Farm Worker Needs In California

A Report Prepared for
California Rural Legal Assistance, Inc.
by
Don Villarejo, PhD

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(530) 756-6555

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Francisco and Jovita are a newly married couple who recently arrived in Madera from their home in Oaxaca, Mexico. Both are undocumented migrants who crossed the border in Tijuana after paying two hundred dollars each for the assistance of a coyote who dropped them off somewhere in the hills of north San Diego County. They lived in a cave near Julian for a few days with some fellow villagers from Oaxaca until they were able to negotiate a ride to the Central Valley with a labor contractor who was looking for workers to pick the tomato harvest. They have been in Madera for over a month. They live in a 1975 Ford station wagon that has a broken fan belt and no back window. A neighbor from back home, who also lives in Madera, charges them fifteen dollars a week to park in front of his house and use his water spigot. Francisco goes to work every day at three-thirty in the morning, riding out to the tomato fields on the labor contractor's bus with the other workers for five dollars a day. Jovita cannot find work. She says that no one will hire her since she is eight months pregnant. She has never been to a medical clinic in her life and plans to give birth to the child in the back of the car with the aid of her friend, Reyna, who is from her home town. She waits all day for Francisco to return, often making bracelets of colored yarn to sell to people in the K-Mart parking lot in the afternoon. When Francisco returns from work they both ride down to the San Joaquin River to bathe. Francisco is careful to wash the agricultural chemicals from his body. They hope to save enough money to rent a room from the labor contractor for twenty-five dollars a week so that Jovita might have the convenience of a bathroom when the baby comes.

Bonnie Bade
"Migrant Farm Worker Needs Assessment." 1990
University of California Cooperative Extension
Executive Summary

California's annual production of fruits, vegetables and horticultural crops has significantly expanded in recent years. Supply increases have out-stripped demand for some crops which, in turn, has led to financial instability within some firms, mainly vegetables and wine grape producers.

Expanded production has resulted in an increase in labor requirements. It is estimated that labor demand in California agriculture has increased by 20% over the past fifteen years.

The farm worker population has increased in number, largely as a result of new immigration. The Immigration Reform and Control Act of 1986 clearly stimulated a substantial new immigration, both authorized as well as unauthorized. Today, 9 of every 10 California farm workers is foreign-born: mostly from Mexico. Just 4 out of 100 workers is U.S.-born.

This new immigration has both broadened and deepened among the peoples of Mexico and, increasingly, Central America. Large numbers of indigenous migrants can now be found working in California's fields.

As the number of farmers and unpaid family members has steadily decreased, and California's farms become increasingly dominated by very large businesses, our state's agriculture has become increasingly dependent upon hired workers. Today, at least 80% of all of the work on our farms, on a year-round basis, is performed by hired workers.

The single most important recent development in farm employment is the increased use of labor contractors. At least one of three California farm workers is employed by a labor contractor during the year. At peak season an actual majority of San Joaquin Valley farm workers in fruits and vegetables works for a labor contractor.

The number of workers in California agriculture is difficult to estimate but wage reports submitted by employers identify some 881,000 different persons (actually Social Security Numbers) employed in agricultural jobs each year. Annual average employment is quite a bit lower since most workers experience long periods of unemployment between jobs.

Most agricultural work, some 90%, is performed by persons who piece together a series of jobs, usually interspersed with periods without work. Thus, very little work is done by persons who enter the labor force only for a short period during the peak of the season. The notion of the "seasonal worker" is largely a myth.

Roughly four of ten California farm workers migrates to find employment; most are young, have an average of just six years of formal education, earn about $6,500 per year, and do not make much use of government-supported services.

Finally, the evidence strongly supports the existence of a substantial labor surplus in California agriculture. Correlated with this is a significant decline in wage rates and an even larger decline in annual earnings.

Unions and other organizations directly representing current farm workers have declined. The large labor surplus as well as continuing immigration are obstacles to organizing efforts.
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Trends in Agricultural Production

California's agricultural industry is larger than that of any other state and currently produces 70% more than does that of second-ranked Texas. Despite great difficulties associated with six consecutive years of drought, the devastating impact of the December 1990 freeze, pressures of urbanization displacing prime farm land and various pest plagues, California's share of national crop production is greater today than ever. With just 3% of the nation's crop land, the state produces 17% of all U.S. crops as measured by farm cash receipts.

The most important changes in the pattern of crop production within California over the past twenty years are in the amounts and types of crops being produced. If we focus attention just on those commodities which require significant amounts of labor, the following trends are significant over the past twenty years:

- vegetable output, in tons, has more than doubled;¹
- tree fruit volume, in tons, has increased by one-third;²
- grape output, in tons, has increased by one-half;³
- nursery crop production has increased by at least one-third;⁴
- exports of California fruit and vegetables have steadily increased after declining in the mid-1980s and reached a new record high in 1991.⁵
Figure 1 presents the twenty year California production record, by total volume, of all fruits and vegetables, and, separately, for each of vegetable, tree fruit and grapes. The figure shows the total output, in millions of tons, of the specified type of commodity for each year in this period. Despite some significant year-to-year swings, due mainly to variations in weather, water supply and pest problems, the overall trend in production is clear: major increases in the annual tonnage of all of these crops over this twenty-year period.

Total production of all California fruits and vegetables a record level of 30 million tons in 1990 before dropping somewhat in 1991. As the figure demonstrates, tree fruit production declined in 1991, due mainly to the effect of the December 1990 freeze on citrus production. But vegetable production actually rose in 1991 as compared with 1990.

California now produces 52% of all of the principal fresh vegetable crops grown in the U.S. Equally significant, we also account for 62% of all processing vegetable output: mainly tomatoes, cucumbers, broccoli and cauliflower.

For all fruits and nuts, California’s share of national production is 54%. For nursery and greenhouse crops the Golden State’s share is 23%.

Much of the expanded production described above is in response to increased consumer purchases of fresh fruit, fresh vegetables and ornamental horticultural products. U.S. residents, on a per capita basis, now consume much greater amounts of fresh fruits and
FIGURE 1
California Fruit & Vegetable Production

Production, million tons

Year

TOTAL FRUIT & VEGETABLES + VEGETABLES ◆ TREE FRUIT ▲ GRAPES
vegetables than they did a generation ago. In 1989, U.S. per capita consumption of fresh vegetables was approximately 101 lbs. per year, an increase of 50% from 72 lbs. per year just twenty years earlier. Similar increases were registered in per capita consumption of fresh fruits. While processed fruit consumption is lower today than it was a generation ago, processed vegetable consumption, mostly of tomato products, has increased. Even fast food outlets today typically provide salad bars with fresh fruit as well as the high-fat products usually associated with that industry.

Exports of California Produce Increased Sharply in the 1980s

A less well-recognized factor driving increased production is the great success of California producers in marketing their products overseas. Agricultural production and distribution, as in the case of automobiles, has become globalized in the past two decades.

The potential of both Asian and European markets as a destination for California produce is considered to be especially great. For example, the European Common market is now larger than that of the U.S. (350 million people vs. 250 million persons in the U.S.) and is also wealthier than the U.S. Some produce industry experts argue that the most important component of future business is in global marketing of high value commodities to affluent customers.

Industry leader Sun World International, Inc., now exports 85% of its Valencia oranges, 65% of its grapefruit, 50% of its lemons,
40% of its grapes and 45% of its tomatoes. According to Doug Barker, Executive Vice-President of Sun World, "If you're not shipping 30% of your product overseas you're depending too heavily on the domestic market." ¹⁰

The emergence of this trend, the globalization of the fresh fruit and vegetable industries, was the subject of an international meeting of scholars and others at the University of California, Santa Cruz, in December 1991, the first gathering of its kind to focus on this topic. Papers based on presentations at that meeting are now available.¹¹

As an specific illustration of the extent of the growth of California produce exports over the past several years we consider the recent trend in table grape exports. Since 1984 exports of California table grapes have tripled, to about 7.6 million lugs (23 pound equivalents) in 1991.¹² Exports today represent 14% of total table grape shipments. Hong Kong is now the third most important destination for California table grapes, ranking behind Los Angeles and New York but well ahead of all other U.S. cities in terms of volume.

A number of factors are important in the expansion of exports of fresh fruits and vegetables. First, the market for these products is already larger in other nations than it is in the United States. Generally, annual per capita consumption of fresh fruits and vegetables is much greater in other nations than it is in the United States. In both Japan and France, for example, annual per capita fresh vegetable consumption is twice that of the
U.S. In Turkey it is four times that of the U.S.

An additional factor in the increase of exports is the decline of the value of the dollar relative to other currencies over the past several years. In other words, it now takes very much less of a given foreign currency to buy one U.S. dollar or the equivalent amount of goods. This makes U.S. exports less expensive and, hence, more competitive in the international marketplace.

Finally, the Federal government now appropriates large sums of money through the U.S. Department of Agriculture to a number of commodity organizations to spend on the direct promotion of U.S. food exports. For example, the California Walnut Commission has received a total of $36 million in Federal funds over a six year period in the 1980s. These funds were used to promote walnut consumption in more than a half-dozen foreign nations. The effectiveness of this effort can be measured in the substantial increase in walnut exports to these counties.

Other Factors in Crop Trends

By examining acreage and production data together it is possible to show that roughly half of the twenty-year increase in vegetable production is due to expanded acreage and half is due to increased crop yields (quantity per acre harvested).\textsuperscript{13} Thus, improvements in crop yields, not just expanded acreage, is a major factor in the production increases described above. California's continuous improvement in its share of national crop production is due to the fact that farmers in the Golden State have successfully increased both the amount of land devoted to the production of
fruit, vegetables and ornamental horticultural products as well as increasing per acre yield of these crops.

However, not all of California's crops have experienced growth in overall production. Field crops, especially irrigated pasture, barley and oat hay, have seen major declines in acreage in recent years. California's yearly output of major field crops has declined from 28.3 million tons (3-year average for 1980-82) to 23.7 million tons (3-year average for 1989-91). This decline amounts to 16% over just the past nine years. Thus, there has been a pronounced shift away from field crops and toward more intensive crops, which generally require greater amounts of labor.

The decline in field crop production appears to be related to two inter-related factors. First, continuing low world market prices for these crops lead farmers to look for better alternatives. Second, the long drought in California has pressured many farmers to cut back on their planted acreage. Many farmers now look to reduce their overall water requirement by planting a smaller acreage with vegetables or fruit crops, which have a much higher cash return per acre, to replace low value field crops.

California has also continued to develop its livestock industry in new directions, mainly by shifting away from grazing and toward intensive dairy, poultry and egg production. Based on current trends, California will displace Wisconsin as the nation's leading dairy state before the end of this decade.

Vegetable Production

Figure 2 identifies California's leading vegetable crops as
FIGURE 2

CALIFORNIA VEGETABLES AND MELONS
PERCENT OF TOTAL VALUE OF PRODUCTION

Lettuce 17%
Proc. Tomatoes 18%
Asparagus 2%
Carrots 6%
Celery 4%
F.M. Tomatoes 7%
Broccoli 8%
Onions 4%
Cauliflower 4%
Mushrooms 4%
Other Veg & Melons 27%
Honeydew Melons 1%

EXCLUDES POTATOES & SWEETPOTATOES
processing tomatoes, lettuce, fresh market tomatoes, broccoli and carrots. Their relative share of state vegetable production in 1990, based on crop value (farm cash receipts), is also shown in Figure 2. Processing tomatoes is the leading vegetable crop, with one-sixth of total vegetable cash receipts, followed closely by lettuce. Fresh market tomatoes ranks third, and broccoli and carrots follow close behind. The twenty-year trend in processing tomato and lettuce output, the top two vegetables, is shown in Figures 3 & 4.

Production data for California processing tomatoes shows a great deal of fluctuation from year to year. However, as shown in
Figure 3, which records annual production in millions of tons, there was a dramatic increase in output in 1989 and 1990. This increase is attributable to decisions by cannery operators to build up their stocks of such tomato products as catsup, pizza sauce and tomato sauce in the face of increasing demand.

In the case of lettuce, Figure 4, production is shown in thousands of hundred-weights (cwt) for each year. The evidence shows that there was a significant decline in California lettuce production in the post-1978 strike period. However, a strong recovery in California lettuce production began to take hold in 1987 and it now exceeds the pre-decline level.
Nursery and Greenhouse Crops

While we have focussed a great deal of attention on vegetable production, cut flower and ornamental plant production are the fastest increasing major segment of California farm output. Also described as nursery or greenhouse crops, this segment is novel in that relatively little land is needed and the cash receipts per acre of production are extremely large. Farm cash receipts resulting from the sale of U.S.-grown ornamental horticultural products are now so great that they bring American farmers more revenue than does all of U.S. wheat or cotton production.  

Analysis of historical production data for California shows a clear long-term pattern. Initially most agricultural land was used for livestock: dry land range for cattle grazing. Then dry land cultivation was introduced to provide grain for flour production. When irrigated farming was first developed it was for the purpose of growing alfalfa for livestock feed or growing food grains. Later, irrigation was used for vegetable production as well as for a broad range of field crops. When irrigation supplies were made secure and reliable, permanent crops, such as orchards and vineyards, were developed. Finally, as population densities increased, nursery and greenhouse production began to take over land that was one used for these earlier purposes. In a sense, nursery crop production can be thought of as an "ultimate" use of crop land.

These successive stages of crop land development are most readily noticed in San Diego County where nursery crop production
has expanded rapidly in recent years, replacing vegetable crops as the leading agricultural commodity. San Diego County reported that its agricultural production exceeded $1 billion in total value for the first time in 1991, and the total value actually increased by some 9% over the 1990 level.\textsuperscript{16} Nursery and flower products were the number one crop for the third year in a row. It is one of the paradoxes of California that San Diego County is also one of the largest and most rapidly urbanizing counties in the state.\n
**Impact of Crop Production Shifts to Mexico on California**

Production increases in certain important California crops have been so large in recent years that even those which have experienced a major movement of U.S. producers to Mexico have also seen major increases in output in California \textit{at the very same time}. For example, substantial amounts of fresh tomato, broccoli and strawberry production for export to the U.S. has been developed in Mexico over the past dozen or so years. However, California's production volume of each of these crops actually increased \textit{at the same time}.\textsuperscript{17} In the case of broccoli and strawberries, the amount of these increases has been in excess of 400% over the past twenty years.

Figures 5 - 7 shows the twenty-year California production record for these crops. Each of these graphs depict annual production in thousands of hundred-weight (cwt). For fresh tomatoes, whose production record is illustrated in Figure 5, we know that approximately 10,000 acres of pole tomatoes were developed in Baja California in the past fifteen years. Pole
tomatoes require a great deal of labor since each tomato is picked when ripe on the vine, requiring repeated harvest sweeps by crews of workers. However, bush tomatoes, which are mainly the so-called "green mature" variety, require very much less labor because they are picked while still green and are artificially reddened after harvest by gassing with natural ripening agents. Because bush tomatoes are less susceptible to damage in handling and have a very much longer storage life, they are now preferred by supermarkets and have largely displaced vine ripe tomatoes. Thus, California has recaptured a cost advantage by mainly producing bush tomatoes, which have a very much lower production cost, roughly
equal to one-third that for the pole variety.

In the case of both broccoli and strawberries, production in California has literally exploded and shows no sign of abating. This is shown in Figures 6 & 7. However, processed broccoli production has experienced a major shift out of California, as most poignantly symbolized by the closing of the Watsonville Green Giant plant. Nevertheless, California broccoli production is at or near all-time record levels.

This seeming paradox can be understood if it is realized that the U.S. market for these crops expanded so rapidly in the past twenty-year period that there was ample opportunity for both U.S.-
based and Mexican production to share in the benefits. Another consequence of this observation is that shifts of crop production to Mexico do not necessarily result in decreased U.S. production of that commodity. In fact, if demand is increasing rapidly enough, as did occur in both broccoli and strawberries, production on both sides of the border may increase simultaneously.

Business Failures in Agriculture Are Increasing Again

Agriculture, unlike other industries, is especially sensitive to over-production in the short term. A bountiful harvest may lead to economic ruin within the same year! When the amount of the available product reaching market at a given time is too great
prices plummet by very large factors and returns to farmers suffer. More generally, when demand for perishable agricultural products is significantly less than the corresponding supply, the prices for the product will fall.

The most recent national data show that agriculture is the industry which appears to be suffering the most from the current period of economic stagnation. According to Dun and Bradstreet, the nation's leading credit service business, in the first six months of 1992, bankruptcies in Agriculture, Forestry & Fishing are up by 33.2% over the first six months of 1991. For all industries, including manufacturing and services, the corresponding increase is 16.8%. While these are national totals it is significant that California business failures for all industries increased by 42.6% in this same period. Industry-by-industry data are not yet available for individual states for 1992. However, the data for 1991 shows that California agricultural businesses suffered more bankruptcies than did those of any other state.

In the past several years there are significant indicators that for several California commodities production increases have out-stripped demand. During Spring 1991 lettuce prices fell by a factor of three as compared to Spring 1990 lettuce. It appears that many desert vegetable producers lost money recently. And shipments of California wine have fallen from 424 million gallons per year to just 375 million gallons per year over the past five years. The latter effect appears to be a result of lower per capita wine and spirits consumption in the U.S. At the same time
there is also evidence that the industry over-expanded with large new plantings in the San Joaquin Valley, often representing absentee investors with little direct knowledge of the wine grape industry.

These developments have contributed to new wave of business failures, consolidations, mergers and farm restructuring within the California farming sector. A number of major vegetable companies, such as J.R. Norton Farms, have closed and sold off their properties.

In early Spring 1992, San Joaquin Farming, Inc., a 2,734 acre wine grape ranch in Stanislaus County, laid off all 400 employees who had been working under union contract (United Farm Workers of America, AFL-CIO). The land owner, John Hancock Mutual Life Insurance Co. of Boston, decided to sell off the property, possibly as a result of the weakness in the California wine grape business mentioned above. Another farm operating company, Michael Hat Farming Company, took over operations during Spring 1992 and replaced all of the laid-off workers. At this writing the dismissals of the UFW contract employees are under appeal.

While there are many sectors within California agriculture that are performing well and are highly profitable, it is important to realize that other sectors are experiencing significant economic difficulty. It is anticipated that the next several years will see additional farm failures and consolidations, particularly in fresh vegetables and wine grapes. These developments portend additional potential serious problems for employees of failing firms.
Figure 8 shows a summary of California farm cash receipts and net farm income for the years since 1980 without any correction for inflation. The figures are in billions of dollars. After falling somewhat during the national farm depression of the mid-1980s there has been a recovery, but followed again by a downturn which is most likely attributable to the December 1990 freeze.
Expanded Crop Production Has Resulted in Increased Labor Demand

Associated with the changing pattern of agricultural production described above are changes in the need for labor. In this context, it is important to realize that increases in production do not necessarily correspond to increases in labor demand.

Technological changes, such as harvest mechanization, may result in a reduction of labor demand even when overall production has increased. It is well known that certain commodities have experienced productivity changes associated with technological improvements in recent years. Mechanization of the processing tomato harvest, for instance, is a case where aggregate labor demand was reduced despite large increases in production.

In contrast, production of broccoli, cauliflower and head lettuce have expanded by such a large amount that the introduction of labor-saving field packing of these commodities has not resulted in a lesser demand for labor. This is because the increased labor required by much larger plantings is greater than the reductions in labor demand associated with improvements in productivity.

Table I shows estimates of seasonal hand-labor requirements for California specialty crops. The harvested acreage and the observed number of hours of seasonal hand-labor per acre are determined on a crop-by-crop basis.\textsuperscript{23} The product of these is the estimated hours of seasonal hand-labor needed for the crop.

Runsten and LeVeen determined the seasonal hand-labor requirement for these same crops for 1976 and found the total to be
Comparison of their result with the result in Table I shows that seasonal hand-labor demand in these crops has increased significantly, by 21%, in the past sixteen years.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Harvested Acres</th>
<th>Labor (hr./acre)</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almonds</td>
<td>409,000</td>
<td>13.65</td>
<td>5,583,000</td>
</tr>
<tr>
<td>Apricots</td>
<td>17,400</td>
<td>141.07</td>
<td>2,455,000</td>
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<tr>
<td>Cherries</td>
<td>10,200</td>
<td>245.50</td>
<td>2,504,000</td>
</tr>
<tr>
<td>Grapes, raisin</td>
<td>271,000</td>
<td>81.50</td>
<td>22,086,000</td>
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<tr>
<td>Grapes, table</td>
<td>80,700</td>
<td>192.72</td>
<td>15,552,000</td>
</tr>
<tr>
<td>Grapes, wine</td>
<td>290,000</td>
<td>81.72</td>
<td>23,700,000</td>
</tr>
<tr>
<td>Lemons</td>
<td>48,400</td>
<td>120.00</td>
<td>5,808,000</td>
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<tr>
<td>Oranges, navel/misc</td>
<td>108,000</td>
<td>80.05</td>
<td>8,645,000</td>
</tr>
<tr>
<td>Oranges, valencia</td>
<td>69,500</td>
<td>93.50</td>
<td>6,498,000</td>
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<tr>
<td>Peaches, cling</td>
<td>27,600</td>
<td>123.90</td>
<td>3,420,000</td>
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<td>Peaches, freestone</td>
<td>26,900</td>
<td>330.00</td>
<td>8,877,000</td>
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<tr>
<td>Pears</td>
<td>23,000</td>
<td>134.88</td>
<td>3,102,000</td>
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<td>Plums</td>
<td>40,600</td>
<td>352.00</td>
<td>14,291,000</td>
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<tr>
<td>Prunes</td>
<td>76,900</td>
<td>21.67</td>
<td>1,666,000</td>
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<tr>
<td>Walnuts</td>
<td>177,000</td>
<td>-</td>
<td>-</td>
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<td>Asparagus</td>
<td>37,500</td>
<td>61.80</td>
<td>2,318,000</td>
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<tr>
<td>Carrots</td>
<td>57,600</td>
<td>9.44</td>
<td>544,000</td>
</tr>
<tr>
<td>Celery</td>
<td>21,800</td>
<td>104.13</td>
<td>2,270,000</td>
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<tr>
<td>Lettuce</td>
<td>168,400</td>
<td>132.39</td>
<td>22,294,000</td>
</tr>
<tr>
<td>Cantaloupes</td>
<td>82,200</td>
<td>132.73</td>
<td>10,910,000</td>
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<td>Tomatoes, proc.</td>
<td>276,500</td>
<td>33.66</td>
<td>9,307,000</td>
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<td>Tomatoes, fresh</td>
<td>38,400</td>
<td>150.00</td>
<td>5,760,000</td>
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<tr>
<td>Strawberries</td>
<td>19,900</td>
<td>889.62</td>
<td>17,703,000</td>
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<tr>
<td>Cotton</td>
<td>1,059,000</td>
<td>2.62</td>
<td>2,775,000</td>
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<tr>
<td>Sugar beets</td>
<td>180,000</td>
<td>24.00</td>
<td>4,320,000</td>
</tr>
</tbody>
</table>

Total hours: 202,388,000

Source: a.) California Agriculture, Statistical Review 1989, California Department of Food and Agriculture, Sacramento, CA, September 1990; b.) John W. Mamer and Alexa Wilkie, Seasonal Labor in California Agriculture: Labor Inputs for California Crops, California Agricultural Studies, No. 90-6, Employment Development Department, State of California, Sacramento, CA, December 1990; c.) For asparagus, Mamer and Wilkie's labor coefficient for Riverside County was used, and for fresh tomatoes, which Mamer and Wilkie did not report on, a CIRS estimate was used.
From Table I it is clear that wine grapes, lettuce and raisin grapes require the largest amounts of temporary hand-labor. Each requires more than 20 million hours of temporary labor. For purposes of reference, 20 million hours is equivalent to 40,000 persons working full time for three months.

Next in order of the amount of temporary labor requirements are strawberries, table grape and plums. Surprisingly, processing tomatoes require a greater aggregate amount of temporary labor than fresh tomatoes. This is due to the very large acreage of the former (276,500 acres) as compared with the latter (38,400 acres). Thus, even though the labor requirement for each acre of fresh tomatoes is much greater than that required for processing tomatoes, the huge acreage of the latter causes its labor requirement to be larger.
Our Farm Worker Population Has Changed as a Result of Immigration

Every available measure indicates that the supply of agricultural labor has increased by a large factor in recent years, especially subsequent to the passage of the Immigration Reform and Control Act (IRCA) of 1986. Labor supply refers to the total pool of hours of labor available by individuals able to perform work. The evidence clearly shows that, on average, the supply of labor currently exceeds demand by a large factor in every agricultural region of the state.

The most important factor in this increased supply of labor is new immigration from Mexico and Central America. Today, more than 95% of California crop workers report that they were born in Mexico, Latin America or elsewhere other than the U.S. This represents a substantial increase in the proportion of foreign-born workers as compared with thirty years ago. In some crops and tasks, such as the raisin grape harvest, virtually all workers are now foreign-born.

The relative importance of IRCA as a stimulant of new immigration is difficult to gauge as compared to the role of "push" factors, such as the decline of the Mexican economy during the mid-1980s. We do know that large numbers of undocumented workers were increasingly a factor in U.S. agriculture during the period preceding enactment of IRCA. Some estimates placed the number of unauthorized workers as high as 40% of all farm workers just prior to the passage of IRCA.

The Immigration and Naturalization Service (INS) expected that
about 360,000 workers would qualify for permanent residency under the Special Agricultural Worker (SAW) visa program of IRCA. So INS printed up about 800,000 sets of application forms for the program. They were woefully wrong in their estimates. It now appears that about 1.3 million persons applied for SAW visas, including 700,000 who reported California addresses.

The very large surplus of workers in agricultural areas is also a direct result of the economic decline of California in the past several years. For example, during May 1992, the average rate of officially reported unemployment was 14.65% in the eight San Joaquin Valley counties. Interviews of farm workers in the San Joaquin Valley during 1989 indicates that the average number of months of full-time work they were able to obtain in 1988 was just 4.6 months and that 82% of workers interviewed stated that they experienced lengthy periods of unemployment "when the season ends." Thus, chronic under-employment characterizes the work experience of most agricultural workers.

The ethnic and national composition of the new immigrants differs in major ways from what was the case even as recently as ten years ago. Not only are more immigrants arriving each year but they are, increasingly, indigenous people from southern Mexico (Oaxaca) and Guatemala. In some commodities and regions the California farm labor force is now dominated by indigenous immigrants.

It is also clear that the fraction of undocumented workers in the farm labor force is increasing. The National Agricultural
Workers Survey (NAWS) reports that 12% of all U.S. workers performing seasonal agricultural services are undocumented.\textsuperscript{31} Alvarado et al. reported about 7% of San Joaquin Valley workers whom they interviewed stated that they did not have papers.\textsuperscript{32} While the Special Agricultural Worker (SAW) visa program of IRCA has provided legal resident status for some 521,817 agricultural workers in California to date, there is compelling evidence that large-scale unauthorized immigration continues.\textsuperscript{33} Unofficial estimates from knowledgeable government sources places the net flow of unauthorized Mexican immigrants into the U.S. at about 200,000 per year.

Surveys of indigenous Mixtec immigrants demonstrates that some 40% of such individuals working in California agriculture are undocumented.\textsuperscript{34} Equally significant, these same surveys show that more than 140 villages are now represented among these workers.\textsuperscript{35} Since immigration follows a "beachhead" pattern, with the earliest arrivals from a particular village providing the linkage for others who follow later, an extremely large immigration of people from the Mixteca region of southern Mexico can be expected in the near future.

IRCA accomplished two important goals: legalization of millions of previously undocumented people and securing the availability of a large labor force to work in U.S. agriculture. Less well-understood is that IRCA also sent a message throughout Mexico: "If you want to have a chance to become a legal resident of the U.S. the place to be living is the U.S., not Mexico." This
conclusion is based on the widespread knowledge that people could qualify for legalization for U.S. residency visas under either the General Amnesty provision or the Special Agricultural Worker provision of IRCA by demonstrating periods of residency in the U.S. Today, thousands of new, unauthorized immigrants are entering California to join family members who came earlier. Many recent immigrants hope to be able to become legal residents at some time in the future based upon their ability to establish a continuous period of U.S. residency comparable to what was required for the General Amnesty or SAW programs of IRCA.
Farm Structure and Farm Labor Markets in California

Although California agriculture is dominated by large companies the overwhelming majority of the state's farms are quite small. Out of 82,000 farms, the 2,816 biggest account for more than two-thirds of all production.\(^3\) By contrast, the 66,000 smallest farms, each producing less than $100,000 worth of farm products per year account for less than one-twentieth of overall production.\(^3\) The reality is that three-fourths of the state's farms are so small that, taken together, they produce a negligibly small share (5%) of the state's farm products.

Each of the 2,816 largest farms reports annual cash receipts from agricultural commodity sales of at least $1 million. All but 61 of these (all of which are livestock ranches) report that they need hired labor to run their farms.\(^3\) Thus, nearly all of the biggest farms use hired or contract labor.

What is less obvious is that just one-half of California farms are operated by farmers.\(^4\) That is, the other half are run by people whose principal occupation is something other than farming. And these non-farmers report that they only work on their place on a limited basis. Thus, it is clear that hired labor is needed on small farms as well as on large farms.

In this context it is important to note that the agricultural crisis of the 1980s saw a great many medium and smaller family-operated farms go out of business. Although the Middle Western states were hardest hit a significant number of California farms were also driven out of business. The decline of the family farm
has meant that many full-time agricultural workers, i.e., farmers and their family members, have left the fields forever.

Taking these several factors into account it is apparent that the amount of agricultural labor contributed by farmers and unpaid family members has steadily declined over the years.\textsuperscript{41} However, the labor contribution of hired workers has remained steady or has actually increased in the years since 1965.\textsuperscript{42} This is shown in Figure 9 where both the estimated annual average direct-hire agricultural employment as well as the estimated annual average "farmer and unpaid family member" employment in California is shown for all years since 1950. In this figure "annual average employment" refers to a twelve-month average of the estimated number of persons on farm payrolls (that is, the twelve individual monthly payroll figures are totalled and this sum is then divided by twelve).

This definition of "annual average employment" is significant because during peak-season months the number of persons on the payroll can be several times larger than the corresponding numbers for the off-season months. Hence, in agriculture, the "annual average" will generally be much smaller than the peak-season value and much larger than the off-season value.

The striking point about the data shown in Figure 9 is that directly hired workers today account for at least 80\% of all of the work performed on California farms. It is likely that the proportion of all work performed by hired workers is even larger because the data of Figure 9 does not include workers hired by
firms performing agricultural services, such as labor contractors. California agriculture is more dependent on hired workers today than has ever been the case.

Measures of the actual level of farm employment are difficult to obtain. The state’s Employment Development Department (EDD) publishes "monthly" totals of employment in the agricultural sector based on reports submitted to EDD by employers of their quarterly payroll and monthly employment, the Unemployment Insurance (UI) wage reports. EDD requires employers to report the number of persons on the payroll for the pay period which includes the twelfth day of the month for each of the three months of the calendar quarter. Understanding the limitation inherent in these wage reports, i.e., some workers may either drop off the payroll before the end of the month, or may be added and then subsequently dropped before the next "pay period which includes the twelfth day of the month" rolls around, these EDD UI monthly wage reports do provide a useful summary of current reported agricultural employment and assist in identifying trends.

The EDD UI wage reports show that statewide agricultural employment peaks in September at about 477,000 and drops off to about 337,000 in February. The annual average of these monthly employment figures is somewhere in between. Figure 10 shows these data for the decade from 1981-1990, including all reported employment by crop and livestock farms, labor contractors, farm management companies, and certain crop service companies.

What is especially noteworthy is that reported annual average
FIGURE 10

Farm Employment, Annual Average

California

Farm Employment, Annual Average
(Thousands)

Year


0  50  100  150  200  250  300  350
employment has fluctuated a bit from year to year but overall is roughly the same at the end of the decade as at the beginning. Since production has increased substantially during this period it is clear that labor productivity has increased significantly during the 1980s. In other words, roughly the same level of employment is producing a much greater amount of product. This immediately begs the question of whether or not workers have shared in the benefits of their increased productivity.

Peak-Season Farm Employment by Region

It is possible to determine the reported peak season employment of farm workers in different regions of the state. Table II presents reported peak season employment in all six of the California agricultural regions. Reported direct-hire, labor contractor and farm management company employment is shown.

Table II

<table>
<thead>
<tr>
<th>Crop Region</th>
<th>Peak Employment</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Coast</td>
<td>18,061</td>
<td>September</td>
</tr>
<tr>
<td>Sacramento Valley</td>
<td>32,786</td>
<td>October</td>
</tr>
<tr>
<td>San Joaquin Valley</td>
<td>247,348</td>
<td>September</td>
</tr>
<tr>
<td>Central Coast</td>
<td>68,661</td>
<td>July</td>
</tr>
<tr>
<td>South Coast</td>
<td>64,969</td>
<td>May</td>
</tr>
<tr>
<td>Desert</td>
<td>49,177</td>
<td>June</td>
</tr>
</tbody>
</table>

Source: Agricultural Employment, 1990, Report 882-A, Department of Employment Development, State of California, July 30, 1991. EDD Agricultural Region definitions have been used together with region-wide farm employment (SIC 01xx, 02xx, 0721, 0722, 0723, 0761, 0762) for each month to determine the month with peak reported employment.

Farm Profits

Profits in agriculture are difficult to precisely identify.
This is because most farm operators are self-employed and off-farm earnings of family members are usually included in determinations of "farm income." However, we do know that California's farms had a net cash return of $2.9 billion on $13.9 billion in cash receipts from the sale of agricultural commodities during 1987, the last year for which data on profits is available. These figures exclude off-farm earnings of farmers and family members. It is believed that, with the exception of a few crop regions in certain years (freeze and drought), operating profits increased in the years thereafter. This inference is based on the increase of 32% in California net farm income (which includes off-farm income of farm operator family members) between 1987 and 1990 (see Figure 8 of this report on p. 18).

To appreciate the size of the net cash return of $2.9 billion for California farms in 1987 it should be noted that it was twice as great as the combined net profits of all California banks in that year. Farming in California is highly profitable for many operators.

Labor Contractors in California Agriculture

The most significant development in agricultural employment of the last decade has been the rise of labor contractors. At peak season at least 122,000 individuals out of a total of 477,000 are reportedly employees of labor contractors (one out of every four farm workers). And one of three farm workers reports working for a labor contractor for at least part of the year. During peak season in the San Joaquin Valley (July-September), an actual
majority of the work in both fruit and vegetables is now being performed by persons working for labor contractors. In Fresno County alone, 25,000 persons are reported as working for labor contractors during the raisin harvest in September.

Detailed examination of the EDD UI employment data discloses that there has been a significant shift in vegetable farm work away from direct hire employment and toward the use of labor contractors. First, reported annual average employment by vegetable farms (Standard Industrial Code - SIC - 0161) has declined substantially in this period, from roughly 45,000 in 1982 to about 32,000 in 1990. This is shown in Figure 11 where the
The term "direct hire" is used to stress the fact that the data refer only to persons directly hired by a vegetable farm operator. Earlier in this report we showed that vegetable production is notably greater today than it was even ten years ago. We have also shown that total reported farm employment (direct hire plus contract hire) is essentially constant during this same period. Thus, if direct-hire vegetable farm employment has decreased can we directly determine who is now doing the work?

As shown in Figure 12, reported employment by farm labor contractors has increased by a very large amount in this same period. This is dramatic evidence of the extent to which vegetable
farm operators, among others, have shifted away from direct hire employment to the use of labor contractors. The amount of the increase in reported labor contractor employment is quite striking: from an annual average of 38,000 in 1978 to about 78,000 in 1990.\textsuperscript{51}

While labor contractors have always played an important role in California agriculture there increased importance in recent years has been something of a surprise to most observers. Many thought that the emergence of state sanctioned labor relations in agriculture would be the death knell of the labor contractor. This was reinforced by the language of the Agricultural Labor Relations Act in which "employer" was defined to be the farm operator, and not an intermediary, such as a labor contractor. Presumably, this meant that labor contractors could no longer be a shield against labor organizing.

Evidence now available suggests that labor contractors are the most efficient labor market brokers active today, especially for serving the needs of the new immigrants. In other words, for recent immigrants who are seeking to enter a highly competitive labor market characterized by a large labor surplus, labor contractors provide a vital link to hard-to-find jobs.\textsuperscript{52}

National wage rate data on labor contractors suggests that they also play a key role in inserting low-paid labor into established labor market with the effect of undermining prevailing wage scales. Examination of piece-rate wages for the three-year period 1989-91, a time when use of labor contractors was becoming more widespread, shows a dramatic fall-off in wage rates. Reported
real piece-rate hourly earnings (corrected for inflation) for employees of farm labor contractors fell from $7.11 in 1989 to $6.08 in 1990, and to $5.01 in 1991, on a national average basis.\textsuperscript{53} While these data are not specific to California, they are heavily weighted by the large number of labor contractor employees located here.

A recent study of California farm labor contractors (FLCs) discloses aspects of the business that have not been previously recognized.\textsuperscript{54} First, most FLCs are relatively small. About 60\% of contractors who reported payrolls to EDD had annual payrolls of less than $250,000. We refer to these as "small FLCs." On the other hand, about one out of seven FLCs reporting payrolls to EDD had annual payrolls of $1,000,000 or more. These are termed "large" labor contractors.

Figure 13 shows the number of California farm labor contractors according to the size of their reported annual payroll. As indicated above most FLCs have small annual payrolls. Only a small fraction report an annual payroll of $1 million or more.

Figure 14 illustrates a major finding of this new study: most of the aggregate reported FLC employment is accounted for by "large" FLCs. These "large" labor contractors account for the great majority (actually 55\%) of aggregate FLC employment; the "small" FLCs, who are at least 60\% of all FLCs, account for less than 10\% of the aggregate FLC employment.

According to this new study, the "average" California FLC has eight foremen, one field supervisor, three office staff, 280 field
FIGURE 13
Farm Labor Contractors, 1990
California, by Size of Payroll

<table>
<thead>
<tr>
<th>Size of Annual Payroll</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $250,000</td>
<td>600</td>
</tr>
<tr>
<td>$250,000 - $499,999</td>
<td>100</td>
</tr>
<tr>
<td>$500,000 - $749,999</td>
<td>50</td>
</tr>
<tr>
<td>$750,000 - $999,999</td>
<td>15</td>
</tr>
<tr>
<td>$1,000,000 or greater</td>
<td>25</td>
</tr>
</tbody>
</table>
FIGURE 14

Farm Labor Contractors, 1990

Employment, by Size of Annual Payroll

Aggregate Employment (Thousands)

<table>
<thead>
<tr>
<th>Size of Annual Payroll</th>
<th>Aggregate Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $250,000</td>
<td></td>
</tr>
<tr>
<td>$250,000 - $499,999</td>
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<td></td>
</tr>
<tr>
<td>$750,000 - $999,999</td>
<td></td>
</tr>
<tr>
<td>$1,000,000 or greater</td>
<td></td>
</tr>
</tbody>
</table>
workers at peak season and employs some 1,027 different persons during the course of a year. 55 "Large" FLCs typically have numerous field supervisors and dozens of mayordomos (foremen) who actually have day-to-day responsibility for the work performed by their employees. One large FLC, who was interviewed for in this survey, reported having sixty-two foremen, nine field supervisors, seven office staff and 2,500 workers at peak season. 56

Another major finding of this study is that, for the large FLCs, foremen (mayordomos) typically have full responsibility for hiring, training, supervision and disciplining workers in their crew. In fact, field workers often describe themselves as "belonging" to the mayordomo's crew and, in many cases, have little direct contact with the FLC.

Quite a number of cases were found in which the foremen, not the FLC, directly provided transportation or other services for which workers were charged fees. In the case of one large FLC, the practices of several mayordomos differed from one another: one provided water and toilets and charged for rides while another furnished toilets but not water and did not charge for rides.

While FLC practices were found to vary widely by crop and region within the state, many individuals who were characterized as operators of large FLC businesses mainly confined their responsibilities to dealing with the growers, packing houses or packer/shippers for whom they worked, and for administration of the overall operation. The hiring of individual workers or taking responsibility for field activities was typically delegated to crew
leaders.

It was also found that very few crew leaders are currently licensed with the Department of Industrial Relations (DIR) as labor contractors in California, although many were found to be registered with the U.S. Department of Labor (DoL), as required by the Migrant and Seasonal Farm Worker Protection Act. A detailed comparison of DIR license holders and DoL registrants in 1990 was undertaken as part of the FLC study. These data were supplemented by lists of FLCs who had submitted employer payroll tax reports to EDD in 1990.

Figure 15 shows the results of this detailed comparison. Of an un-duplicated total of 3,580 California FLCs and crew leaders appearing on the three lists, we were able to find that only 506 are on all three. The California Institute for Rural Studies appears to have been the first organization to ever successfully complete such a detailed comparison of FLC compliance with these agency requirements. Surprisingly, the agencies themselves had abandoned such efforts many years ago.

The most important conclusion from this new study of farm labor contractors is that many foremen are acting as FLC "sub-contractors" and are assuming major responsibilities for members of their crews. Reportedly "unlicensed" labor contractors identified by research project field staff most often, upon investigation, turned out to actually be foremen who worked for a licensed FLC. However, in their capacity as foremen they were hiring, training, supervising and providing services, such as rides, for fees to
FIGURE 15
LABOR CONTRACTORS: Registered, Licensed, and Paying Employer Taxes

EDD  
\[ n = 1,080 \]
\[ 372 \, (10\%) \]
\[ 151 \, (4\%) \]
\[ 506 \, (14\%) \]
\[ 51 \, (1\%) \]
\[ 161 \, (5\%) \]
\[ 318 \, (9\%) \]

DIR  
\[ n = 1,136 \]

DOL  
\[ n = 2,896 \]

Total entities = 3,580

EDD: Employment Development Department, State of California
DIR: Labor Commissioner, Department of Industrial Relations, State of California
DOL: U.S. Department of Labor
"their" crew members.

In view of the great importance of labor contractors today it is significant to note that this study found that wage rates paid by labor contractors do not differ very much with size of the FLC operation: large FLCs typically pay wage rates equal to those paid by small FLCs. On the other hand, larger FLCs typically provided longer jobs, or more numerous short jobs, than did smaller FLCs. Thus, total earnings per worker tend to be larger for the larger FLCs. No case was found in which FLCs paid for medical insurance or other benefits such as holiday or vacation pay, but a few provided free housing.

**Employment in the Nursery Crop Business**

An additional important development in the last twenty years is the increase in employment in the expanding nursery crop industry within California. These jobs are usually of much longer duration than other types of work although most pay minimum wage or slightly more. Employment has now reached 36,000 in this industry, which, as noted earlier in this report, is one of the most rapidly expanding segment of the agricultural industry.

A measure of the significance of the employment in nursery crops, it is now the case that the total amount of labor required in nursery crops is roughly the same as the total amount of work needed in California grapes (raisin, table and wine grapes). While much attention is properly focussed on grape workers as symbolic of the conditions prevailing in the fields of California, the state's nursery crop industry is just as important a job site for workers.
Who Are Today's Farm Workers?

As recently as five years ago most published information about farm workers was obtained from administrative reports submitted by employers such as the EDD UI wage reports. These reports convey information about wages, earnings, employment and related matters. However, they are not helpful with such basic demographic information as age, gender, education, family size and place of birth. Today, thanks to thousands of direct interviews with farm workers conducted over the last five years, we have a much more accurate picture of who is doing hired farm work.

The most striking feature of what we have learned is the considerable, and increasing, diversity of the farm worker population. The new immigrants, only briefly described above, include thousands of indigenous migrants from southern Mexico (Oaxaca) and Central America.

Many of the new indigenous migrants prefer speak their own dialect and are not fluent or literate in Spanish. Because of their distinctive appearance, stature and culture, Mixteco and other indigenous migrants (Zapotec, Triqui) frequently experience discrimination while working in agriculture, in many instances directed from mestizo Mexicans or Chicanos. We have found repeated instances of such reports, including some cases involving farm worker service agencies.

Today's California farm worker population is estimated by the California Department of Employment Development to be 881,000.58 Most workers are young (median age is 31 years), three out of four
are men, two out of three are married, most (55%) have been in the U.S. for nine or fewer years, and as many as one in five foreign-born farm workers frankly admits to being undocumented. It is likely that the true figure for the fraction who are undocumented is higher.

At least nine of every ten hours of seasonal farm work is performed by workers who try to make a living by piecing together a series of short term jobs in the course of a year. There is compelling evidence that less than ten per cent of seasonal farm work is done by workers who are in the labor force for only part of the year, i.e., by people who could be described as a "seasonal worker."

This latter point is quite important. What it means is that although most farm work is seasonal, only a small number of workers temporarily enter the labor force to perform these jobs and then leave the labor force when the job has ended. Hence, the notion that most farm workers are only casually attached to the labor force is a myth. And the notion of the "seasonal worker" is also largely a myth. Because of the significance of this finding it is of some value to review the basis for this conclusion.

The empirical evidence regarding farm worker job patterns comes from the National Agricultural Workers Survey (NAWS), an interview-based survey of persons performing seasonal agricultural jobs. The NAWS has conducted thousands of direct interviews with farm workers throughout the U.S. over the past five years, including hundreds of interviews in California. The NAWS records
a two-year retrospective job history as directly provided by each worker, including location, crop, task, hours, job duration and earnings. What these job histories show is that at least ninety per cent of seasonal hired farm work, measured by the number of hours of work performed, is done by people who are in the labor force year-round and who attempt to string together a series of short-term jobs, mostly in agriculture, but also in other industries, to earn a livelihood.

NAWS also shows that about four out of ten farm workers migrates to obtain work for at least part of the year.\textsuperscript{62} Three of ten workers are "shuttle migrants" between Mexico and the U.S. while one in ten workers "follows the crops."

While there are many Mexican urban residents in the current farm labor force, most are from rural areas. The average level of education is six years of school (in Mexico), but some have completed high school.\textsuperscript{63} Among the Mixteco immigrants the average number of school years completed is just two.\textsuperscript{64}

Average annual earnings amounts to about $6,500.\textsuperscript{65} A majority of farm worker families currently fall below the official poverty level as defined by the Federal Government.\textsuperscript{66} Among the Mixteco immigrants, annual earnings average about $4,500.\textsuperscript{67}

Persons employed by labor contractors have lower earnings than individuals working as direct grower-hired employees, about one-fourth lower.\textsuperscript{68} While one out of seven direct-hire employees receives health care benefits, no employees of labor contractors report receiving employer-paid health insurance benefits.\textsuperscript{69}
Despite these conditions less than half of persons eligible to apply for unemployment insurance benefits actually does apply, less than one in six has ever used a migrant clinic and fewer than one in thirty applies for food stamps.\textsuperscript{70}

There is compelling evidence that real wages are declining: in the California fresh tomato and raisin grape harvests the decline of reported wage rates amounts to more than 40\% in the past twenty years.\textsuperscript{71} In part, this wage decline represents the agricultural component of the general decline in wages and earnings experienced by all U.S. workers during the past fifteen years.

The publication \textit{Farm Labor} of the U.S. Department of Agriculture reports on wage rates as reflected by a national survey of farm employers. Figure 16 shows the trend in agricultural wage rates, expressed in constant (1991) dollars, for California field workers.\textsuperscript{72} The decline in reported wage rates is greater among agricultural workers than among other types of employees. We have compared the reported wage rates for food processing workers in California with the data shown in Figure 16.\textsuperscript{73} \textit{We find that farm wage rates declined 50\% faster than all manufacturing wage rates during the 1980s.}

It is important to distinguish wage rates from annual earnings, particularly in agriculture.\textsuperscript{74} That is, in conditions of surplus labor agricultural employers can readily expand their crew size to more rapidly complete the harvest of a perishable crop. Thus, for a fixed acreage of a particular crop each worker will perform less work (measured in hours) and this will be
FIGURE 16
Wage Rates for Field Workers, Calif

Hourly Wage Rates (Constant 1991 $)

Year

Hourly Wage, Annual Average in 1991 $

Farm Labor, USDA
reflected in lower individual earnings. This effect will not be indicated in wage rates but will only appear in reported earnings. In both the 1991 California fresh tomato and raisin grape harvests direct observations and worker interviews reflected evidence of this effect.\textsuperscript{75}

Among employees of labor contractors, there has been a 25\% decline in individual annual average earnings (constant dollars) over the past three years.\textsuperscript{76} It is likely that this decline reflects both changes in real wage rates as well as the effect just described.

One out of three Mixteco immigrants reports having worked at a job in the last year in which the wage rate was below the minimum wage.\textsuperscript{77} It is not unusual to find indigenous workers earning $15 to $25 for a full day's work.\textsuperscript{78}

About four of ten workers employed by labor contractors report being required to pay for rides to the job, pay for tools, or other payments as a condition of work.\textsuperscript{79} One in eight workers reports that the work site does not have either toilets, drink water or wash water.\textsuperscript{80}
Issues of Concern to Farm Labor Advocates

a. **Wages and Working Conditions**

The most basic concerns of farm workers today are wages, earnings and related conditions of employment. The available data demonstrates that real wages and earnings in California agriculture have declined by a significant amount (10%) over the period of the 1980s. The rise of labor contracting is only a part of the story. Some farm operators who paid good wages in the 1970s are now paying much lower amounts, as measured in real terms. Many employers have eliminated employer-paid benefits such as health insurance and a large number of employers no longer provide housing.

It is likely that the decline in wages and deterioration of working conditions are mainly a reflection of the large surplus of labor that is associated with the enormous immigration of the past decade. From the point of view of economic theory when supply exceeds demand then the price of a good, in this case the price of labor, will decline.

A second factor is the virtual disappearance of labor organizations directly representing field workers in most agricultural areas of California. While the number of union contracts and jobs covered by them is not accurately known, it is well-established that many fewer farm workers today enjoy the protection of union contracts than was the case fifteen years ago. Of course, organizing workers at the job site is especially difficult when labor is in surplus. On the other, the CIO and the major industrial unions were built during the 1930s in the midst of
the largest depression this nation has ever known, when the official unemployment rate was at 25%.

b. **Job Safety**

More than 42,000 on-the-job injuries are reported through the Workers Compensation Insurance Rating Bureau every year in California agriculture making it one of the most, if not the most, dangerous occupations.\(^1\) The injury rate is 15,489 per 100,000 FTE (Full Time Equivalent Employees).\(^2\) That is, out of every 100 farm workers, 15 will be awarded compensation for an on-the-job injury each year. Of those injuries, about 22,000 each year are disabling injuries, causing an employee to miss at least one full day of work. The largest number of reported injuries are sprains and strains, followed by lacerations, contusions and fractures.\(^3\) These data are presented in Figure 17, where some 197,000 disabling on-the-job California farm employee injuries that were compensated under the Workers Compensation system are classified according to nature of injury. Fewer than one in twenty reported disabling injuries is caused by toxic chemicals, such as pesticides.

It is likely that only a portion of apparent on-the-job injuries in agriculture are reported and claims filed through the workers compensation system. Mines and Kearney found that Tulare County farm workers who experienced on-the-job injuries preferred to treat the injury themselves instead of filing a workers compensation claim or, in a disturbing number of cases of pesticide injury, chose to continue working without treatment if that was physically possible.\(^4\) Immigration status and fear of losing
All Commodities (SIC 011 - 078)
Nature of Injury: Non-Fatal Injuries (N = 197114)
income are likely to heavily influence individual decisions.

Recent legislation requires that all employers prepare a written job safety plan and inform their employees about safe job practices. Agriculture has been targeted for enforcement efforts by Cal-OSHA. The reinstatement of Cal-OSHA also provides a mechanism to seek redress, which was effectively utilized by the Fresh Fruit and Vegetable Workers Union at a Dole Citrus packing facility.

In addition, many employers, whether labor contractors or growers, are paying very high workers compensation insurance premiums. Some report paying annual insurance premiums equal to 20% of wages. Thus, they have a strong financial incentive to address job safety issues.

c. Health Status

There are no reliable reports on the health status of the current farm worker population. In the few instances in which physical examinations have been given to a group of farm workers at the job site it has been noted that most were in excellent health. This is the so-called "healthy worker" effect in which one finds both that injured or unhealthy workers are usually not working while the most physically able workers tend to be attracted to the most demanding jobs.

However, in connection with the McFarland cancer cluster study, the Department of Health Services conducted a complete health screening of nearly all of the children in the community (more than 1,600 children were given full physical examinations).
McFarland is a town in which the overwhelming majority of the population are hired farm workers. It was found that 71% of the children needed a medical referral. One-quarter of the children were experiencing anemia as a result of malnutrition, fully one-half had never been to a dentist, even for an examination, and about four in ten were from families without any medical insurance of any type, including Medical.

d. Social Services

There are no objective measures of the utilization and access to social services by farm workers. Since many of these services are provided by private, non-profit agencies who receive Federal grant funds, reviews of the extent to which client communities are served tend to be done "in house." Hence, measures of the extent and type of service furnished in this fashion are suspect as biased in favor of the agency itself as a means of continuing funding.

With that limitation in mind, there a few observations that can be made. First, with respect to migrant clinics, the McFarland Children's Health Screening Project mentioned above included questions about the extent to which the local clinic was utilized. Only one family in six had ever used the clinic. While there are no similar measures of the extent of clinic utilization in other communities, there is no reason to doubt that this figure is actually representative of the true situation.

Second, surveys of workers show that less than one in five workers ever uses directly provided government services, even if they are fully eligible to receive them. Food stamps are the
most utilized program (16% of workers). AFDC, General Assistance and public housing are each used by fewer than one in thirty workers. Roughly one in one hundred workers says that they have received assistance from a private community organization.

Given the very large number of farm workers and dependents in California (EDD estimates are 882,000 individual workers, and there are as many as two million dependents), examination of the number of users of federally funded services can help to clarify the great extent of this disparity. For example, California migrant clinics reported visits by 116,515 migrant or seasonal farm workers and dependents in 1991. At the other extreme Job Partnership Training Act agencies reported just 326 California migrant farm worker clients served in 1989. And the Migrant Head Start program reported only 4,266 children served in California in 1991.

e. Labor Contractors

As indicated previously, farm labor contractors are clearly one of the state's major problem areas with respect to abuses of agricultural employees. There are many who pay their taxes but who are neither licensed or registered (312), many others who pay their taxes and are registered but not licensed (372), and a great many, mostly crew leaders, who are registered with the Department of Labor and who do report payment of employer taxes or hold a license (2,072).

Apart from this finding the single most important observation that can be made about the current way in which labor contractors
operate is that the mayordomos (foremen) are the individuals who recruit, hire, train and supervise the great majority of employees of labor contractors. The "crew boss" system which is widespread in Mexico has clearly accompanied the Mexicanization of California agriculture.

Mines has pointed out that the available evidence suggests that the most recently arrived immigrants working in agriculture tend to enter the U.S. labor market through labor contractors.31 This makes sense, especially when considering how difficult it must be for a new immigrant, who generally does not read or speak English, to even find an employer let alone a job in a crowded labor market.

f. Housing

There has been a very substantial decrease in employer-provided housing, perhaps by as much as 75% over the past ten years. The addition of new state-funded labor camps, such as the new facility in Blythe, only meet a very small part of the need. Overall, less than 3,000 units are available in these camps.

The rise in housing costs that California has experienced means that farm workers are generally unable to obtain housing in the normal market. In the course of interviews of workers in Parlier, our staff found individuals living in garages, in tool sheds, underneath porches, in abandoned automobiles and in shanties of varied descriptions.32

New efforts are needed in both the private and public sectors to generate needed housing. Opportunities to cooperate with
employers should be welcomed.

**g. Gender Discrimination**

There is evidence of widespread gender discrimination affecting female agricultural workers. The effective use of this issue in the Saticoy Lemon Association case and several other instances suggests that there is the possibility of using this issue to build action by workers seeking real changes.

**h. Organizations of Workers**

At the present time fewer than 30,000 farm workers enjoy the benefits of union contracts and its protections. The United Farm Workers state that they have 20,000 members. The available evidence, however, suggests that fewer than 5,000 of these enjoy the benefits of a union contract. The largest single contract providing union protection for farm workers is the Dole Fresh Vegetable (formerly Bud Antle) contract with Teamsters, Local 890 (Salinas) which covers approximately 4,500 workers. Overall, Local 890 has 10,000 agricultural workers under contract. Other unions are very much smaller.

In recent years the United Farm Worker have placed the main emphasis of their efforts on a nation-wide boycott of California table grapes. The successful widespread distribution of the video "The Wrath of Grapes" plus speaking tours by UFW leaders has brought the issue of pesticide injury and lack of union representation to the attention of millions of Americans. At the same time the available evidence suggests that table grape producers have responded to this challenge with new tactics and
have enjoyed considerable success.

Among the important new approaches of the California table grape industry to the challenge of the boycott has been a major effort to expand overseas markets. As discussed earlier, exports of California table grapes have tripled since 1984 and represent about 14% of the total shipments. Second, the California Table Grape Commission now spends about $6 million per year in direct advertising on radio and television promoting sales of table grapes. Third, the globalization of the produce industry has brought increasing shipments of table grapes from Chile and some other nations to the U.S., principally during the counter-cyclical winter season. Thus, consumers can now purchase grapes on a year-round basis, which has led to substantial increases in per capita grape consumption. In addition, the large volumes of imports has blurred the focus of the boycott somewhat.

One would expect that the impact of the grape boycott should be evident in the level of profits of the major table grape companies. If the boycott is effective then profits would be expected to decrease, or at least, to be stagnant over the period of time when the boycott is in effect. We find that after-tax profits of the major table grape companies have increased sharply in the past several years. For example, Giumarra Vineyards Corp., the largest table grape producer, reported net profits of $4.7 million for the year ended June 30, 1991, double the earnings reported in the year ended June 30, 1988. This represents a return on invested capital of 12.6% for the 1991 fiscal year.
Another example is that of Anton Caratan & Son (Caratan Ranch). For the year ended June 30, 1991 the company reported net income of $2.0 million, nearly double the $1.1 million reported for the year ended June 30, 1988.\textsuperscript{94} For Caratan, this represents a return on invested capital of 13.8\% for the year.

The factors discussed above can be summarized in two observations. First, in spite the boycott campaign, California table grape shipments have actually \textit{increased} significantly in recent years: over the past twenty years shipments of California table grapes are up by 26\%.\textsuperscript{95} Second, profits of table grape growers, packers and shippers appear to reached record high levels in the past several years.

Many of the community-based organizations of the past, whether Mexican-American Concilios or single-issue focussed have disappeared. However, some of the immigrant workers have been able to build very small, fragile organizations. The Mixteco immigrants have been able to sustain several very small, volunteer-based efforts. Asociación Cívica "Benito Juárez" has affiliates in Arvin and in Fresno. Organización del Pueblo Explotado y Oprimido is another group, based in Livingston, and Comité Cívico Popular Mixteco is based in Vista.

The Mixteco groups appear to sustain because their common survival is based on a collective, village-based strategy. Thus, the distinctive Mixteco language and culture is a base for organizing.
Conclusions

There is compelling evidence that farm worker wages, working conditions and living conditions have seriously eroded over the course of the past ten or so years. In large measure this is the result of a vast surplus of workers seeking agricultural jobs, many of whom are relatively recent immigrants. It is also the case that organizations of farm workers have declined in importance, and that there is no longer an effective political presence on behalf of farm workers in either state or federal political processes.

Laws enacted to protect farm workers are routinely flouted, in part because agencies responsible for enforcement do not have adequate resources to conduct an effective job. At the same time, as consideration of traffic speed laws demonstrates, voluntary compliance is an essential component of any effective law. For very different reasons both employers and workers have accommodated to existing conditions. It is not unusual today to find agricultural workers whose hourly earnings are below the minimum wage.

Many agricultural employees are not aware of their rights as U.S. workers. Even fewer believe that they can effectively exercise those rights. Until effective organization can be built among current farm workers there is little possibility of changing that reality.

Service providers have, to a greater extent than they realize, have lost touch with many of the recent immigrant workers, and this is especially so for indigenous immigrants. Few agencies serving
the farm worker community have any current farm workers on their client advisory boards, or on their agency board of directors. While most agencies are doing vitally important work, this distance between the general farm worker population and the agency, as a vital organization, poses a long-term danger to the agency. As Ralph Abascal once stated about California Rural Legal Assistance, one of the very best of the service providers, "You will most likely never see the prospective clients who have the greatest need." But the chances of serving those whose need is greatest is even less if current farm workers are not directly involved in helping to shape the agenda of the organization.
References

1. California Vegetable Crops: Acreage, Production and Value, 1981-90, California Agricultural Statistics Service, California Department of Food and Agriculture, Agricultural Statistics Branch, Sacramento, CA, August 1991; and prior years. Comparing the three-year average production for 1969-71 with the three-year average production for 1989-91 shows an increase of 117.4%.


3. Ibid. Comparing the three-year production record for 1969-71 with that for 1989-91 shows an increase of 56.2%.

4. California Agriculture, Statistical Review, 1990, California Department of Food and Agriculture, Sacramento, CA, August 1991; and prior years. This estimate is based on changes in the reported total value of nursery crop and flower and foliage production in constant (1990) dollars. It is not possible to estimate changes in the physical volume of production of these crops since none is reported. This absence of reported volume reflects the fact that some of these products are measured in such units as bunches, some in containers, others in flats, and still others in less familiar units.


7. Ibid.


9. Ibid.


11. For additional information on this meeting and on continuing activities of these scholars, contact the conference coordinator Prof. William H. Friedland, College Eight, University of California, Santa Cruz, Santa Cruz, CA 95064.

13. Harvested vegetable acreage increased from approximately 730,000 acres (1969-1971 average) to 1,150,000 acres (1988-1990 average) in this period, a 58% increase. Since harvested vegetable tonnage increased by 107% in the same period, it is clear that roughly half of the production increase may be attributed to expanded acreage and half to increased average yields.


18. *D & B Reports, "Dun & Bradstreet Looks at Business,"* September/October 1992, p. 1. Total bankruptcies in Agriculture, Forestry & Fishing were 1,158 in the first six months of 1991 and reached 1,542 in the corresponding period in 1992. For all industries the figures are 43,324 and 50,582, respectively.

19. Ibid.


23. Harvested acreage data were obtained from *California Agriculture, Statistical Review, 1989*, op. cit. Labor coefficients, expressed as "temporary" labor requirements, in hours per acre, were obtained from John W. Mamer and Alexa Wilkie, *Seasonal Labor in California Agriculture: Labor Inputs for California Crops*, California Agricultural Studies, No. 90-6, Employment Development Department, State of California, Sacramento,
CA, December 1990. Mamer and Wilkie's data refer to observations made during the 1989 crop year.


25. Alvarado et al., op. cit., Table 4, p. 6.


32. Andrew J. Alvarado et al., op. cit.

33. U.S. Immigration and Naturalization Service, February 13, 1992 Summary of SAWs Granted Status Under IRCA. INS reports also show a substantial increase in the number of border apprehensions in the past year and one-half, approaching the record levels of the mid-1980s.

34. Carol Zabin et al., op. cit.


38. ibid.

39. ibid, Table 52, p. 106.

40. ibid, Table 1, p. 7.


42. ibid.


44. *Census of Agriculture 1987*, op. cit., Table 4, p. 12.


47. *Agricultural Employment, 1990*, op. cit.


49. This is based upon computations of the total agricultural employment by fruit or vegetable farms, together with farm labor contractors for the eight San Joaquin Valley counties (SIC codes 0161, 017x and 0761). Most labor contractors in this region work in fruit or vegetables during the third calendar quarter of the year.

50. CIRS obtained full data sets from EDD to cover the period before publication of report 882 (pre-1987).
51. CIRS obtained UI wage report data sets directly from EDD for the SIC code 0761 for the period prior to publication of EDD Report 882 (pre-1987).


54. Suzanne Vaupel, Howard Rosenberg and Don Villarejo, Farm labor Contractors in California, Labor Market Information Division, Department of Employment Development, State of California, in press.

55. Ibid.

56. Ibid.

57. Ibid.


59. See Findings From the National Agricultural Workers Survey (NAWS) 1990, op. cit; Andrew J. Alvarado et al., op. cit.; and Richard Mines, private communication, May 1992, for recent data on immigration status.


61. See Findings From the National Agricultural Workers Survey (NAWS) 1990, op. cit., for a detailed description of survey methods and results.


63. See Findings From the National Agricultural Workers Survey (NAWS) 1990, op. cit.; and Andrew J. Alvarado et al., op. cit.

64. Carol Zabin et al., op. cit.

65. See Findings From the National Agricultural Workers Survey (NAWS) 1990, op. cit.; and Andrew J. Alvarado et al., op. cit.

66. Ibid.

67. Carol Zabin et al., op. cit.


71. *Too Many Farm Workers?*, California Institute for Rural Studies, draft manuscript, August 1990.

72. *Farm Labor*, U.S. Department of Agriculture, Washington, DC, Quarterly Wage Reports and Monthly Employment Reports. This publication is sometimes referred to by the acronym QALS (Quarterly Agricultural Labor Survey). Data are reported on a national basis and regional basis. Because of its special importance, California data is separately reported.

73. *Too Many Farm Workers?*, op. cit.

74. The author is grateful to Ed Kissam for pointing out the significance of this distinction.


77. Carol Zabin et al., op. cit.

78. The author met a Mixteco worker in Fresno during February 1992 who had earned $15 for a full day's work pruning peach trees.


80. *Findings From the National Agricultural Workers Survey (NAWS) 1990*, op. cit.

81. The author is grateful to the Workers Compensation Rating Bureau for making this unpublished data available. A paper presenting a detailed analysis of this information is in preparation.

82. Ibid. This injury rate is based upon a CIRS analysis of the data reported by WCIRB.

83. Don Will, California Occupational Health Program, Department of Health Services, State of California, has analyzed workers compensation claims reported to the Department of Industrial Relations (DIR). The annual average number of such DIR injury reports in California agriculture is 22,000, significantly less than the number reported by the Workers Compensation Insurance Rating Bureau.
84. Richard Mines and Michael Kearney, The Health of Tulare County Farm Workers, Tulare County Department of Health, April 15, 1982, see especially pp. 98-99 and Table IV-17, p. 99.


86. Ibid.

87. Findings of the National Agricultural Workers Survey (NAWS) 1990, op. cit.


94. See financial statements, Anton Caratan & Son, private communication, CIRS files.

95. See, for example, California Fruit and Nut Statistics, California Department of Food and Agriculture, various years.