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ABSTRACT

This report examines the effects of the Immigration Reform and Control Act of 1986 (IRCA) on the raisin industry's labor market, and provides educators with background on California migrant workers and their deteriorating working conditions. Because the raisin harvest lasts only 3-4 weeks but employs 40,000-50,000 workers, any effects of IRCA on agricultural labor markets should be most visible in the raisin grape industry. Interviews were conducted with 125 raisin harvest workers, 323 growers, and 12 industry experts. The worker sample was 92 percent male, entirely Hispanic (94 percent born in Mexico), with a median age of 28. Workers' educational level averaged 6 years, and 87 percent understood little or no English. About 35 percent were working illegally. Raisin growers increasingly used farm labor contractors to hire and oversee workers. Use of contractors eliminated employer paperwork, avoided many government regulations, and reduced labor supply concerns. However, use of contractors also increased the "distance" between growers and workers and the possibility of unscrupulous middle-man practices, while contractor fees resulted in lower wages for workers. Fears that IRCA would reduce the supply of agricultural laborers have not materialized. Undocumented workers continue to provide an ample supply of workers, and growers remain dependent on this source as workers legalized by IRCA move to better jobs in other crops. Unfortunately, the ample labor supply has left employers disinterested in providing training or improved wages and benefits for their workers. Survey instruments for workers and growers are appended. (SV)

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# CALIFORNIA AGRICULTURAL STUDIES

92-4

## The Labor Market in the Central California Raisin Industry: Five Years After IRCA

Labor Market Information Division

Employment  
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# THE LABOR MARKET IN THE CENTRAL CALIFORNIA RAISIN INDUSTRY: FIVE YEARS AFTER IRCA

by  
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December 1992

The findings of this report are solely the representation of the contractor. They do not necessarily reflect the policies, administrative philosophy, opinions or the official position of the State Employment Development Department.

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## SUMMARY

The California Employment Development Department commissioned this study in order to gain a better understanding of the raisin industry's labor market, and to learn if its operations have changed in response to the Immigration Reform and Control Act of 1986 (IRCA). Surveys of growers, farm workers, and industry experts were conducted by Center for Agricultural Business researchers in Fresno County.

The raisin grape industry consists of approximately 5,300 raisin growers and is centered in Fresno County in California's San Joaquin Valley. Ninety-five percent of United States raisin production occurs within a 60-mile radius of the city of Fresno. The typical raisin grape farm is a 50-acre family-owned and operated enterprise.

As with any agricultural crop, the raisin industry experiences economic variability associated with market and production conditions. Economic returns to growers are often slim.

Competition within the U.S. market from other nations is not a major concern for the domestic raisin industry. However, small quantities of raisins have been imported to the U.S. from Mexico and Chile in recent years. The goal of the raisin industry is to maintain and expand export markets, assuming that such growth is crucial to its own economic viability. The industry appears to be meeting that goal: the data show increasing success in marketing California raisins internationally in the past seven years, with the total exported tonnage increasing 63 percent between 1985 and 1991.

A clear trend in the raisin industry is the increasing use of farm labor contractors (FLCs) to hire and oversee workers. This has been particularly true since the passage of IRCA in 1986. Sixty percent of growers indicated that they used FLCs in 1991, compared to only 35 percent of the same grower sample in 1985. The major reasons given by growers for using FLCs were: (1) to eliminate the paperwork involved in hiring workers directly, (2) to avoid the many governmental regulations imposed on employers, and (3) to eliminate labor supply concerns and difficulties in recruiting workers. Only seven percent of growers indicated that reducing labor costs was a motivating factor in the decision to use an FLC.

Typically, the grower-FLC relationship is an informal one. Ninety-three percent of growers stated that they worked under a verbal agreement with an FLC.

Growers use one of three methods to pay FLCs: (1) a flat rate for each tray picked, (2) a commission based on a percentage of payroll, or (3) a payment of one or two cents per tray for recruiting workers plus an hourly rate for supervising workers. FLCs often supplement these earnings by charging workers for transportation and tools.

All workers in the survey were paid on a piece-rate basis that provided for 80 percent of them an hourly wage of between \$4.25 and \$8.00 per hour, with an average of \$6.25.

Approximately 10 percent of the workers interviewed said that they earned less than \$4.25 per hour, and about the same number reported earning over \$8.00 per hour. Workers employed by FLCs earned slightly less than those employed directly by growers. Worker benefits such as housing and health insurance usually are not offered by employers, whether FLCs or growers.

Approximately 79 percent of farm workers interviewed indicated that their current employer had required work documents before employment. However, more than one-third of the worker sample was found to be undocumented.

The majority of workers interviewed (54 percent) found their current job through a personal reference from a friend or relative. Only 12 percent of the workers were recruited by a grower or his foreman, and slightly less than ten percent were recruited by an FLC or his foreman. Many workers reside in villages in rural Mexico and return to their homes each year.

Interviews with workers indicate that crop work, such as picking raisins, was not the job they preferred. They did such work because it was an easily available way to earn some money, in spite of their limited skills, education, and language ability.

With few exceptions, the production of raisins has not been affected by improved technology or mechanization for the past 50 years; there are no current economic incentives to mechanize, since workers do a better job and cost less than machines.

Growers report that labor costs have increased in the raisin industry since the implementation of IRCA in 1986. These increased costs often are the result of complying with regulations; they rarely result in increased earnings or fringe benefits for workers.

An important part of the mission of EDD is to act as a broker between employers and job seekers. EDD does not, however, have a major role in placing workers in the Central California raisin industry. There are several reasons for this: the continuing surplus of workers; the short duration of the raisin harvest season; and the casual and informal nature of the employment and recruitment relationships used by growers and FLCs.

The raisin industry is most likely to continue to depend upon immigrant workers in the future, with FLCs increasingly dominating hiring practices while providing a buffer between growers and workers.

There is no indication that raisin growers have reduced their raisin acreage due to labor shortages or that IRCA has had any significant effects on prevailing wages or personnel practices in the industry.

## CHAPTER 1

### OVERVIEW AND GOAL OF THE STUDY

#### PURPOSE OF THE STUDY

The Employment Development Department (EDD) commissioned this study in order to "provide EDD with a clear understanding of the needs of the raisin industry, and the changes in operations in response to the passage of the Immigration Reform and Control Act of 1986" (EDD, Request for Proposals No. 10785). The research methodology used to address this purpose is discussed in Appendix A. Surveys of growers, farm workers and industry experts were conducted by Center for Agricultural Business (CAB) researchers in Fresno County.

The Central California raisin industry was identified as an area of concern to EDD for several reasons. First, the raisin harvest industry is characterized by a large demand for labor for a short period of time. Although exact employment numbers are elusive, industry representatives estimate that 40,000 to 50,000 workers are employed for some period of time in the raisin harvest. Because of the short time period during which the grapes can be harvested and dried, the season typically lasts for only three to four weeks. An individual worker may work for the same grower for only two or three days and, if employed by a farm labor contractor, may not even know the identity of the grower or farm operator.

During the three-week drying season, raisin grapes are highly vulnerable to rain damage. A threat of rain increases the immediate demand for labor, at least in the minds of growers worried about losing their crops. It is not unusual to find that growers may perceive a labor shortage in a given year, even though the number of workers exceed those available in a drier year.

Second, most industry observers agree that a significant portion of the pre-IRCA work force in the raisin harvest was comprised of individuals who were in the U. S. illegally. This created initial concern in the industry that there would not be sufficient Seasonal Agricultural Worker (SAW ) applicants to meet the industry's labor needs, since many who worked solely in the raisin harvest would not fulfill the 90-day work requirement for SAW eligibility. Moreover, it was feared that newly-legalized SAWs would seek more desirable employment as workers in other crops or in occupations outside agriculture.



Finally, raisins are sold in world markets and compete on a price-basis with raisins and currants produced in and supported by the nations of the European Economic Community or other countries. This leads industry representatives to claim that there is little room for improving the terms and conditions of employment.

Because of these production, labor market, and product market conditions, it was hypothesized that any impact of IRCA would be observed most immediately and visibly in the raisin grape industry. Conversely, if IRCA has not had significant effects in the raisin industry, it is safe to extrapolate that IRCA has similarly been a non-event in other crops and regions of California.

## **RESEARCH APPROACH**

To obtain the information needed to accomplish the objectives of this study, three survey groups were identified. The first was a sample of 125 raisin harvest workers drawn from among the crews of twelve Fresno County growers. Interviews were conducted on the job sites, with employer permission. Large, medium, and small employers (growers and farm labor contractors) were equally represented. (See Appendix A for detailed methodology.)

The second study sample consisted of 1,500 raisin grape growers randomly selected from a comprehensive listing of 4,500 growers maintained by the Raisin Administrative Committee of Fresno County. A total of 323 questionnaires were completed, resulting in a response rate of 21.5 percent.

The third source of study information included twelve raisin industry experts selected by the researchers from among Central California agency and industry leaders. They are considered to reflect the highest levels of decision-making and experience regarding the raisin industry. (See Appendix A for description of industry experts.)

## **OVERVIEW OF THE RAISIN INDUSTRY**

The raisin grape industry is centered in Fresno County in California's San Joaquin Valley with 95 percent of U. S.- produced raisins grown within a 60-mile radius of the city of Fresno. Raisin grapes also are grown in neighboring Madera and Tulare counties, with limited acreage found in Kern County to the south.

There are somewhere between 5,200 and 5,500 raisin growers in the Central Valley, with small-acreage farms dominating the industry. While many growers have relatively large farms with more than 300 acres, the average grower has about 50 acres. Raisin grape farms are typically family-owned and operated units (U. S. Census of Agriculture, 1987).

There are several grape varieties used for raisins, including Muscat, Sultana, Zante Currant, and Thompson Seedless. About 95 percent of California raisins are made from Thompson Seedless grapes, with about 270,000 acres of this variety planted in the state in 1990 (Table 1.1). It is somewhat difficult to determine the exact acreage devoted to raisins each year because Thompson Seedless grapes are also sold for table and wine/juice purposes.

California's production of raisins has grown fairly steadily since the 1920s, when annual production was about 135,000 to 140,000 tons. Total production has ranged between 325,000 and 350,000 tons in recent years, with growers' returns usually averaging about \$350 million annually. Generally, the state produces between 4.5 and 5.4 million tons (green-basis) of grapes each year. ("Green basis" refers to grapes before they are dried into raisins. It takes approximately 3.5-4 tons of green grapes to produce one ton of dry raisins.)

**Table 1.1**  
**Acreages of Thompson Grapes in California**  
**1965-1990**

Year	Total Acres	Year	Total Acres
1965	239,159	1978	236,295
1966	238,159	1979	244,143
1967	238,195	1980	259,513
1968	237,304	1981	270,500
1969	235,543	1982	278,723
1970	233,982	1983	279,283
1971	232,146	1984	281,711
1972	230,928	1985	278,685
1973	231,539	1986	269,059
1974	233,928	1987	266,061
1975	232,330	1988	264,802
1976	228,477	1989	269,602
1977	234,220	1990	270,000

Source: "California Grape Acreages," California Department of Food and Agriculture, published annually.

In 1990, Thompson Seedless grapes accounted for about 44 percent of total state production. Among the Thompson Seedless and other "raisin" varieties, only about 40 percent are sold as raisins. The remainder are sold as fresh fruit, or for wine or juice production.

All raisins are sold through twenty-one packers operating in the industry. The packing industry includes two cooperatives and two large conglomerate firms (Dole and Del Monte); the remainder are privately-held firms. Sun-Maid Growers, a large cooperative, markets about 30 percent of the crop. Dole controls about 20 percent of the packout, with the remaining nineteen firms holding relatively small market shares.

Marketing of raisins is controlled through a Federal Market Order, which regulates the supply of raisins to be put on the market each year. The Federal Raisin Market Order, established in 1949, is administered by the Raisin Advisory Committee (RAC). The most important function of this committee is to control the supply of marketing raisins. A normal crop is about 350,000 tons, with sales of about 275,000 tons.

Each fall the RAC meets before harvest and estimates the crop size. It then compares that estimate to the expected demand. The difference between expected supply and demand is put in a reserve pool (see Table 1.2). The "free tonnage," the projected amount of raisins the market will demand, is the quantity that packers may sell to any outlet. In 1991, 84 percent of the raisins received by packers could be sold by them as free tonnage. The remaining 16 percent went into the reserve pool. Reserve tonnage becomes property of the RAC, and is sold to outlets not considered competitive within the normal domestic market. Reserve pool raisins are often sold as subsidized exports or to the federal government's School Lunch program. The actual price received by the grower is a weighted average of free and reserve tonnage.

The raisin industry experiences economic variability associated with market and production conditions. Raisin grapes are particularly vulnerable to rain during the three-week drying period in September, when the green grapes are laid on trays to dry. Rainfall during this time can cause substantial crop loss. The raisin industry is also sensitive to changes in national and global markets. In 1983, the average grower price dropped to \$587 per ton, well below production costs. This was caused primarily by a sharp reduction in demand for Thompson Seedless grapes by wineries, with the result that about 100,000 additional tons (dry basis) of grapes were diverted to the raisin packers.

**Table 1.2**  
**Per Ton Prices Received By California Raisin Growers**  
**1980-1990**

Year	Average Price (All Deliveries, \$ Per Ton) <sup>1</sup>	Free Tonnage Price (\$ Per Ton) <sup>2</sup>
1980	1193	1247
1981	1315	1275
1982	1150	1315
1983	587	1300
1984	635	775
1985	612	
1986	757	900
1987	817	945
1988	898	1025
1989	977	1115
1990	NA	1115

Sources: <sup>1</sup>California Fruit and Nut Statistics, California Agricultural Statistical Service, Annual Reports

<sup>2</sup>Raisin Bargaining Association, Annual Reports and Interview With Manager.

According to University of California Cooperative Extension estimates, the cash costs to produce a ton of raisins are estimated to be about \$300. There are also overhead costs of \$539 per ton for an office, equipment, supplies, insurance, and interest. With a total production cost of \$840 per ton, the economic returns of growing raisin grapes are often slim. Based on data in column one of Table 1.2, there were several such years in the last decade. Raisin vineyard values have followed the economic conditions of the industry. Per acre values peaked in 1982 at \$10,840 (Table 1.3). Land values started declining in 1983, and bottomed out at \$4,000 per acre in 1986. Since that time, land values have improved, to an estimated \$5,900 per acre in 1991.

Although small quantities of raisins have been imported to the U.S. from Mexico and Chile in recent years, the major concern of the California raisin industry with respect to foreign competition is in maintaining and expanding export markets. International competitiveness and access to foreign markets are very important to the California raisin industry. Japan and the European Economic Community (EEC) are California's leading export markets.

**Table 1.3**  
**Raisin Vineyard Prices, San Joaquin Valley**  
**1975-1991**

Year	Value Per Acre	Year	Value Per Acre
1975	\$ 2,500	1984	\$ 6,580
1976	2,800	1985	4,520
1977	3,500	1986	4,000
1978	4,950	1987	4,300
1979	6,900	1988	4,850
1980	10,150	1989	5,300
1981	10,200	1990	5,800
1982	10,840	1991	5,900
1983	9,460		

Source: California Department of Food and Agriculture, California Agriculture Statistical Review, annual reports.

Exports have shown modest growth in recent years despite the fact that the leading market, the EEC, is obligated to purchase raisins from Greece, one of its members. The United Kingdom, which is the largest raisin-importing nation, does not import raisins from the United States. Nonetheless, exports in 1991 were the greatest since 1970. During this period, the export markets have taken from 13 to nearly 36 percent of the annual production (Table 1.4).

The raisin industry has attempted to develop price stability through marketing strategies. However, weather, crop size, and international conditions cause economic variations and instability in the industry. Over the years overproduction has exacerbated this instability, except for years such as 1978 when over half of the crop was lost to rain and prices increased. Although domestic consumption has increased slightly in recent years, the export markets continue to be crucial to the economic viability of the California raisin industry.

The ability of the California raisin industry to compete in international markets is determined by a number of economic and political factors. These include the value of the dollar, the availability of the product from competing countries, the policies of the European Economic Community, the use of federal export promotion funds, the amount of raisins consumed domestically, and the marketing decisions made by the Raisin Marketing Order.

**Table 1.4**  
**Exports of California Raisins**  
**1970-1991**

Year	Tons Exported (thousands)	Total Production (thousand tons)	Percentage Exported
1970	57	193	29.5
1971	61	191	31.9
1972	17	105	16.2
1973	41	223	18.4
1974	43	421	7.8
1975	54	284	19.0
1976	35	142	24.6
1977	48	249	19.3
1978	20	74	27.0
1979	64	263	24.3
1980	62	255	21.8
1981	56	257	21.8
1982	46	255	18.0
1983	50	387	12.9
1984	60	325	18.5
1985	73	363	20.1
1986	86	297	29.0
1987	94	321	29.3
1988	102	379	26.9
1989	98	354	27.7
1990	108	374	28.9
1991	119	332	35.8

Source: Raisin Administrative Committee, various annual reports.

Some industry leaders claim that the California raisin industry cannot compete with low-cost producers in countries such as Turkey and Chile. In 1986, for example, it was reported that Europeans could buy Greek raisins for \$650 per ton while U.S. raisins cost \$1,250 per ton. Data on California raisin exports, however, indicate increasing success in international market competition during the past seven years. Between 1985 and 1991, the proportion of raisins sold in the export markets increased from 20.1 percent to 35.8 percent. Moreover, the total tonnage exported has increased from 73,000 tons in 1985 to 119,000 tons in 1991, a 63 percent increase (Table 1.4).

Some industry representatives interviewed as part of this study indicated that higher labor costs in California make it difficult to compete with raisins produced in low-wage countries. Producing and harvesting raisin grapes is a labor-intensive activity requiring an estimated 103 annual work hours per acre (Mamer and Wilkie, 1991). But the stagnant wages and piece-rates recorded since 1986 (see Chapter 3) indicate that IRCA has not increased labor costs and has not affected the international competitiveness of the California raisin industry.

## CHAPTER 2

### EMPLOYMENT IN THE INDUSTRY

There are 5200 to 5500 farms that grow raisin grapes in Central California. These farms tend to be small, with an average size of about 50 acres. For many operators, farming is not the principal source of family income. Industry experts interviewed indicated that a farmer needs a minimum of 70 to 80 acres of raisins to be economically viable, so the majority of raisin grape growers are part-time farmers. Some raisin growers also farm other crops; 38 percent of those who responded to the mail survey conducted as part of this study indicated that they grew crops other than raisin grapes in 1991. Raisins, however, were considered to be the major crop by 82 percent of the respondents.

Exact figures on the seasonal work force required by the California raisin industry are not available. EDD reports that there were about 25,000 workers in the Fresno County grape industry in September of 1990. Comparable estimates for Madera and Tulare counties were 6,100 and 6,000, respectively. But these figures overstate the raisin harvest work force, since they also include harvesters of table grapes, and those employed in the wine and juice industries. Conversely, harvest workers employed by FLCs are not reported as grape workers. In September of 1990, EDD reported that almost 25,000 individuals were employed by FLCs in Fresno County. Undoubtedly, a significant portion of those were harvesting raisin grapes.

The lack of an accurate tabulation of raisin harvest workers results in some debate about the number of workers employed in the raisin grape harvest. Industry sources insist that the labor requirements are greater than EDD estimates. For example, a consortium of those involved with the raisin industry (Raisin Bargaining Association, Sun-Maid and others) claims that 50,000 to 60,000 workers are needed to harvest raisin grapes ("Farm Labor: California's Vital Resource," March 1988). Whatever the specific requirements, it is safe to say that the industry requires a large, temporary work force for a short harvest season. Labor relations are casual, with farm labor contractors or crew bosses often acting as intermediaries between growers and workers. Employment with an individual grower typically does not last for more than two or three days. In our interviews with workers, we found that many workers did not know who the farm owner/operator was at the specific work site. However, in most instances they could identify by name either the crew boss/foreman or the FLC.



## HIRING AND RELATED EMPLOYMENT PRACTICES

### Increasing Use of Farm Labor Contractors

A clear trend that has emerged in the raisin industry is the increasing use of farm labor contractors, particularly since IRCA was passed in 1986. As indicated by the data presented in Table 2.1, growers relied on farm labor contractors to a much greater extent in 1991 than in 1985. Three-fifths of the 323 growers who responded to our mail survey indicated that they used FLCs in 1991. This same sample of employers stated that only 35 percent of them used FLCs in 1985, the year prior to passage of IRCA.

**Table 2.1**  
**Use of Farm Labor Contractors in the Raisin Harvest Since 1985**  
**As Reported by Employers**

Year	Percent	Year	Percent
1985	35.1	1989	52.0
1986	37.0	1990	57.1
1987	41.4	1991	59.3
1988	44.5		

The 1991 data are similar to the results found by others. For example, Heppel found that slightly over 60 percent of Fresno County raisin employers used FLCs in the 1989 harvest season (Heppel and Amendola, 1990). Our interviews with industry leaders, growers, and FLCs indicated that these are conservative estimates of the importance of farm labor contractors in the raisin harvest. Typical estimates given by these sources were that 70 to 80 percent of growers are now using farm labor contractors for the raisin harvest.

The major reasons given by employers for the shift to farm labor contractors are:

1. Too much paperwork in hiring workers directly. Ninety percent of the responding employers who used FLCs in 1991 indicated that they did so in part because of difficulties in complying with all the paperwork requirements involved, even for short-term employees. IRCA is only one of several laws which require that employers create a paper trail. Examples beyond the I-9 form required by IRCA include forms for withholding and documenting taxes, demonstrating health and safety standards, and

paying workers' compensation, unemployment and state disability insurance. It is clear that many employers are willing to pay the increased costs associated with using a farm labor contractor in order to avoid having to gear up a payroll and documentation system that will be required for only a very short season.

2. Too many regulations imposed on employers. Another major concern expressed by growers is related to the sanctions and liability associated with non-compliance with the variety of laws and regulations that face employers. Although it is evident that many growers have become less apprehensive about failing to comply with IRCA, other liability concerns, such as work-related injuries, reporting requirements, mandatory workers' compensation insurance, and other regulations are worrisome to employers. Approximately 84 percent of the employers in our survey who used farm labor contractors in 1991 indicated that one reason for using them was to avoid dealing with various government regulations.

3. Labor supply concerns and difficulty in recruiting workers. Approximately 58 percent of employers who used FLCs in 1991 indicated that difficulty in recruiting workers for the raisin harvest was a reason for electing to use an FLC. Although these reasons were checked by the majority of those who used FLCs, they appear to be significantly less important than compliance with laws and regulations in terms of motivating growers to rely on FLCs to recruit and supervise their harvest crews.

Reducing labor costs apparently is not a motivating factor in using farm labor contractors. Only about seven percent of the raisin growers who used FLCs in 1991 indicated that labor costs were reduced by using a farm labor contractor. In fact, 86 percent of the total sample responded that their total labor costs had increased since 1986, even though nominal harvest piece-rates have remained constant during this period. Fifty-six percent of the growers indicated that the increase in labor costs was due to a combination of increases in minimum wage and increases in piece-rates; 30 percent indicated that it was due to increased piece-rates alone, and eight percent cited increased fees paid to farm labor contractors. These responses suggest a general sense among raisin growers that labor costs have increased since 1986, but this only seems a vague notion that it costs more to do business every year, not a sense of where the monies are going.

The general trend within the raisin industry during the past five years toward increased reliance on FLCs includes small, medium, and large employers (size measured by raisin acreage in production). However, there is a greater likelihood that large employers will use

FLCs. The average size of employers who used FLCs in 1990 was 95.7 acres. By comparison, those who did not use FLCs farmed 86.0 acres. Utilizing a one-way non-parametric statistic to measure association between farm size and use of an FLC generated a correlation coefficient of 0.60. In other words, 36 percent of the variance, or power of prediction of whether employers utilize FLCs, can be explained by employer size. This indicates that larger employers are more likely to use an FLC, although the relationship is not strong in our sample data.

### **Arrangements Between Growers and Farm Labor Contractors**

Typically, the grower-FLC relationship is an informal agreement. Ninety-three percent of employers who used FLCs in 1991 said that they worked under a verbal agreement with the FLC. Three general types of FLC payment methods are used in the industry:

1. The most common method is to pay the FLC a flat rate for each tray picked. Approximately 53 percent of the employers who used FLCs in 1991 responded that they used this method of paying FLCs. The median average paid to FLCs via the flat rate was 21 cents per tray.
2. Another method used to pay FLCs is a percent commission on payroll. The median response from the mail survey was that growers paid FLCs 31 percent of payroll for their services in 1991. About 41 percent of respondents who employed FLCs indicated that they used a percentage commission arrangement with their farm labor contractors.
3. The final method used by a small portion of growers is the so-called "penny contractor." In this type of arrangement, the "farm labor contractor" recruits the workers and sometimes supervises the crews. The penny contractor is paid one or two cents per tray for recruiting the workers, and then is paid on an hourly basis for supervising the harvest crews. The grower is responsible for the payroll and related costs. It appears that many growers who use penny contractors do not consider them to be FLCs, although many governmental agencies would.

According to the results from our mail survey of employers, workers who were employed by farm labor contractors in 1991 earned about 16 cents per tray. This leaves a commission of about 31 percent for the farm labor contractor. When one accounts for mandatory employer-paid payroll taxes and insurance, including OASDI (7.65 percent), unemployment insurance (as high as 5.6 percent), and workers' compensation insurance (base rate for grapes was eight percent in 1991), it is evident that the FLC works on a slim profit margin in the raisin

harvest. The minimum commission figure estimated<sup>d</sup> by farm labor contractors and industry experts we interviewed that would allow an FLC to operate legally by complying with all regulations and required payroll expenses would equal a 32 percent markup on direct labor charges. One farm labor contractor stated that he would not negotiate a commission below 36 percent. Consequently, he has gradually reduced the number of growers he works for in the raisin harvest and notes that the competition among FLCs engaged in the raisin harvest is fierce.

There are a variety of ways that an FLC can make a profit, even with these small commissions. Unscrupulous farm labor contractors may not pay taxes they withhold from workers, or may report a reduced wage bill to the IRS and EDD. They may not pay workers' compensation insurance or other insurance premiums, or they may not carry required liability insurance. In some instances, the workers are charged for services provided by FLCs. Sixty-one percent of the 125 workers we interviewed indicated that they paid someone to provide a ride to work. FLCs, foremen and "raiteros" (drivers of privately-owned vehicles who may be an FLC, a foreman, or a fellow worker) accounted for 60 percent of those who were paid for transportation to the fields. The cost of the ride ranged between \$3.50 and \$4.00 round trip each day in 1991. Another charge or cost imposed by both FLCs and growers is for equipment use. Virtually all (124 of 125) of the workers interviewed indicated they had to pay for both gloves and knives, even though required equipment is supposed to be paid for by employers in California if the worker earns less than twice the minimum hourly wage (\$4.25 per hour in 1991).

### **Use of Crew Bosses and Foremen to Recruit and Hire Workers**

Previous studies in a variety of California agricultural crops have found that crew bosses, supervisors, or "mayordomos" are often the key link between growers and seasonal farm workers (cf, Mason, Alvarado and Riley [1992]; Mines and Anzaldua [1982]). Supervisors are typically bilingual, and often are responsible for recruiting new workers as seasonal demands increase. Workers are usually found through family and friendship networks, quite often based in rural villages in Mexico.

Among the growers who responded to our survey, 13.5 percent indicated that they used their foremen to recruit crews to harvest raisins in 1991. While this is a relatively small proportion of the total sample, it represents about 29 percent of the growers who did not use farm labor contractors in 1991. Farm labor contractors were not included as employers in the mail survey. It is likely that crew bosses and supervisors perform important roles in recruiting and

hiring workers employed by FLCs.

Among the raisin growers who used foremen to recruit workers in 1991, the dominant method of payment was a tray rate. Of employers who paid foremen for recruiting, 92 percent indicated that they paid them on a per tray basis. This arrangement likely reflects the proportion of growers who use the "penny contractor" arrangement discussed earlier. That is, about 11.7 percent ( $.127 \times .92$ ) of the growers used their crew bosses in a "penny-contractor" type arrangement to recruit workers.

### **Checking Employment Documents**

Both growers and employers were asked if employers were requiring verification of work authorization prior to employment. Grower responses indicated that there is general conformance with the IRCA verification requirements, at least in terms of checking to see that the workers have some kind of documents. Approximately 79 percent of the farm workers interviewed indicated that their current employer had required work documents before employment. Workers stated that they typically used Social Security cards, as well as temporary or permanent work authorization cards issued by the Immigration and Naturalization Service (INS), to obtain work. It does not, however, appear that employers are too concerned with document authenticity; over one-third of the worker sample was found to be undocumented.

### **How Workers Find Jobs**

While employers look to recruit workers, workers search for jobs. It is clear from the questions we asked farm workers that job search among raisin harvest workers relies on an informal network of friends and family members. This is consistent with our previous findings among the general farm worker population in the Central Valley region. In the current study, we found that only 12 percent of the workers were recruited by a grower or his foreman, and slightly less than ten percent were recruited by an FLC or his foreman. The majority of the workers interviewed (54 percent) indicated that they found their current job through a personal reference from a friend or relative.

Slightly more than half of the worker sample stated that one or both of their parents had worked in U.S agriculture. Since 99 percent of the workers interviewed were born outside of the U. S., this suggests that there is an intergenerational migration pattern that relies heavily

on friends or family members already in the farm labor force for job information.

This international network which links rural villages in Mexico with agricultural jobs in California is clearly an important connection for migrants seeking work. Fifty-three percent of the raisin workers interviewed return to Mexico each year, a way of maintaining the friendship and kinship networks that communicate information about employment opportunities. Seventy-nine percent of the workers who responded to this question indicated that they knew someone in Fresno County who helped them get their job when they migrated from Mexico. Eighty-three percent of the respondents knew they would be working in agriculture, and 65 percent planned to work in the raisin harvest when they left Mexico.

### **FUTURE OUTLOOK FOR EMPLOYMENT IN THE RAISIN INDUSTRY**

The Central California raisin industry has long depended on a readily-available, large pool of workers willing to harvest the crop in a short period of time. Since its inception, the industry has depended largely on foreign-born workers to provide the necessary harvest labor. There was speculation and concern among growers that IRCA would make it difficult, if not impossible, to secure the needed labor without continuous foreign augmentation. It is clear, however, that after five years of experience under IRCA, very little has changed. Many workers who gained legal status under IRCA are apparently leaving the raisin harvest. Although the sample size was small, our survey of raisin workers in 1989 found that about 60 percent of the harvest work force were SAW applicants (Alvarado, Riley and Mason, 1990). The comparative statistic for 1991 was 42 percent, which indicates that SAWs are leaving the raisin industry.

Despite this apparent loss of SAW workers, there has not been a shortage of workers in the raisin harvest. In fact, many of the workers we interviewed complained that there was not enough work because of the abundant labor supplies. It is clear that any loss of SAW workers is being more than offset by the continuing flow of undocumented (or "fraudulently documented") workers from Mexico. Informed observers estimated that the 1991 work force was at least 50 percent illegal. In 1989, when we asked raisin harvest workers if they were here illegally, 26 percent responded that they were. In 1991, 35 percent of the workers self-reported that they did not have the legal right to work in the U.S. It is therefore evident that five years after IRCA was signed into law, there is an increasing reliance on undocumented workers in the raisin harvest. The continuing flow of new migrants from Mexico has overwhelmed most anticipated effects of IRCA, and this also has been the case in the raisin industry.

## Future Labor Supplies

We asked growers and workers their perceptions about the future of the industry, their own situation, and any actions they might take to adjust to a changing future. Their observations indicated that IRCA has not had significant effects on the raisin industry, and most participants indicated that the future will be "business as usual." Ninety-two percent of the growers who responded to our mail survey indicated that the 1991 labor supply was adequate or abundant. Growers were also asked how difficult it was to find harvest workers in 1991, compared to 1986. Almost 70 percent of the growers who responded stated that it was as easy or easier to find workers as compared to five years ago. The majority of growers (77 percent) also rated the current work force as equally productive or more productive than that of 1986. Thirty-six percent of employers did express a sense that the 1991 work force had less experience, and another 49 percent said the workers required more supervision than did the work force of 1986. Given the large number of new immigrants in the current work force, these findings are not surprising.

Growers also were asked if they had experienced any labor shortages since 1986. Even though we did not define the term "labor shortage," the only year in which more than ten percent of the growers indicated they had experienced a labor shortage for harvest was 1989. Twenty-three percent of the growers surveyed claimed they couldn't find enough harvest labor in 1989. This is due to the fact that significant rainfall occurred during the drying season. The total work force probably was similar to other years, but peak demand was accentuated due to threats of rain.

The most important reason that there have not been labor shortages in the raisin harvest -- or other agricultural activities -- is the lack of enforcement of IRCA. About 12 percent of the growers surveyed indicated that they had been visited by the Immigration and Naturalization Service since 1986, but none had been inspected more than once. This means that only about two percent of the farmers can expect to be visited in any year, which is not likely to make most employers concerned about enforcement.

Another question asked growers what they might do if harvest labor shortages occur in the future. Most frequently, they answered they didn't know. Twenty-nine percent said that they would mechanize the harvest, and 29 percent would use farm labor contractors. These responses suggest there is no overriding concern about future labor supplies among growers.

We also asked the 125 farm workers about their plans for the future. Eighty-five percent planned to harvest raisins in 1992, and only 5.7 percent were certain they wouldn't. Eighty-three percent felt they would work for their current employer in the next year, and 72 percent indicated that they plan to do U. S. farm work as long as they are able to do so.

In interviewing farm workers, we discovered that working in crops and performing tasks such as picking raisins were not their careers of choice. Rather, those jobs offer easy-access employment where workers with limited skills, education and language ability can earn some money. Employment contacts, often based in rural Mexican villages, are those who know about agricultural areas and jobs. Many workers would like to find steadier and less arduous work, but they see their opportunities as limited to seasonal agriculture. Given the population growth in Mexico and the relative economic advantage of migrating to the U. S. for even the lowest-paying jobs, the future is not likely to be much different than the present.

### **Employers' Indifference to Training Workers**

During the Congressional debates preceding the enactment of IRCA, major concerns expressed by agricultural employers were the effects that the proposed law would have on the farm labor pool. Six years after the enactment of the law, any concerns about labor shortages seem to have vanished. Employers, state agencies, industry leaders in agriculture, and workers all agree that the supply of labor is adequate for raisins. This labor force, which appears to replenish itself, albeit largely with undocumented workers, creates little incentive for employers to be concerned about its stability. Growers and farm labor contractors we interviewed explained that the vast majority of their raisin harvest crews typically work for them only during the harvest season, with limited spillage into other crops and tasks. As growers increasingly utilize FLCs for the raisin harvest, a clear trend we have observed is that growers have little or no direct contact with the workers. This distance between growers and workers in an overabundant labor market environment diminishes concerns among employers about labor stability. In other words, growers view workers as employees of the FLCs, and employment-related concerns as the responsibility of the FLCs. One grower organization leader stated: "Agriculture does not utilize its labor very efficiently...Only a handful of growers even think about these kinds of things." As a result, it is not likely that the vast majority of growers will entertain the concept of training workers to extend their annual employment until labor market conditions dictate that they do so.



## **Will the Raisin Harvest Be Mechanized?**

With a few exceptions, harvesting, tying, and pruning tasks in the production of raisins have not been affected by improved technology or mechanization for the past 50 years. According to University of California Cooperative Extension estimates, approximately 103 hours of labor per acre are required each year to produce raisins (Mamer and Wilkie, 1991). Despite the labor-intensive nature of growing raisins, there has been little sustained interest in adopting new technologies that would reduce these labor requirements.

During recent years, there has been experimentation with mechanized harvesting in the region, but such practices are not yet deemed to be cost-effective by most growers, whose average raisin grape farm does not exceed fifty acres. Key informants interviewed for this study estimated that a grower should have at least 200 acres of raisin grapes in production for current mechanization technologies to be cost-effective. Local growers first began to experiment with mechanized raisin harvest systems approximately 20 years ago. Presently, only a few growers in the region have invested as much as \$120,000 to develop or purchase mechanized systems that harvest, lay continuous tray paper on the ground, and later retrieve the raisins.

Five basic systems are currently operational. Two of the systems mechanically harvest the grapes. About one week prior to harvest, fruit canes are cut with hand shears, allowing the grapes to partially dry while still attached to the grape stem. When the mechanical harvester comes in, the grapes fall off the stem as single berries. The berries are then conveyed to continuous tray paper which has been mechanically laid down in the middle of the rows. Neither of these two systems turns or rolls the trays prior to retrieval, but they do utilize mechanical retrievers to pick up the raisins when dried.

The other three systems rely upon manual harvesting of the grapes onto continuous tray paper that is laid out by hand in the middle of the grape rows. According to the raisin growers who use the continuous paper tray, the speed of harvesting with this method is approximately 20 percent faster than it is with the traditional individual trays. Next, the continuous paper tray is turned mechanically by a tractor-drawn machine in about one week to ten days after the grapes are first laid on the ground. The final step in the process involves the mechanical retrieval of raisins that are sufficiently dry by a tractor-drawn machine. These raisins are then loaded into bins for transport to the packer.

The key issue in the matter of the use of mechanized systems available today for harvesting

raisins appears to be cost effectiveness. When we asked our 1991 survey sample of 323 raisin growers whether they would consider using mechanized systems in the event of a labor shortage, only 28 percent answered affirmatively. As one grower we interviewed commented: "It doesn't make any sense that they make so much fuss about these expensive machines when workers do a better job." What this grower really meant was that workers do a better job cheaper.

### **IRCA's Effects on the Raisin Industry**

Abundant labor supplies since 1986 have allowed the raisin harvest to proceed with few concerns about future labor needs. Yet this solution is unsatisfactory to most involved. Growers and industry leaders readily admit their continuing dependence on undocumented workers, and they are keenly aware that their crops would be jeopardized if the replacement workers stop crossing the border. These abundant supplies of labor have also thwarted most of the salutary effects anticipated by IRCA proponents. The work force has not been stabilized, employment opportunities have not expanded for legalized workers, and the economic position of farm workers has not improved. While the current situation is workable in that crops are being harvested and workers are finding jobs, it is an uneasy solution that satisfies neither the growers' desire to have a stable and predictable work force nor the social goals of those who want to improve the lives of farm workers.

IRCA obviously has failed as a mechanism for deterring undocumented workers from entering the country or, once they arrive in the San Joaquin Valley, keeping them from participating in the farm labor force. The more than one million apprehensions along the United States - Mexican border during 1991 testify to the certainty and expectations workers have for finding employment upon arrival at farm sites. This expectation is raised even higher by the common knowledge that work documents are not screened carefully and that field sweeps by the Border Patrol are no longer to be feared.

The incentives to migrate north continue to be primarily economic, as the differential between earnings in Mexico and the United States is significant. For example, the daily minimum wage in one of the major rural Mexican regions from which workers migrate is 11,200 pesos, or \$3.73 in U.S. currency. Obviously, the ability of farm workers to earn at least nine times more employed in the raisin harvest in Central California than they could earn in their native land is too great an attraction for the tens of thousands who expose themselves to the many risks inherent in migrating to the U.S. illegally. In some instances, workers can earn 20 times

more per day in this country than if they remained in Mexico. IRCA has had no impact on these economic choices workers make when they decide to migrate.

### **Lack of Incentives to Stabilize the Work Force**

The ephemeral nature of the raisin harvest -- with its short season, high worker turnover, erratic hiring patterns -- is intensified by its inconstant, large, and temporary labor force. Such conditions result in tenuous employer-employee relationships where loyalties are lessened or become nonexistent. Two factors serve to exacerbate this condition: the trend among employers toward greater use of FLCs in obtaining their harvest crews; and the increasing predominance of undocumented workers who are non English speakers. In most instances, FLCs completely buffer the employer from the workers. During our field interviews with employers we frequently found them to be uninformed about their workers. They did not know where they came from, whether they were married, where they lived, or how skilled or experienced they were. Direct communication between the employer and the nearly all non-English speaking labor force was minimal; this served to further increase the distance between the two. Without such communication, relationships were highly impersonal.

Only eight percent of the employers surveyed expressed any concern about labor shortages during the 1991 harvest season. Also, weekly publications ("California Weekly Farm Labor Report") by EDD during the 1991 raisin harvest registered no labor shortages in Fresno County to work this commodity. Interviews with industry leaders confirmed that there was an abundant supply, perhaps even a surplus, of workers. These conditions contribute toward creating a climate that mitigates the need for growers to offer inducements and incentives to workers. An important outcome of such conditions in the industry is the lack of incentives for employers to stabilize the raisin harvest work force.

### **Impact of Future Employment Practices on Wages and Benefits**

During the past decade the most significant trend among grower personnel practices has been the increased use of FLCs during the harvest season. There is little evidence to suggest that employers will modify existing practices, much less introduce new ones, in the near future in a manner that would affect wages and benefits for the harvest workers. In most instances, raisin harvest workers' annual family earnings remain below the USDA established poverty level. Adoption of mechanized harvest practices as an alternative to meeting future labor shortages is not being seriously considered by the majority of growers.

even though 29 percent of the employers we surveyed indicated they would introduce mechanization to their harvest operations in the event of labor shortages. Industry leaders offer two major reasons which diminish the likelihood of wide-scale mechanization: cost and an overabundant labor supply.

The overabundant labor supply is the major factor characterizing the present raisin harvest labor market that points in the direction of continued depressed economic conditions for farm workers. Fringe benefits, other than those mandated by law, are not available to the raisin harvest labor force as there are no inducements that compel growers to change wage and benefit practices. On the other hand, mechanization does not seem to be a serious threat to displacement of workers, as the use of such technology is not considered cost-effective.

## CHAPTER 3

### STATUS OF THE WORK FORCE

#### Demographics

The 125 raisin harvest workers interviewed as part of this study were entirely Hispanic, with 94 percent born in Mexico. Only one worker interviewed was born in the United States, and seven workers (5.6 percent) were born in Central America. Of the Mexican workers, 32 percent were from Michoacan and 30 percent were from Guanajuato.

Ninety-two percent of the workers interviewed were male, and 41 percent were single. The median age of the workers was 28 years, and 93 percent of the sample were citizens of Mexico. The median year that the workers first came to the U.S. was 1983, but 35 percent indicated that they had come here initially in 1986 or later. About half the sample planned to remain in the U.S. permanently, with the remainder planning to return to Mexico or unsure of their plans.

The mean average of experience in farm work in the U.S. was about nine years, while the median was only six years. Nineteen workers indicated that 1991 was the first year they had done any farm work.

About 38 percent of the farm workers had done some non-farm work in the U.S. Gardening, as well as work in construction, restaurants, and factories, were listed as the most frequent types of this employment.

#### Education

Formal levels of schooling among this population are low, but consistent with those among farm workers employed in other crops. The average (mean and median) years of schooling completed in Mexico is six years, and only seven of the workers had completed any school in the U.S. With most workers in this country for fewer than ten years (and often for only part of each year) and with almost no exposure to English in school, it is not surprising that the dominant language spoken by 99 percent of the sample is Spanish. Ninety-four percent of the workers said they are able to speak very little or no English. Eighty-seven percent understand little or no English.

## **Legal Status**

Slightly more than 35 percent of the workers interviewed indicated that they were working in the U.S. without legal work documents. Forty-two percent had applied for legal status through the SAW program, with the remaining workers legalized through general amnesty or prior to IRCA. Less than two percent of the raisin work force were found to be U.S. born citizens. Industry experts we interviewed estimated that at least one-half of the current work force in the raisin harvest was undocumented or using fraudulent documents.

Seventy percent of the workers interviewed responded that it was not hard to obtain documents to work in the U. S. This response was verified by project researchers, who were able to openly purchase a Social Security card and driver's license for \$25 at a local flea market that caters to farm workers.

## **Employment**

For most of the workers, the raisin harvest is not the only source of employment. Seventy-two percent of the workers indicated that they had worked in other crops in California in the past year; 37 percent had worked in agriculture outside of California during the past five years. (These subsets are not mutually exclusive.) The "typical" worker was employed in one to two other crops during the past year. The task and crops most often cited were harvesting vegetables, tree fruit, citrus and olives. Eighty-two percent of the workers indicated that they had worked in only one county in the past year, which suggests that the primary form of migration is from Mexico to one area in California and that the raisin workers do not "follow the crops" within the state or the West Coast region.

Despite their pursuit of work in other crops, the raisin workers were unemployed for five to five and a half months during the past year. Forty-eight percent of the workers applied for unemployment insurance during these periods of unemployment. The most frequent reason they didn't apply for unemployment insurance was that workers thought that they wouldn't qualify. We also asked the workers if they knew they were covered by unemployment insurance. Thirty-nine percent said they were covered; 41 percent said they weren't covered, and 20 percent didn't know their status.

Although growers report that labor costs have increased in the raisin industry since the implementation of IRCA, these increased costs do not include either higher earnings or increased benefits for workers. Indeed, according to the 125 workers interviewed for this study, benefits for some workers have been reduced since 1985 as have their piece-rate

earnings.

In studies of Central California agricultural labor (Mason, Alvarado and Riley [1992]; Alvarado, Riley and Mason [1990 and 1992] ), the point is frequently made that raisin workers seem to fall at the lowest end of the "wage and benefit" continuum. We have seen in previous studies that raisin workers report the most meager and fewest of employee benefits, the highest seasonal rates of unemployment, and the lowest overall or annual earnings as compared to workers in other commodities, such as table grapes, citrus, and especially melons. These previous findings are echoed in the data obtained from workers and growers in this current (1991) study, but with greater resonance than before, due to the diversity of data sources and the level of detail allowed by this current study with its exclusive focus on the raisin industry.

### **Worker Supervision and Compensation**

As in other agricultural commodities, there are many factors which may have an impact on the total seasonal earnings of a raisin worker. Such factors include conditions that affect the field, the crop, the labor market, and the environment, as well as the level of prevailing wages. Of most importance to any analysis of raisin worker earnings are the labor market conditions (reviewed to a large extent in the previous chapter) and the level of prevailing wages.

Regarding labor market conditions, we saw in Chapter Two that there seems to be an adequate or even abundant labor supply in the raisin industry, in spite of the evident loss of SAW workers and their possible displacement by illegal or fraudulently-documented workers. Although extremely difficult to document in any authoritative way, it is argued by industry experts and leading farm labor contractors that shifts in available labor are "holding down" the level of worker wages. Logic alone would dictate that with an abundant labor supply which consists of at least 50 percent illegal workers, the prevalent piece-rate earned by workers could be reduced if large numbers of workers were willing to "work for less." But the relationship between prevailing wages and an abundance of illegal workers is more complex than it might seem at first glance.

A critical factor among an overwhelming majority of the 1991 raisin harvest workers interviewed for this study is their inability to understand English. When asked how well they understood their English-speaking employer, 87 percent responded "not at all" or "very little." As a result, these individuals are dependent upon others who are able to communicate in

English for most, if not all, of their employment-related transactions. This function is commonly provided by either farm labor contractors or by foremen employed directly by the grower. And because raisin harvest workers usually work independently rather than as part of a crew, once they begin their work routines at the farm site direct supervision of workers is often lax or nonexistent.

We found that all the raisin harvest workers were paid on a piece-rate basis, averaging 16 cents per tray within a range of 15 to 17 cents per tray. Workers average nine hours of work per day, and over the total harvest season they reported earning an average of \$6.25 per hour. About ten percent reported earning less than \$4.25 per hour and another ten percent reported earning over \$8.00 per hour. Since the raisin harvest lasts for only three to six weeks, most workers earn less than \$1,000 during the harvest season. Worker earnings determined by a piece-rate basis are sensitive to several factors which ultimately affect individual earnings. Among these factors are worker skill, vine and crop conditions, and of course, the piece-rate paid by employers. Workers employed by FLCs averaged one cent less than those employed directly by the grower.

There is a connection between the low prevailing rate of pay among raisin harvest workers and the increasing prevalence of illegal workers. It is not merely that undocumented workers are willing to work for less. Because of their lack of English skills, their inability to arrange for employment directly with the growers, and their need to minimize the possibility that their illegal status be disclosed, most workers with fraudulent documents are forced to seek employment through a middleman.

In some cases, of course, the middleman is a registered farm labor contractor. But in many other cases, the middleman is simply a foreman who works on salary for the grower and arranges for a harvest crew through personal contacts, often reaching directly into Mexico and small, rural feeder-villages there. Whether working for a registered farm labor contractor, an unregistered farm labor contractor, or a foreman functioning as a farm labor contractor, the raisin harvest worker must sacrifice in earnings the difference between what the grower pays the "contractor" and what the "contractor" pays the worker. And this difference is often as much as two or three cents per tray.

In order for a worker to earn the minimum wage of \$4.25 per hour, it is necessary to harvest 27 trays at 16 cents per tray. On numerous occasions, workers reported harvesting in excess of 400 trays per day, a number that is difficult to attain, according to experienced workers and supervisors. During a ten-hour work day, a worker would need to harvest an average of 40



trays per hour. However, if the average wage reported by workers was \$6.25 per hour, and the average rate per tray was 16 cents, and workers' average nine hours of work per day, then the average number of trays was about 350. Using these averages, the daily pay would be about \$56.00.

In the 1991 raisin harvest, EDD staff conducted tray counts at selected farm sites in Fresno County where some workers harvested 50 trays per hour. However, these observations were made in the early hours of the work day before the summer heat exceeded 80 degrees Fahrenheit. It is doubtful that a worker could maintain such a frenzied pace through the entire day. In instances where workers reported such high piece-rate production, we observed trays that were only half full. A full tray of freshly-harvested raisin grapes averages about 22 pounds. If an employer or supervisor will accept trays weighting 15 pounds or less, the workers are then able to increase their average hourly wage by picking the same amount of fruit at the average piece-rate for 400 half-trays as those who are compensated at the same rate for 270 full trays.

### **Rising Labor Costs and Declining Worker Earnings**

As noted, there is a clear trend toward the use of FLCs by employers for the harvest of raisin grapes. We found that 40 percent of those interviewed were working for an FLC at the time this study was conducted. (Because of difficulties in locating FLCs and their employees, this 40 percent figure should not be considered representative of the importance of FLCs in the raisin harvest.) Although growers reported that labor costs are increasing, the increases are not reflected in higher wages to the workers but rather in commissions and fees paid to the FLCs. The increases in labor costs reported by employers are also likely due to increased payroll taxes, Social Security insurance, workers' compensation insurance, and other mandated fees. When asked whether the piece-rate for the raisin harvest had changed during the past five years, 62 percent of the workers indicated that the rates had not changed or decreased. Nearly all of the employers we surveyed indicated that labor costs had increased during the same period. They attributed the increase to a combination of factors, including piece-rate hikes, commissions or fees paid to farm labor contractors, and the increase in the minimum wage.

Industry leaders we interviewed agreed that there has been a slight increase in the piece-rates for the raisin harvest, but that such increases have been minimal and not commensurate with increases in the cost of living. In fact, the prevailing piece-rate reported

by most sources -- workers, employers, EDD -- was the same in 1986 as reported in 1991. This suggests that most workers employed in the raisin harvest have experienced a real decline in wages since the passage of IRCA in 1986.

## **Housing Conditions**

The lack of adequate housing is one of the most critical problems experienced by farm workers in the county. Scarcity of housing is even more acute during the raisin harvest, with a large number of workers coming into the region for a relatively brief period of time. Such housing often consists of cramped, substandard structures lacking basic necessities.

According to the grower survey, about 17 percent provided housing opportunities for their raisin harvest crews in both 1985 and 1991. Although these percentages coincide, further analysis of the data suggested there has been about a 25 percent turnover in growers providing housing between 1985 and 1991. That is, about 25 percent of the raisin farmers who provided housing in 1985 had discontinued that practice by 1991. When asked why they discontinued making housing (i.e., farm labor camp housing) available to their workers, 40.7 percent said that the laws and regulations had become too restrictive. Others noted the poor condition of existing housing and the high maintenance expenses.

In our 1989 survey of farm workers in Central California, we found that 85 percent of the general farm worker population were living in rented non-employer-provided housing, mostly in single family dwellings. Among our 1991 raisin worker sample, 16 percent indicated they were renting from their raisin employer and living on the farm premises. Almost 38 percent (37.6 percent) reported living in boarding houses or labor camps. Slightly more than six percent (6.4 percent) were found to be homeless, sometimes living in vehicles. Seven percent lived in apartments, and nearly nine percent lived in mobile homes. When asked if housing was an important factor in deciding which raisin employers to work for, 32 percent said yes.

In conducting the field research for this study, researchers observed a variety of housing situations for raisin workers. The most prevalent was a number of families occupying what appear to be substandard single-family houses and apartment suites. In many instances, this housing was occupied by several single men. The worst conditions observed included workers sleeping in cars, under trees, and under a bridge. The best housing situations were often employer-provided housing, or housing provided and subsidized by public agencies.

Overall, housing conditions for raisin harvest workers are among the most deplorable of all farm workers, and the prospects appear dim that either governmental agencies or employers will address the problem. Employers repeatedly express their frustration with stringent government regulations that serve to discourage them from providing housing for their workers, often citing experiences where compliance with building codes for farm worker housing would exceed building standards for their own homes.

## **Insurance**

Medical and health insurance benefits to seasonally-employed raisin harvest workers are virtually nonexistent in the industry, according to both the workers and the growers. Cost is certainly a factor cited often by industry experts, but extremely short average periods of employment (perhaps only a few days with each grower) and the large size of this transitory labor force (estimated 30 to 60 thousand workers per season) also place some practical limitations upon the grower-employer's ability to provide such coverage. Virtually all those who work in the raisin harvest receive no compensation other than piece-rate earnings, nor do they receive other employee benefits. Less than six percent of those interviewed reported receiving any kind of "bonus compensation," medical insurance plan, or paid vacations. Those receiving such benefits were more likely to be hourly employees of the growers and functioned, in part, as foremen or supervisors.

Nearly 80 percent of those interviewed reported that they had been unemployed (and available for work) at least one week during the previous twelve months. The highest number (55 percent of the sample) were unemployed in February and March; the lowest number (37 percent) reported periods of unemployment in September. On average, and discounting those who were not available for employment and therefore not seeking employment, those interviewed reported being unemployed six of the previous 12 months. During these periods of unemployment, 48 percent applied for unemployment insurance benefits. About 19 percent said they did not apply because they were only out of work for short periods. Virtually everyone else indicated that they did not apply because they were not qualified or did not know about such benefits.

Lack of knowledge about employer-provided benefits required by law seems evident: 62 percent of those interviewed reported that they were not, or didn't know whether they were, covered by workers' compensation insurance, even though in California all employers are required to provide this benefit. Similarly, the 48 percent who believed that they were not

eligible for unemployment insurance benefits should probably have answered that they did not know, for in California there is essentially universal unemployment insurance coverage. Of course, the perceived lack of unemployment insurance coverage could be the result of knowing that a valid Social Security number is required to be eligible for unemployment insurance. Thirty-five percent of the total sample reported that they were working in the U.S. illegally, using false documents for employment purposes. Industry experts interviewed estimated that at least 50 percent of the 1991 raisin harvest work force was illegal or "fraudulently documented."

### **Transportation and Equipment Costs**

Transportation to and from the work site is a problem for many of the farm workers we interviewed. Two-thirds of all workers interviewed indicated that they must pay a daily fee to either another worker, a foreman or a raitero. The median cost per day for a ride to and from work is four dollars. Interviews with FLCs indicated that some registered and unregistered FLCs actually make much of their profits by providing transportation to workers on a daily basis. Twenty-one percent of the workers in the sample drive their own cars, and seven percent walked to and from work. Only seven percent of the employers surveyed indicated that they provided transportation to their 1991 harvest workers.

## CHAPTER 4

### EDD AND THE RAISIN INDUSTRY

An important part of the mission of the Employment Development Department is to act as a broker between employers and job seekers. Placement data at both the national and state level for both agricultural and non-agricultural placements suggest that EDD's Job Service has had a limited role in matching job seekers with employers (Table 4.1).

**Table 4.1 Job Service Applicants and Placements  
Fiscal Year 1989-90**

	Total	U.S. Agricultural	Total	California Agricultural
No. of Total Applicants	18,414,985	227,168	1,093,744	56,844
No. of Placement Transactions (PT)	4,284,389	167,958	368,418	34,142
Applicants as a Percent of PT	23%	74%	34%	60%

Source: United States Department of Labor Employment and Training Administration, "Indicators of Compliance, Fiscal Year 1989-1990."

The data in Table 4.1 indicate that agricultural applicants appear to do better than other job seekers in terms of the percentage of applicants placed. It also is clear, however, that the activities of the Job Service in agricultural job matching are not very significant, given the number of employment transactions that occur each year. For example, it has been estimated that there are somewhere between 800,000 to 1.2 million individuals who do some agricultural work in California each year, and many of these individuals find several jobs within a year. California's EDD placement of applicants into 34,000 jobs in recent years indicates that the Job Service's market share is probably less than three to four percent of the agricultural job placements that occur each year. Given these background data, it is not surprising that EDD does not have a major role in placing workers in the Central California raisin industry.

In our mail survey, we asked growers several questions about their use of EDD to obtain raisin harvest workers at any time since 1985. Caution must be used in interpreting these data since farm labor contractors were not included in this mail survey. A grower who employs an FLC is not likely to know if the FLC used EDD to recruit his crews.

Of the 323 responding growers, about 14 percent indicated that they had listed job openings with EDD. Nine percent of the total grower sample received referrals from EDD, and eight percent had hired workers referred by EDD at least once since 1985. Among the eight percent of the growers who had hired workers referred by EDD, 53 percent rated the skills of these workers the same as those of workers hired through other means, seven percent rated them as better, and 40 percent considered the EDD referrals to be poorer workers than others. Approximately 20 percent of the growers had been visited by an EDD representative, primarily an agribusiness representative, in the past six years.

These employer survey results are consistent with information and observations provided in our interviews. It was estimated that about ten percent of the raisin growers used EDD for job referrals, and employers who used EDD's services tended to be the smaller growers. The low use of EDD's job referral services was attributed to abundant harvest labor supplies, the networks of families and friends, and the increased use of farm labor contractors.

In our 1991 interviews of raisin workers, we did not ask if the workers used EDD for job referrals. Previous studies of Central California farm workers have shown, however, that workers do not utilize EDD's job placement services. In 1989, only 1.2 percent of farm workers interviewed stated they had used EDD to find jobs (Alvarado, Riley and Mason, 1990). In 1990-91, the comparable statistic was 0.4 percent (Alvarado, Riley and Mason, 1992). This is not an entirely surprising finding, since only 39 percent of the raisin workers we interviewed in 1992 said they applied for unemployment insurance when laid off, an indication they were not familiar with EDD services.

Several reasons for the relatively low use of EDD's job referral service by both employers and employees in the Central California raisin industry were identified. Some of these reasons are generic to all of seasonal agriculture, while others are specific to the raisin industry.

Our experience with California agriculture suggests that the portions of the industry which tend to use EDD's Job Service are those that have a fairly predictable recall pattern. Examples are food processors and packing houses. In these areas, the work force is relatively stable from year to year, with consistent periods of employment and unemployment. Most of the workers draw unemployment insurance during slack periods, and EDD is used to recall workers as the season starts up. This provides employers with an easy method of

recall, and can help reduce their unemployment insurance claims rating.

The short duration of employment and high worker turnover rates from year to year in the raisin industry do not facilitate this type of recall system. Prior to the start of the raisin harvest, workers typically are employed in other crops or residing in Mexico. As a result, they are not connected to the unemployment system at the beginning of the raisin harvest season and typically would not know of or use EDD's Job Service. It appears easier for these workers to find employment through their existing networks of family and friends.

A second reason for EDD's low level of placement activity is the continuing surplus of agricultural workers throughout Central California. In 1989, adverse weather during the raisin harvest increased peak labor demand and caused concern among employers about a potential labor shortage. Growers placed more job orders with EDD as a result. They also showed interest in the Agricultural Labor Network, which is an employer-sponsored information network designed to improve labor market efficiency by providing information about labor needs and availability among growers. Since 1989, continuing labor surpluses have reduced grower interest in EDD and the Agricultural Labor Network.

The casual and informal nature of the employment and recruitment relationship is a third contributing factor in EDD's placement role. Employer recruitment methods in the raisin industry are very informal, partly because of the ready availability of workers. One industry representative claimed that employer recruiting efforts were extensive in 1989, as evidenced by the number of handwritten "Pickers Needed" signs posted at vineyards.

A fourth cause applies to all of seasonal agriculture, and relates to some constraints placed on the Job Service by the Judge Richey Court Order in 1980. A complete analysis of this order and its effects on agricultural job placements is beyond the scope of this study, but many of the regulations stipulated in the order make it difficult for the Job Service to be a major player in placing seasonal agricultural workers. One problem is the requirement for written "assurances" from employers before interstate or intrastate referrals can be made. Another is the elimination of separate farm labor offices. While the return to the previous system of separate farm labor offices is probably not desirable, elimination of seasonal offices in agricultural areas limits access for farm workers.

A fifth reason for the diminished EDD role is the ever-increasing role of farm labor contractors in seasonal agriculture, including the raisin harvest. During the past five years, the number and importance of FLCs in California agriculture has continued to increase. Industry experts

estimate that 70 to 80 percent of raisin growers are now using FLCs, and our survey of growers indicated that 59 percent used FLCs in 1991. Our study showed that EDD is not a significant recruitment site for either workers or employers. Of the 30 employers in the survey who hired EDD referrals, less than 10 percent of the sample, 12 of them compared the workers unfavorably to their other workers, while 18 said they were the same or better. Clearly, the job matching function is being filled by contractors rather than EDD.

There are many constraints and barriers facing EDD if it wishes to increase its job placement activities. First, it may be appropriate to revisit the Judge Richey order. At one level, the "separate means unequal" precept which underlies the elimination of "farm worker only" Job Service offices may no longer be valid. With modern telecommunications capabilities, any rural Job Service can be linked to regional offices with comprehensive listings of all employment opportunities. Providing agricultural workers with information about all jobs in the region would benefit both employers and employees, without creating a stereotypical farm placement office.

Another approach to complying with the Richey order is to develop a system which avoids some of the constraints of the written employer assurances about working conditions required before EDD can make a job referral. Philip Martin of the University of California at Davis has suggested a two-tiered program for employment referrals. The first tier would be the same as the current system, and would require full compliance with the Judge Richey order. A second tier would be much more informal, and would focus on providing labor market information about job availability rather than on specific placement activities. This could increase workers' earnings and reduce the number of individuals required to complete harvest activities by increasing the efficiency of the job searching and matching process.

One specific suggestion by employers to increase the role of EDD is for the Job Service to provide verification of work authorization (i.e., completion of I-9 forms) for workers referred for employment. Employers viewed this as a valuable service that would encourage them to work through EDD in recruiting and hiring seasonal workers.

The reality of the California labor market is that farm labor contractors are becoming increasingly important, and now dominate the raisin labor market. If the Job Service is to become more active in the market, it will have to work more closely with farm labor contractors. A concerted effort needs to be undertaken if EDD is to increase its influence over job placements in agriculture.



All of these steps, however, would likely have relatively little impact if current labor supply conditions prevail. An overabundance of workers allows employers to recruit and hire the same way they have for years -- that is, to wait for workers to show up.

## CHAPTER 5

### THE FUTURE OF THE RAISIN INDUSTRY

Among the 250 crops grown in the Central San Joaquin Valley, the raisin grape industry is among the most labor-intensive; it depends upon a peak labor force of 40,000 to 50,000 workers during a very short harvest period. The vast majority of these workers (98 percent) are Hispanic, mostly Mexican-born, who represent some of the most marginal of farm workers in terms of socio-economic status. These characteristics have remained relatively constant over the past five decades (Fuller, 1991).

The increased use of farm labor contractors during the past decade frequently is attributed by employers to greater scrutiny by governmental regulatory agencies of agricultural operations in general, and to labor-intensive crop commodities specifically. In addition, the seasonality of the harvest, the reliance upon others for transportation, and the relative unfamiliarity of workers with specific employers are all part of a tenuous work environment. For these reasons, workers prefer to work directly for employers rather than for FLCs, if given a choice. And even though nearly 80 percent of the worker sample indicated that they earned lower piece-rates while working for FLCs, they still were more likely to maximize their seasonal earnings when employed by them, simply because the contractors were able to place the workers in more jobs.

Labor organizing activities during the past decade have been almost nonexistent, and there is little evidence that efforts to unionize raisin harvest workers have ever been successful. The over-abundant labor pool makes it even more difficult for union organizers to win labor contracts and obtain better wages and fringe benefits for workers. The increased labor costs reported by 94 percent of employers are not reflected in increased earnings for employees, but are diverted largely to FLCs whose crews now perform the majority of the harvest functions.

The 1986 IRCA legislation has had some effect on the raisin labor force, particularly on those workers legalized through the SAW provision of the law. These newly-legalized workers are now able to travel to and from Mexico without the risks associated with illegal entry into this country. During the "off-season" winter months, thousands of recently legalized SAW workers return to Mexico for two or three months until the spring employment surge begins. The Border Patrol no longer conducts "field inspections" or raids in the work place, a practice

that was contemptible to both employers and workers. On the other hand, illegal entry into the region continues unabated; upon arrival in Fresno County, undocumented raisin harvest workers are able to obtain employment without much difficulty. Fraudulent documents, readily and inexpensively obtainable, are routinely presented by workers to employers as evidence of their legal status in this country. As stated previously, 35 percent of the raisin work force said they were in this country illegally. Industry experts believe the undocumented work force exceeds 50 percent. Therefore, while the legalized SAW worker is now able to enter and work in this country without fear of deportation, those who are not part of the legalized work force remain highly vulnerable to exploitation by some FLCs, "raiteros," and other middlemen.

Despite their legal right to work in the U.S., the SAW workers in general do not seem to be exiting from farm work. With limited English-speaking skills, limited non-farm employment experience, and few personal contacts in the urban areas, there appears to be minimal movement from farm employment to urban jobs within this group. SAW participation in the raisin harvest does, however, appear to be decreasing, probably due to their ability to move more freely within agriculture and seek the more desirable jobs among the various crops. The combination of the SAW workers' exit from the raisin harvest and a continuous influx of undocumented workers creates an increasing reliance upon the latter by employers.

It is likely that the raisin industry will continue to depend upon immigrant workers in the future. To the chagrin of the farm workers, the buffer provided by FLCs between growers and workers increasingly dominates hiring practices. Raisin acreage in the region remains stable, with most of the employers growing other crop commodities along with raisins and grapes. There is no indication that raisin growers have reduced their raisin acreage due to labor shortages, or that IRCA has had any effects on prevailing wages or personnel practices in the industry.

Abundant labor supplies since 1986 have allowed the raisin harvest to continue unfettered and with little concern about future labor needs. Yet, this solution is unsatisfactory to most involved. Growers and industry leaders readily admit their continuing dependence on undocumented workers, and are keenly aware that their crops would be jeopardized if the replacement workers stop crossing the border. These abundant supplies of labor have also thwarted most of the salutary effects anticipated by IRCA proponents. The work force has not been stabilized, employment opportunities have not expanded for legalized workers, and the economic position of farm workers has not improved. While the current situation is workable

in the sense that crops are being harvested and workers are finding jobs, it is an uneasy solution that satisfies neither the growers' desire to have a stable and predictable work force nor the goals of those seeking to improve the economic lot of farm workers.

## BIBLIOGRAPHY

Alvarado, Andrew J., Gary L. Riley, and Herbert O. Mason. Agricultural Workers in Central California in 1989. Employment Development Department, California Agricultural Studies, 90-8, 1990.

Alvarado, Andrew J., Gary L. Riley and Herbert O. Mason. Agricultural Workers in Central California, 1990-91. Employment Development Department, California Agricultural Studies, 91-5, 1992.

California Agricultural Statistics Service. California Fruit and Nut Statistics. Sacramento, CA., various issues.

California Department of Food and Agriculture. California Grape Acreages. Sacramento, CA., various issues.

California Agriculture Statistical Review. Sacramento, CA., various issues.

DeSalles, Lavada E., "Placement Activity of the Employment Development Department in California Agriculture: A Perspective." Sacramento, CA: November 6, 1991.

Emerson, Robert D. ed., Seasonal Agricultural Labor Markets in the United States. Ames: Iowa State University Press, 1984.

Employment Development Department. Agricultural Employment. Report 882A. Calendar years 1989 and 1990. Sacramento, CA., June 1990 and June 1991.

Fresno County Agricultural Commissioner. Fresno County Agricultural Crop and Livestock Report, Fresno, CA., 1991.

Fuller, Varden. Hired Hands in California's Farm Fields. Berkeley: University of California, Giannini Foundation Special Report, June 1991.

Heppel, Monica, and Sandra Amendola. Immigration Reform and Perishable Agriculture: Compliance or Circumvention. Washington, D.C.: Center for Immigration Studies, 1991.

Kissam, Ed, Anna Garcia, and David Runsten. "Networks and Farm Labor Market Dynamics in Parlier, California," Paper presented at the Agricultural Labor Research Symposium, Napa, CA., June 6, 1991.

Mamer, John and Alexa Wilkie. Seasonal Labor in California Agriculture: Labor Inputs for California Crops. California Agricultural Studies 90-6. Employment Development Department, December 1990.

Martin, Philip L. California's Farm Labor Market. Issues Paper 87-1. University of California Agricultural Issues Center. July 1987.

Martin, Philip L., and Edward Taylor. "Immigration Reform and California Agriculture a Year Later." California Agriculture, 42 (November-December 1988): pp. 24-27.

Martin, Philip L. "The Endless Debate: Immigration and United States Agriculture." Davis: University of California-Davis, June 1991.

Mason, Herbert O., Andrew J. Alvarado, and Gary L. Riley, IRCA and Agricultural Labor Markets: A Case Study of the Tulare and Yuma County Citrus Industries, to be published by the Commission on Agricultural Workers, 1992.

Mines, Richard. Developing a Community Tradition of Migration to the United States: A Field Study in Rural Zacatecas, Mexico, and California Settlement Area. Monographs in United States-Mexican Studies. San Diego: University of California, 1981.

Mines, Richard, and Ricardo Anzaldúa. New Immigrants vs. Old Migrants: Alternative Labor Market Structure in the California Citrus Industry. Monographs in United States-Mexican Studies. San Diego: University of California, 1982.

Mines, Richard and Michael Kearney, The Health of Tulare County Farm Workers. Report submitted to Tulare County Health Department. 1982.

Palerm, Juan Vicente. Farm Labor Needs and Farm Workers in California 1970 to 1989. California Agricultural Studies, 91-2. Employment Development Department, 1991.

Raisin Administrative Committee. Annual Reports, Fresno, CA., 1970-1990.

Raisin Bargaining Association. Annual Reports. Fresno, CA., various issues.

Rosenberg, Howard. Emerging Outcomes in California Agriculture from the Immigration Reform and Control Act of 1986. U.C. AIC Issues Paper No. 88-3. University of California Agricultural Issues Center. February 1988.

Sun-Maid Growers of California. Sun-Maid, Kingsburg, CA., 1991.

United States Border Patrol. "San Diego Sector Operations, FY 1990." Mimeo, n.d.

United States Department of Commerce Bureau of the Census. 1987 Census of Agriculture. Geographic Area Series. Vol. 1, Parts 3 and 5. Washington, D.C., 1989.

United States Department of Labor. Office of the Assistant Secretary for Policy. Findings from the National Agricultural Workers Survey: A Demographic and Employment Profile of Permissible Crop Farm Workers. Research Report No. 1. Washington, D.C., July 1991.

United States Department of Labor. Employment and Training Administration." Indicators of Compliance, Fiscal Year 1989-90." Washington D.C., n.d.

University of California Cooperative Extension. 1988 Raisin Cost of Production, Fresno, CA., 1988.

Vaupel, Suzanne. Agricultural Economist. Sacramento, CA. Telephone Interview, March 18, 1992.

Villarejo, Don. California Institute for Rural Studies, Davis, CA. Telephone Interview, April 6, 1992.

Zamora, Julian. La Raza-Forgotten Americans. University of Notre Dame Press, 1966.

**APPENDIX A**  
**STUDY DESIGN AND**  
**SAMPLE CHARACTERISTICS**



## **STUDY DESIGN AND SAMPLE CHARACTERISTICS**

The 1991-92 study of the raisin industry in Central California was designed to examine a variety of issues which would allow the Employment Development Department (EDD) to characterize labor market conditions, employer needs, and current trends which might influence these conditions and needs in the near future. Researchers at the Center for Agricultural Business (CAB) employed conventional survey research techniques to define and select representative samples of workers, employers, and industry experts, solicit their participation in providing statistically-representative data, and subject the resultant data to statistical analyses resulting in reliable estimates of industry characteristics and anticipated trends. In this appendix, we will discuss in detail the overall study design and describe the central characteristics of the survey samples.

### **Identification of Study Samples**

To obtain the information needed, three survey sample groups were identified. The first consists of the population of seasonally-employed raisin harvest workers whose total number each season is estimated to be between 30 and 60 thousand in Fresno County. The second is the population of raisin grape grower-employers in Fresno County whose total number is between 5,000 and 5,500. And the third is a less easily defined aggregate of "raisin industry leaders" consisting of farm labor contractors, packing-house managers, industry organization representatives, major growers, and the like who are generally accepted in the industry as being well-informed spokespeople for the industry as a whole.

### **The Farm Worker Sample**

A sample of 125 raisin harvest workers was randomly drawn from among the fall, 1991, harvest crews of twelve (12) Fresno County growers. Using 1989 unemployment insurance (UI) data provided by the Employment Development Department, nine growers (SIC codes for grapes) were chosen from among each of three size categories (i.e., large, medium and small) based upon total payroll paid for 1989. Inasmuch as raisin grapes are not distinguished from other grapes in the SIC codes, it was necessary to substitute (in the order sampled) a raisin grape grower for non-raisin grape producers when the initial grower contacts were made by CAB researchers to solicit grower participation in the study. The final list of growers from whom the farm workers would be sampled included two large growers (upper one-third in total 1989 payroll), four medium growers (middle one-third), and six small

growers (lowest one-third). In this study, no employer had to be replaced due to an unwillingness to participate in the farm worker phase of the data gathering process. Such cooperation is of great value to the integrity of the random-sampling method and is duly noted in this report on the raisin industry.

Slightly over one-fourth (25.6 percent) of the final farm worker sample was drawn from the two large growers; 56.0 percent came from the four medium growers; and 18.4 percent came from the six small growers. Due to the relative size of harvest crews, it was necessary to "oversample" small growers and "undersample" large growers in order to produce the desired subsample representations achieved. No females were included among those employed by small growers.

The number of women in the farm worker sample for this study is lower than in prior subsamples of raisin workers among Central Valley farm workers surveyed by CAB researchers during the past three years. In our previous studies, deliberate over-sampling of women was done in order to address key research questions pertaining to women. Also, over-sampling of women was an artifact of our interest in interviewing Oaxacans from Mexico, a relatively small group heavily concentrated in the raisin harvest and comprised of many women. The combination of these two objectives generated a much higher percentage of women in the raisin harvest sample in earlier studies than found in the present study.

When selecting growers from whom to draw farm worker samples, no consideration was given to whether or not the grower utilized the services of a farm labor contractor to employ harvesters. About 39 percent (39.2 percent) of the farm workers surveyed were working for an FLC at the time of the survey, however. Earlier in this report we described an increasing trend toward using FLCs to employ raisin harvest crews, but in this current context let it simply be noted that the proportion working for FLCs in the farm worker sample is underrepresented when compared with information obtained from the grower-survey portion of this study

### **The Grower Sample**

Not to be confused with the group of 12 growers identified above who were selected to participate in generating the farm worker sample, 1500 Fresno County raisin-grape growers were randomly identified from a list of approximately 4,500 growers on the mailing list maintained by the Raisin Administrative Committee (RAC). According to the regional office of the United States Department of Agriculture, the list maintained by the RAC is the most

comprehensive listing of raisin-grape producers in Central California. It does not, however, include growers who are members of the Sun-Maid Cooperative. Discussions with industry experts indicated that there are no a priori reasons to expect that Sun-Maid members are different from non-members in any of the key variables of interest for this study (e.g. size, ownership, employment practices).

The list of grower names and addresses was produced by RAC in mailing-label form and was screened to eliminate as many duplicate names as possible. That is, one individual or family might own and operate two or more raisin-grape vineyards and be listed two or more times in the master membership computer database.

Approximately 500 such duplicates were removed from the master listing by a process of visual examination of names and principal mailing addresses. From the 4,000 remaining names, a random sampling process produced a survey sample of 1,500 growers to participate in this part of the study.

Inasmuch as the member list is considered confidential, all mailing labels were affixed to the outgoing envelopes at the Fresno office of the RAC. Survey questionnaires were mailed to each of the 1,500 growers with a cover letter explaining the purpose of the study, how participants were selected, and the importance of their response.

A total of 384 questionnaires were returned: 323 were completed and included in the data analysis; 11 were returned blank with the explanation that the recipient had received, completed and returned another copy; and 50 were returned blank with the explanation that the recipient was not in raisin-grape production in 1991. No further analyses were made of the 61 instruments returned blank. We cannot determine to what extent other duplications or other non-producers might have been included in the mailout sample of 1,500 who may have simply discarded the survey.

The mean average size of raisin-grape vineyards among the 323 who responded is 92.12 acres and the median was 43.5 acres (1991 production year), with the smallest acreage reported at one (1) acre and the largest at 1,500 acres. One-third of the respondents currently farm 28 acres or less; one-third farm 90 acres or more. The data are clearly skewed by a relatively few number of cases with large acreages, so for descriptive purposes it is better to cite the median average (rather than the mean) which is 43.5 acres.

Slightly over 80 percent of the respondents indicated that raisins were their primary crop commodity in 1991. Small family operations of 20 acres or less are not uncommon (27.5 percent of the respondents so indicated). Almost 40 of the respondents indicated that they grew other crops (usually table grapes) in 1991.

### **Industry Expert Samples**

The third study sample consisted of industry experts who were chosen by the researchers on the basis of their positions in or associations with the raisin industry: two farm labor contractors, four growers from the Fresno area, three representatives of raisin grower associations, one raisin processing house executive, one EDD agribusiness representative, and the agent-in-charge of the local United States Border Patrol office. The sample was selected only after conducting the preliminary analyses of data obtained from the farm worker and grower samples so that information could be obtained from industry experts which would help explain or enhance the survey data.

### **Survey Instrumentation and Methodology**

Farm workers selected to participate in the study (N=125) were personally interviewed by specially-trained bilingual (Spanish and English) interviewers who followed a written interview guide (see Appendix B for a copy of the Farm Workers Interview Schedule). All of the interviews were conducted in Spanish.

With employer permission, interviews were conducted on the job site. In most instances, interviews were conducted immediately after the harvest crew(s) stopped work for the day or during a scheduled meal-break so as to minimize loss of harvest productivity and worker earnings. All participants were compensated \$10 per interview.

Grower survey questionnaires (see Appendix C) were reviewed by several industry leaders prior to their final printing and distribution so as to reduce the possibility of unclear, ambiguous, or awkwardly-phrased questions. Questionnaires were mailed in one wave (i.e., a single mailing with no follow-up) in mid-December, 1991. Virtually 100 percent of the completed instruments (N=323) were returned within six weeks of the initial mailing. Since the researchers were not allowed to maintain a copy of the confidential membership list from which the sample was drawn, it was not possible to follow up on nonresponses. The distribution of the 323 respondents (by size as measured by total acreage in production in

1991) was reviewed by several of the industry experts who indicated that the range of sizes and the average size of the respondents' raisin operations seemed consistent with their knowledge of the industry as a whole. No other attempt was made to determine whether the response sample was statistically representative of the total grower population.

### **Statistical Treatment of the Data**

The data from the Farm Workers Interview Schedules and the Grower Questionnaires were entered into a computer program (Statistical Package for the Social Sciences, SPSS for MAC, Version 2.01, 1991) and verified using a random double-entry method by two data input assistants. A set of frequencies was produced for each data set containing a detailed breakdown of values, range of values, and measures of central tendency. Additional descriptive statistics were produced as needed to complete the topical sections of this report.

## APPENDIX B

# RAISIN HARVEST - FARM WORKER FIELD SURVEY DESCRIPTIVE SURVEY RESULTS

**CALIFORNIA STATE UNIVERSITY, FRESNO  
CENTER FOR AGRICULTURAL BUSINESS**

**RAISIN HARVEST - FARM WORKER FIELD SURVEY  
DESCRIPTIVE SURVEY RESULTS  
1991**

There were 125 respondents in the raisin worker survey. The following shows the percentage of responses and the specific number of respondents (in parentheses if less than 125).

**Part One: Respondent Demographics**

1. Crop Task	Harvest	96.0%	Turn	1.6%	Roll	2.4%
2. Employer Size	Large	25.6%	Medium	56.0%	Small	18.4%
3. Employer Type	Grower	60.8%	FLC	39.2%		
4. Gender	Male	92.0%	Female	8.0%		
5. Marital Status	Single	40.8%	Married	52.0%	Other	7.2%
6. Age	15-20 yrs	16.0%	21-25 yrs	24.0%	26-30 yrs	17.6%
	31-35 yrs	12.8%	36-40 yrs	8.0%	41-45 yrs	8.8%
	46-50 yrs	4.8%	51-62 yrs	8.0%		
7. Where were you born?						
	Mexico	93.6%	United States	0.8%	Cent. Am.	5.6%
8. If born in Mexico, in what state were you born?			(123)			
	Michoacan	31.6%	Guanajuato	29.9%	Other	38.5%
9. If not born in the U.S., in what year did you first come to this country?			(123)			
	1950s	4.1%	1960s	9.7%	1970s	20.3%
	1980s	48.0%	1990	6.5%	1991	11.4%
10. Of which country are you a citizen?						
	Mexico	92.8%	Cent. Am.	5.6%	U.S.	1.6%
11. If not a citizen of the U.S., do you plan to reside here permanently?			(122)			
	Yes	48.4%	No	33.1%	Not sure	18.5%

12. What was the highest grade you completed in school?
- |                 |               |       |             |       |
|-----------------|---------------|-------|-------------|-------|
| In the U.S. (7) | Grades 3-9    | 47.9% | 11th grade  | 57.1% |
| In Mexico (109) | Grades 1-5    | 38.5% | 6th grade   | 35.8% |
|                 | Grades 7-8    | 9.2%  | Grades 9-12 | 13.7% |
|                 | Postsecondary | 2.8%  |             |       |
13. What is the dominant language in which you speak to your family and friends? (124)
- |         |       |       |      |
|---------|-------|-------|------|
| Spanish | 99.2% | Other | 0.8% |
|---------|-------|-------|------|
14. Do you speak English to your employer? (124)
- |     |       |    |       |
|-----|-------|----|-------|
| Yes | 19.4% | No | 80.6% |
|-----|-------|----|-------|
15. How well do you speak English?
- |             |       |             |       |
|-------------|-------|-------------|-------|
| Not at all  | 52.8% | Very little | 41.6% |
| Fairly well | 3.2%  | Very Well   | 2.4%  |
16. How well do you understand English?
- |             |       |             |       |
|-------------|-------|-------------|-------|
| Not at all  | 38.4% | Very little | 48.8% |
| Fairly well | 10.4% | Very Well   | 2.4%  |
17. How well do you read English?
- |             |       |             |       |
|-------------|-------|-------------|-------|
| Not at all  | 65.6% | Very little | 27.2% |
| Fairly well | 4.8%  | Very Well   | 2.4%  |
18. In what year did you first do any farm work in the U.S.
- |       |       |       |      |       |       |
|-------|-------|-------|------|-------|-------|
| 1950s | 4.0%  | 1960s | 9.6% | 1970s | 20.0% |
| 1980s | 45.6% | 1990  | 5.6% | 1991  | 15.2% |
19. How many years total have you done farm work in the U.S.? (one year = 15 days or more worked)
- |             |       |           |       |            |       |
|-------------|-------|-----------|-------|------------|-------|
| 1 year      | 16.8% | 2-5 years | 28.0% | 6-15 years | 36.8% |
| 16-25 years | 12.8% | 26+ years | 5.6%  |            |       |
20. Did (do) either of your parents do any farm work in the U.S.? (124)
- |     |       |    |       |
|-----|-------|----|-------|
| Yes | 50.8% | No | 49.2% |
|-----|-------|----|-------|
21. If married, is your spouse working with you in the raisin harvest? (90)
- |     |       |    |       |
|-----|-------|----|-------|
| Yes | 16.7% | No | 83.3% |
|-----|-------|----|-------|
22. Have you worked in non-farm jobs in the U.S.? (124)
- |     |       |    |       |
|-----|-------|----|-------|
| Yes | 38.7% | No | 61.3% |
|-----|-------|----|-------|



23. If yes, how many years? (48)

1 year	56.3%	2 years	22.9%
3-4 years	12.5	5+ years	8.3%

24. What was the primary work you did for the most recent non-farm employer? (48)

Gardening	12.5%	Construction	18.8%	Restaurant	14.6%
Garment	6.3%	Factory	16.7%	Nursery	4.2%
Other	27.1%				

25. Why did you leave your most recent non-farm job? (47)

Laid off	21.3%	Low wages	8.5%	Farm work	19.2%
Fired	2.1%	Other	48.9%		

26. During the past 12 months, were you without a job for a period of at least one week while living in the U.S.? (124)

Yes	79.0%	No	21.0%
-----	-------	----	-------

27. If yes, during what month(s) were you unemployed? (97)

September	37.1%	October	47.4%	November	47.4%
December	39.2%	January	45.4%	February	54.6%
March	54.6%	April	49.5%	May	45.4%
June	42.3%	July (98)	49.0%	August (98)	46.9%

28. What was the reason you were without employment? (98)

End of season	66.3%	Laid off no work	10.2%
Bad weather	19.4%	Illness/Injury	8.2%

29. During that period of not working, what were you doing? (98)

Looking for any work	25.5%	Looking only for farm work	41.8%
Looking for only nonfarm work	6.1%	Waiting/Seasonal	24.5%
Recovery illness/injury	4.1%		

30. During the period(s) of unemployment, did you apply for unemployment insurance? (102)

Yes	48.0%	No	52.0%
-----	-------	----	-------

31. If not, why not? (48)

Didn't know about UI	10.4%	Didn't Qualify	47.9%
Period of unemployment too short	18.8%	Other	22.9%

**Part Two: Current Employment**

32. During the past 3 years:

For how many farm labor contractors have you worked? (123)

None - 13.0%	1 - 29.3%	2 - 16.3%
3 - 17.1%	4-6 - 16.3%	7+ 8.0%

For how many crew leaders or field bosses have you worked? (124)

None 10.5%	1 - 24.2%	2 - 20.2%	3 - 11.3%
4 - 8.9%	5 - 5.6%	6 - 4.8%	7 - 1.6%
8 - 4.8%	10-12 4.8%	13+ - 3.2%	

By how many growers have you been employed directly? (122)

None 28.7%	1 - 33.6%	2 - 12.3%
3 - 14.8%	4 - 4.1%	5+ 6.4%

33. How did you get your present job?

On my own 24.0%	Grower Recruited 12.0%
FLC Recruited 9.6%	Personal Referral 54.4%

34. Did you pay a fee to the person who recruited you? (28)

No 100.0%

35. Do you have an understanding with your present employer to recall you when work is available?

Yes 68.8%	No 31.2%
-----------	----------

36. What time do you usually begin working each day on your present job?

6:00-6:15 AM 64.0%	6:30-6:45 AM 25.6%	7:00 AM 8.8%
7:30-8:00 AM 1.6%		

37. What time do you usually stop working at the end of each workday?

1:00-1:45 PM 4.0%	2:00-2:30 PM 11.2%	3:00-3:30 PM 20.0%
4:00-4:30 PM 21.6%	5:00-5:30 PM 26.4%	6:00-6:30 PM 12.8%
7:00 PM 2.4%	Other 1.6%	

38. How much time do you take from your work for lunch and rest periods each work day on your present job?

None 7.2%	10-15 minutes 12.8%	20-30 minutes 40.8%
45-60 minutes 28.0%	75-150 minutes 11.2%	

39. What is the average number of hours you work each day?

6 or fewer hours	8.8%	7 hours	8.8%	8 hours	28.0%
9 hours	18.4%	10 hours	24.8%	11+ hours	11.2%

40. Do you work by yourself or are you paid as part of a crew in your present job?

Individual	99.2%	Part of a crew	0.8%
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41. If part of a crew, how many others are part of your crew? (1)

4 others	0.8%	Unknown	99.2%
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42. How much are you paid for each tray you harvest in an average day? (120)

15 cents	8.3%	16 cents	53.3%	17 cents	38.3%
----------	------	----------	-------	----------	-------

43. What is your average hourly pay? (124)

Less than \$4.25	9.7%	\$4.25-\$4.50	8.8%	\$4.51-\$5.00	8.1%
\$5.02-\$5.31	5.7%	\$5.33-\$6.00	11.2%	\$6.08-\$6.31	5.7%
\$6.38-\$7.00	21.8%	\$7.03-\$8.00	17.7%	\$8.13-\$10.00	8.7%
Over \$10.00	1.6%				

44. How many seasons have you worked harvesting raisin grapes?

1	27.2%	2	11.2%	3	14.4%	4	5.6%
5	7.2%	6-10	19.2%	11-15	10.4%	18+	4.8%

45. Do you plan to work in the raisin grape harvest next season?

Yes	85.6%	No	4.8%	Not Sure	9.6%
-----	-------	----	------	----------	------

46. Do you plan to work for the same employer in the next raisin harvest? (122)

Yes	82.8%	No	4.9%	Not Sure	12.3%
-----	-------	----	------	----------	-------

47. How many harvest seasons have you worked for your present employer in the raisin harvest?

1 yr	44.0%	2 yrs	18.4%	3 yrs	14.4%
4 yrs	5.6%	5-9 yrs	16.0%	More than 10 yrs	1.6%

48. Do you receive any other compensation or bonus from your employer or labor contractor?

Yes - from grower	2.4%	Yes - from FLC	3.2%	No	94.4%
-------------------	------	----------------	------	----	-------

49. Under what circumstances are bonuses given out? (5)  
(only 'yes' responses to previous question)

Incentive	40.0%	Season End	20.0%	Other	40.0%
-----------	-------	------------	-------	-------	-------

50. If you are injured or get sick off the job, are you covered by a private medical insurance plan?
- |     |      |    |       |            |       |
|-----|------|----|-------|------------|-------|
| Yes | 6.4% | No | 80.0% | Don't know | 13.6% |
|-----|------|----|-------|------------|-------|
51. Who pays for your insurance? (19)
- |      |       |          |       |       |      |            |       |
|------|-------|----------|-------|-------|------|------------|-------|
| Self | 26.3% | Employer | 31.6% | Other | 5.3% | Don't know | 36.8% |
|------|-------|----------|-------|-------|------|------------|-------|
52. If you are injured or sick as a result of work, do you get any pay while you are recovering (i.e., Workers' Compensation)?
- |     |       |    |       |            |       |
|-----|-------|----|-------|------------|-------|
| Yes | 37.6% | No | 23.2% | Don't know | 39.2% |
|-----|-------|----|-------|------------|-------|
53. Are you provided with paid holidays and/or paid vacations on your present job?
- |     |      |    |       |            |      |
|-----|------|----|-------|------------|------|
| Yes | 1.6% | No | 94.4% | Don't know | 4.0% |
|-----|------|----|-------|------------|------|
54. Are you provided with unemployment insurance? (124)
- |     |       |    |       |            |       |
|-----|-------|----|-------|------------|-------|
| Yes | 38.7% | No | 41.1% | Don't know | 20.2% |
|-----|-------|----|-------|------------|-------|
55. Have you previously worked for your current employer?
- |     |       |    |       |
|-----|-------|----|-------|
| Yes | 58.4% | No | 41.6% |
|-----|-------|----|-------|
56. Have you worked for your current employer only during the raisin harvest or do you work other crops/tasks also? (108)
- |                |       |                  |       |               |       |
|----------------|-------|------------------|-------|---------------|-------|
| No other tasks | 36.1% | Yes, other tasks | 39.8% | My first year | 24.1% |
|----------------|-------|------------------|-------|---------------|-------|
57. When the season ends, does the employer keep in contact with you about future employment during the off season? (121)
- |     |       |    |       |
|-----|-------|----|-------|
| Yes | 55.1% | No | 44.9% |
|-----|-------|----|-------|
58. What has been the type of farm task you have done the most over the years? (119)
- |         |       |       |      |      |      |       |      |
|---------|-------|-------|------|------|------|-------|------|
| Harvest | 81.5% | Prune | 1.7% | Weed | 7.6% | Other | 9.2% |
|---------|-------|-------|------|------|------|-------|------|
59. What has been the type of farm crop you have worked with the most over the years? (119)
- |           |       |        |       |            |       |
|-----------|-------|--------|-------|------------|-------|
| Grapes    | 31.1% | Citrus | 14.3% | Tree Fruit | 16.8% |
| Vegetable | 29.4% | Melons | 5.9%  | Other      | 2.5%  |
60. Has the piece rate per tray you have been paid in the raisin harvest gone up or down in the last 5 years? (97)
- |           |       |            |      |
|-----------|-------|------------|------|
| Increased | 32.0% | Decreased  | 7.2% |
| No Change | 54.6% | Don't know | 6.2% |
61. Do you know what the minimum hourly wage is in California?
- |     |       |    |       |
|-----|-------|----|-------|
| Yes | 63.2% | No | 36.8% |
|-----|-------|----|-------|

62. What is your present housing situation?

My employer provides free housing for me	35.2%
My employer provides free housing for my family and me	1.6%
I pay rent for housing from my employer	16.0%
I rent from government housing project	0.8%
I own/am buying my home	1.6%
I rent from non-employer	31.2%
I live with relatives/friends and pay for rent	8.0%
I live with relatives/friends free of rent	1.6%
I am homeless	3.2%

63. In what type of housing do you live?

House	40.0%	Boarding House	29.6%	Mobile Home	8.8%
Labor Camp	8.0%	Vehicle	5.6%	Apartment	7.2%
Homeless	0.8%				

64. How do you usually get to work?

Raitero	48.0%	Drive car	20.8%	Ride with others	20.8%
Walk	7.2%	Other	3.2%		

65. Do you pay a fee to someone for transportation to and from work? (114)

Yes	66.7%	No	33.3%
-----	-------	----	-------

66. To whom do you pay the fee? (78)

Other workers	38.5%	Raitero	30.8%	Foreman	24.4%
FLC	5.1%	Other	1.2%		

67. How much do you pay for transportation to and from work? (77)

\$4.50 or more	2.6%	\$4.00	61.0%	\$3.00-3.50	22.1 %
\$2.50 or less	14.3%				

68. Does your present employer provide meals?

Yes, free to me	1.6%	No	98.4%
-----------------	------	----	-------

69. Do you pay for any equipment that you use at work?

Yes	99.2%	No	0.8%
-----	-------	----	------

70. What equipment do you pay for? (124)

Gloves and knives	100.0%
-------------------	--------

71. Which of the following services are provided for you by your employer while you are at work?

Drinking water	Yes	99.2%	No	0.8%
Water to wash with	Yes	68.0%	No	32.0%
Toilet facilities	Yes	56.8%	No	43.2%

72. During the last 5 years, have you ever stopped working in farm work or refused to begin working because you were concerned about your health and safety on the job? (124)

Yes	4.0%	No	96.0%
-----	------	----	-------

73. What is the furthest distance you have traveled daily to work during the past five years? (124)

1-6 miles	7.3%	12-25 miles	8.1%	30-40 miles	17.9%
45-55 miles	6.5%	60 miles	8.9%	70 miles	2.4%
80 miles	5.7%	90 miles	7.3%	100 miles	10.6%
110-200 miles	21.1%	220-300 miles	4.1%		

74. How long do you expect to continue doing farm work in the U.S.?

As long as I am able	72.0%	Less than 1 yr.	8.8%	1-3 yrs	12.8%
3-5 yrs	0.8%	Over 5 yrs	2.4%	Other	3.2%

75. If you don't think you will be doing farm work in the U.S. much longer, what kind of work do you expect to be doing?

Local nonfarm	39.2%	Distant nonfarm	27.2%	Leave - no work	0.8%
Return to Mexico	28.0%	Other	4.8%		

76. Have you had any experiences in the last 5 years getting together with other workers to try to improve wages or working conditions?

Yes	18.4%	No	81.6%
-----	-------	----	-------

77. Are you now or have you in the past belonged to a farm labor union?

Yes	5.6%	No	94.4%
-----	------	----	-------

78. What information do you usually consider important when deciding whether or not to work for a particular farm employer? (124)

Wages	Yes	81.5%	No	18.5%
The way I'm treated	Yes	41.9%	No	58.1%
Housing	Yes	18.5%	No	81.5%
Job duration	Yes	37.1%	No	62.9%
Task type	Yes	34.7%	No	65.3%
Field Conditions	Yes	25.8%	No	74.2%

79. Besides raising wages, what could farm employers do so workers would want to work there? (124)

Provide housing	Yes	32.3%	No	67.7%
Provide health insurance	Yes	29.8%	No	70.2%
Provide continuing work	Yes	25.0%	No	75.0%
Treat workers fairly	Yes	60.5%	No	39.5%
Provide good working conditions	Yes	29.8%	No	70.2%

80. Were you employed in farm work in the U.S. five years ago? (123)

Yes	59.3%	No	40.7%
-----	-------	----	-------

81. Do you work in the harvest of other crops in California?

Yes 88.8% No 11.2%

82. In what other crop harvest have you worked? (111)

Citrus	Yes	35.1%	No	64.9%
Table grapes	Yes	27.0%	No	73.0%
Wine grapes	Yes	25.2%	No	74.8%
Tree fruit	Yes	61.3%	No	38.7%
Melons	Yes	20.7%	No	79.3%
Vegetables	Yes	61.3%	No	38.7%
Olives	Yes	31.5%	No	68.5%

83. Have you migrated out of California to work in other crops during the past 5 years?

Yes 36.8% No 63.2%

84. Did you work in California crops other than raisins in the past 12 months?

Yes 72.0% No 28.0%

85. Do you normally return to Mexico during the off season? (21)

Yes 54.5% No 45.5%

86. If you return to Mexico, do you work while there? (69)

Yes 82.6% No 17.4%

87. Did you have a good idea of the kind of farm work you would be doing when you first arrived in the U.S.? (89)

Knew would work in raisins	Yes	52.3%	No	47.7%
Knew would do farm work	Yes	83.1%	No	16.9%
Knew the type of task	Yes	65.2%	No	34.8%

88. How did you decide where you were going to work in the U.S.? (88)

Did not know 28.4% Family contacts 69.3% Recruited by employer 2.3%

89. Did someone help you obtain your present job in Fresno County? (124)

Yes 79.0% No 21.0%

90. Who helped you obtain your present job? (98)

Friend 52.0% Relative 44.9% Other 3.1%

91. Is it difficult to obtain employment directly with a raisin employer?

Yes 36.8% No 58.4% Don't know 4.8%

92. Is it difficult to obtain employment with a farm labor contractor?

Yes 20.0% No 70.4% Don't know 9.6%

93. Do you think you will be working for a FLC in the raisin harvest 3 years from now?  
 Yes 64.8% No 23.2% Don't know 12.0%
94. What is your legal status as a farm worker in the U.S.?  
 US Citizen 1.6% Legal before IRCA 13.6% Legal through IRCA 42.4%  
 Border Card 4.0% Undocumented 35.2% Other 3.2%
95. If not yet legalized, have you applied for legal status in the U.S.? (100)  
 Yes 61.0% No 39.0%
96. Under which program did you apply? (79)  
 Amnesty 5 yr 6.3% Amnesty SAW 72.2% Guest Worker 2.5%  
 Spousal Petition 1.3% Other 17.7%
97. What is the status of your application? (72)  
 Pending 15.3% Temporary residency granted 62.5%  
 Permanent residency granted 18.1% Rejected 4.2%
98. In which month and/or year did you apply (80)  
 1960-1979 7.5% 1980-85 15.0% 1986 13.8% 1987 15.0%  
 1988 28.7% 1989 11.3% 1990 5.0% 1991 3.7%
99. What documents do you use to obtain work? (22)  
 False documents 100.0%
100. Was it difficult to obtain the necessary documents needed to work in this country? (112)  
 Yes 22.3% No 77.7%
101. How many times have you crossed the border for employment in the U.S.? (112)  
 1 33.6% 2 11.5% 3 5.7% 4-6 22.2%  
 8-9 6.5% 10 8.2% 11-101 12.3%
102. How did you cross the border the first time you came to the U.S.? (122)  
 On my own 30.3% "Coyote" 59.8%  
 Documents 8.2% False Documents 1.6%
103. How did you cross the border the last time you came to the U.S. for employment? (98)  
 On my own 18.4% "Coyote" 32.7%  
 Documents 48.0% False Documents 1.0%
104. Do you plan to work in the raisin harvest next year? (123)  
 Yes 85.4% No 5.7% Not sure 8.9%
105. Were you included in the 1990 census? (117)  
 Yes 31.6% No 68.4%



## APPENDIX C

### RAISIN HARVEST - GROWER MAIL SURVEY DESCRIPTIVE SURVEY RESULTS

**CALIFORNIA STATE UNIVERSITY, FRESNO  
CENTER FOR AGRICULTURAL BUSINESS**

**RAISIN HARVEST - GROWER MAIL SURVEY  
DESCRIPTIVE SURVEY RESULTS  
1991**

There were 323 respondents in the grower mail survey. The following shows the percentage or sometimes number of responses and the specific number of respondents (in parentheses if less than 323).

**Part One: Employer Background Information**

1. For how many consecutive years have you farmed raisin grapes? (320)

1-9 yrs	26.9%	10-19 yrs	33.4%	20-29 yrs	15.6%
30-39 yrs	11.0%	40-49 yrs	10.0%	50+ yrs	3.1%
  
2. The total acres of raisin grapes you had in production in 1985: (272)

1-25 acres	26.5%	26-99 acres	42.6%	100-199 acres	21.3%
200-399 acres	6.7%	400+ acres	2.9%		
  
3. The total acres of raisin grapes you had in production in 1991: (316)

1-25 acres	29.7%	26-99 acres	40.6%	100-199 acres	18.0%
200-399 acres	8.9%	400+ acres	2.8%		
  
4. In 1991, did you farm any commodities other than raisins? (319)

Yes	38.9%	No	61.1%
-----	-------	----	-------
  
5. In terms of total acres in production in 1991, were raisin grapes your primary commodity? (318)

Yes	82.1%	No	17.9%
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**Part Two: Harvest Practices**

6. Have you adopted any new technologies in the last 5 years that have changed the way your raisin harvest workers perform their tasks? (309)

Mechanical harvesting	2.6%
Continuous paper trays	4.5%
Both of the above	0.3%
Other	2.9%
No, but I am considering doing so	22.3%
Not considering	67.3%

7. Why yes to mechanical harvesting? (42)
- |                          |       |
|--------------------------|-------|
| Cost savings             | 33.3% |
| Labor supply concerns    | 21.5% |
| Combination of the above | 45.2% |
8. How did you recruit and hire your raisin harvest workers in 1991? (304)
- |                             |       |
|-----------------------------|-------|
| Direct hire                 | 27.0% |
| Foreman                     | 13.5% |
| Farm Labor Contractor (FLC) | 59.5% |
9. With the FLC, did you sign a written agreement or simply have a verbal agreement? (186)
- |         |       |
|---------|-------|
| Written | 7.5%  |
| Verbal  | 92.5% |
10. How did you pay the farm labor contractor? (189)
- |   |       |
|---|-------|
| Flat commission based on total wages paid to crew | 41.8% |
| Specific amount for each tray picked by crew      | 53.4% |
| Other   | 4.8%  |
11. If you paid flat commission to FLC, what percent of total wages did you pay? (90)
- |       |       |     |       |     |      |
|-------|-------|-----|-------|-----|------|
| 2-29% | 14.4% | 30% | 32.2% | 31% | 7.8% |
| 32%   | 15.6% | 33% | 15.6% | 34% | 3.3% |
| 35%   | 11.1% |     |       |     |      |
12. If you paid FLC for each tray picked, how much did you pay him/her per tray? (120)
- |             |       |          |       |           |       |
|-------------|-------|----------|-------|-----------|-------|
| 1-15 cents  | 17.5% | 16 cents | 10.0% | 17 cents  | 9.2%  |
| 18-20 cents | 4.1%  | 21 cents | 10.8% | 22 cents  | 17.5% |
| 23 cents    | 15.8% | 24 cents | 10.0% | 25+ cents | 5.0%  |
13. How much did FLC pay workers for each tray picked? (91)
- |             |       |          |      |           |       |
|-------------|-------|----------|------|-----------|-------|
| 13-14 cents | 2.2%  | 15 cents | 8.8% | 16 cents  | 51.6% |
| 17 cents    | 26.4% | 18 cents | 5.5% | 22+ cents | 5.5%  |
14. If you hired your 1991 raisin harvest crew through a foreman, how did you compensate for this service? (48)
- |   |       |
|---|-------|
| Flat commission or bonus                    | 6.3%  |
| Paid a specific amount for each tray picked | 70.8% |
| No special compensation was paid            | 22.9% |
15. If you paid a specific amount for each tray picked, how much did you pay the foreman per tray? (33)
- |        |       |         |       |          |       |
|--------|-------|---------|-------|----------|-------|
| 1 cent | 18.2% | 2 cents | 63.6% | 3+ cents | 18.2% |
|--------|-------|---------|-------|----------|-------|

16. How much did you pay workers for each tray picked? (50)

1-15 cents	22.0%	16 cents	40.0%	17 cents	28.0%
18+ cents	10.0%				

17. If you hired your 1991 raisin harvest crew directly, how much did you pay your workers?

Cents per tray, straight piece rate (90)

1-15 cents	11.1%	16 cents	42.2%	17 cents	23.3%
18 cents	12.2%	19+ cents	11.1%		

Other methods (11)

18. Compared to previous raisin harvest seasons, how would you rate your 1991 raisin harvest labor supply? (296)

Adequate	77.7%
Inadequate	8.1%
Abundant	14.2%

19. Have you used farm labor contractors at any time since 1985 to obtain your raisin harvest workers? (305)

Yes	66.9%	No	33.1%
-----	-------	----	-------

20. Used a Farm Labor Contractor: (204 in question 19 -- 66.9% of 305)

1985	112
1986	118
1987	131
1988	143
1989	167
1990	184

21. Why did you elect to use a labor contractor? (Check all that apply) (204 in question 19))

Concerns about having an adequate labor supply	106
Difficult to find and recruit harvest workers	106
Too much paperwork associated with direct hires	165
Laws and regulations make direct hiring troublesome	156
Overall labor costs are reduced with FLC	23

22. In the past 5 years, have your raisin harvest labor costs changed? (298)

Increased	93.3%
Decreased	0.7%
No Change	6.0%

23. If your raisin harvest labor costs have changed over the past 5 years, what is the cause? (291)

Minimum wage rate	4.1%
Piece rate paid to workers	29.6%
Commission/fees paid to FLCs	7.9%
Other	2.7%
Combination of these	55.7%

**Part Three: Labor Force Characteristics**

24. How has worker productivity changed since 1985? (274)

More productive	7.3%
Less productive	23.0%
The same	69.7%

25. Did you provide the following for your raisin harvest workers? (323)

	1985 Yes	1991 Yes
Health Insurance	3.4%	4.6%
Housing	17.6%	17.0%
Transportation	8.0%	6.5%

26. If you provided housing at one time, but no longer do so, why have you discontinued? (59)

Too expensive to maintain	3.4%
Structures were in poor condition	3.4%
Laws/regulations have become too restrictive	40.7%
Other	1.7%
Combination of these	50.8%

27. Please check any of the following years that you have experienced a raisin harvest labor shortage. (323)

1985	4.6%
1986	6.5%
1987	10.0%
1988	11.1%
1989	22.9%
1990	13.0%
1991	8.0%

28. For those years you checked above, did you suffer any crop loss or financial loss due to a labor shortage? (182)

Yes	27.5%	No	72.5%
-----	-------	----	-------

29. Do you anticipate a labor shortage in 2-3 years? (307)
- |     |       |    |       |            |       |
|-----|-------|----|-------|------------|-------|
| Yes | 26.7% | No | 42.3% | No opinion | 30.0% |
|-----|-------|----|-------|------------|-------|
30. If a labor shortage for the raisin harvest were to occur, how would you most likely respond to the crisis? (323)
- |   |       |
|---|-------|
| Change production to other grape products | 10.0% |
| Change to non-grape commodity             | 5.0%  |
| Adopt mechanized harvesting               | 28.5% |
| Go to FLCs for workers                    | 29.1% |
| Don't know                                | 37.8% |
31. How is it finding harvest workers in the last 5 years? (307)
- |        |       |        |       |          |       |
|--------|-------|--------|-------|----------|-------|
| Easier | 10.1% | Harder | 31.7% | The same | 58.6% |
|--------|-------|--------|-------|----------|-------|
32. Are the ages of workers in 1991 different than in 1985? (243)
- |         |       |       |       |          |       |
|---------|-------|-------|-------|----------|-------|
| Younger | 23.5% | Older | 11.9% | The same | 64.6% |
|---------|-------|-------|-------|----------|-------|
33. How is the skill level of the harvest workers compared to 1985? (244)
- |        |      |       |       |          |       |
|--------|------|-------|-------|----------|-------|
| Better | 4.9% | Worse | 25.8% | The same | 69.3% |
|--------|------|-------|-------|----------|-------|
34. Do your 1991 crews have more women compared to 1985? (228)
- |      |       |      |       |          |       |
|------|-------|------|-------|----------|-------|
| More | 16.2% | Less | 25.9% | The same | 57.9% |
|------|-------|------|-------|----------|-------|
35. Do your 1991 crews have more experience compared to 1985? (242)
- |      |      |      |       |          |       |
|------|------|------|-------|----------|-------|
| More | 3.3% | Less | 36.0% | The same | 60.7% |
|------|------|------|-------|----------|-------|
36. How closely do your workers need to be supervised in 1991 compared to 1985? (246)
- |      |       |      |      |          |       |
|------|-------|------|------|----------|-------|
| More | 49.2% | Less | 2.0% | The same | 48.8% |
|------|-------|------|------|----------|-------|
37. Have you observed any unionization activities or tendencies among your raisin harvest workers since 1985? (306)
- |     |      |    |       |            |       |
|-----|------|----|-------|------------|-------|
| Yes | 5.2% | No | 65.7% | Don't know | 29.1% |
|-----|------|----|-------|------------|-------|
38. Have INS agents visited your operation since 1986 for the purpose of reviewing the legal status of your workers? (309)
- |     |       |    |       |
|-----|-------|----|-------|
| Yes | 12.3% | No | 87.7% |
|-----|-------|----|-------|
39. Have officials of the Department of Labor visited your operation for any reason since 1986? (311)
- |     |       |    |       |
|-----|-------|----|-------|
| Yes | 10.6% | No | 89.4% |
|-----|-------|----|-------|

**Part Four: Service to Employers**

40. Since 1985, have you listed jobs with EDD for hiring your raisin harvest workers? (318)

Yes	14.2%	No	85.8%
-----	-------	----	-------

41. If yes, did you receive any referrals from EDD? (58)

Yes	51.7%	No	48.3%
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42. Did you hire any of the EDD referrals for the raisin harvest? (40)

Yes	65.0%	No	35.0%
-----	-------	----	-------

43. How would you rate the EDD referrals compared to other raisin harvest workers hired by other means? (30)

Better	6.7%	Worse	40.0%	The same	53.3%
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44. Since 1985, have any representatives from EDD visited your operation? (310)

Yes	20.3%	No	79.7%
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45. Since 1985, have any representatives of other governmental agencies visited your operation? (309)

Yes	12.3%	No	87.7%
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Serving the People of California

STATE OF CALIFORNIA  
EMPLOYMENT DEVELOPMENT DEPARTMENT  
P.O. BOX 826880  
SACRAMENTO CA 94280-0001

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