get less? There are no fringe benefits. We compete on hourly wages alone. So we have to bend our ears to the workers to try to make their environment as good as possible under the circumstances. We are the personnel managers. And perhaps we know more than a lot of studies that have been done on personnel management.

We have to keep the grower happy. We have to keep the workers from being organized or from being stolen by another labor contractor.

Why the emergence of labor contractors so suddenly? I have no statistics on this. But I believe that it has to do with the increase in compensation insurance rates in the citrus industry. It has to do with the State law, not with wages. The amount of accidents in the citrus industry is very high. Twenty-one percent of the overhead that we charge to growers goes to compensation insurance, 7.5 percent goes to Social Security, 5.4 percent goes to unemployment insurance. So there isn't much profit out there.

Why have wages gone up (total wage bill)? Not because we have raised the wages, but because people are working longer periods of time to qualify under IRCA.

Bill Friedland
The point that Ralph de Leon has just made indicates that we simply cannot go through the "normal" data collection procedures if we want to have good data. If, as researchers, we want to know what is really going on out there, we will have to get our information from the field. Up until now, data collection has tended to be "synthetic," using formulas to calculate how many workers are out there. The State has to be committed to putting up the money for field-level data collection on labor issues, not just on production issues.

Judith Redmond
There was a suggestion made by Bill Friedland to have some kind of farm labor extension service, and to have the University start to organize farm labor instead of just serve to organize producers. I would like to know from Ben Maddock and Bill what that kind of program would really look like.

Elizabeth Martin
If you talk to farmers in the Midwest about the "services" provided by the land grant universities, they see themselves as having been driven off the land by mechanization and research. If we are going to consider having the University get involved in labor organizing, how do we keep it responsible to labor? How do we ensure that the same thing does not happen to farm labor as has happened to Midwestern and Southeastern farmers as a result of their alliance with the land grant colleges?

Ben Maddock
I'm not sure whether U.C. should be involved in organizing farm workers. Over the years, the University of California has done a lot of research for the farmer in the development of new crops. There are a lot of growers saying that they would not be as productive or competitive as they are without those new seeds, new strains, and new crops to grow.

I think that as U.C. discovers new ways for farmers to replace workers, it should also work on finding out what to do with the replaced workers. With the advent of the cotton picking machine, four, five and six row machines, California is growing more cotton than ever before. What happened to all those workers? They're in the cities. And in tomatoes, there are very few pole tomatoes left where workers can make money. Now they're harvested mechanically. You can use the tomatoes harvested today in a baseball game.

They say that as costs go up you have to eliminate the farm worker. I would like to see the University of California spend a lot more money on the retraining of workers and a little less on developing labor-displacing technologies.

Bill Friedland
In the suit that California Rural Legal Assistance (CRLA) successfully brought against the University of California for its agricultural mechanization research, there was a set of suggestions made to the judge on getting the University to change its ways. Ultimately, CRLA withdrew the proposal because of their assessment of the legal and political factors involved.

In that proposed "remedy" there were some important ideas. For instance, the need to create a mechanism for funding for research within the University, but separate from the Agriculture Division. There should be constituency representation which has an advisory voice. This type of relationship already exists between the University Agriculture Division and growers, and now it should be applied to the issue of farm labor.

Karl Lawson
Everybody is talking about how there is a "decasualization" of the labor force and new structural trends. We have to realize that somebody sits down and makes the decisions that start those trends.

For example, in Ventura County many large employers who used direct hire no longer want to rehire those workers who have become legal. They want to maintain an undocumented work force. They want to get rid of the people who qualify under the SAW program and have burdensome seniority benefits.

All the growers and labor contractors reaped two harvests this last year. They had a great harvest of letters they sold for a price from $100 to $1,000. I'm talking about real letters needed for legalization, not fraudulent letters, that growers sold to their own employees.

The point of this is that agriculture wants a Third World economy here in the United States. They want to bring wages and benefits down so low, and have an inexhaustible labor supply, to make sure that we have an internal Third World economy in the United States that serves the needs of agribusiness. This is the larger question. It is essentially a political question.

One recommendation I can make is that we increase the penalties for evasion of taxes and compensation from civil penalties to criminal penalties. Some people have to be thrown behind bars for the crimes they're committing.

Luis Magana
I have been a farm worker for over eighteen years in the San Joaquin Valley. My family came to the United States during the bracero program. I represent an organization of workers in San Joaquin County, the "Union Campesina Lazaro Cardenas," that has relations with workers in Mexico.

I would like to comment on the points made about farm labor contractors. There are two types of farm labor contractors in California. One type operates with a license, the other does not. Both of them function the same way, as filters of protection for the growers.

I have two friends who last year were picking tomatoes with me and now are labor contractors. We have such weak laws that anyone can become a contractor. They are very ignorant about labor regulations, such as OSHA. And now they have the power to legalize a lot of people, filling out I-705 legalization forms.

Let's not forget about the massacre by a labor contractor from Arizona. Becoming a farm labor contractor is like a modern day *malinche* from Mexico [a traitor to the people].

We have the responsibility to help farm worker organizations make known the ignorance and violations of the labor contractors. We need to weaken and eliminate this intermediary that stands in the way of farm worker organization and justice for farm workers.