California farmers continue to find themselves short of employees, despite raising wages, increasing benefits and taking other steps to try to alleviate the problem, according to a survey conducted by the California Farm Bureau Federation in collaboration with the University of California, Davis. The results remain consistent with a similar voluntary survey by CFBF in 2017.

In the 2019 survey, 56 percent of participating farmers reported they had been unable to hire all the employees they needed for production of their main crop at some point during the past five years. A survey conducted in summer 2017 showed 55 percent of farmers had experienced employee shortages.

The 2019 findings show that California farming operations continue to see a negative trend in employee availability, resulting in more challenges and the likelihood of tough business decisions in the very near future.

The purpose of the survey was to collect information about changes in farming practices resulting from the increase of employee scarcity. This report describes the survey response and summarizes key findings.

Among them:

- 86 percent of farmers responding to the survey said they had raised wages in efforts to hire enough people.
- 61 percent reported they had hired a farm labor contractor to recruit employees.
- 56 percent reported they have used a labor-saving technology, and of those who began using mechanization, 56 percent did so due to employee shortages.
- 37 percent said they had adjusted cultivation practices, for example by reducing or delaying weeding and pruning.
- 31 percent said they are switching acreage.
- 6 percent said they had enrolled in the H-2A agricultural visa program.

A total of 1,071 farmers responded to the survey, which was conducted in early 2019. The response reflects broad coverage across California counties and commodities.
Q: During the past five years, have you ever been unable to obtain all the workers you needed for the production of your main crop in your main county?

Of those farmers reporting employee shortages, the survey indicated worsening problems the past two years, with 70 percent or more saying they had had more trouble hiring employees in 2017 and 2018.

Comments from individual farmers included:

- “We have had to abandon berry fields and row crop fields that were good harvest quality due to the unavailable workers during critical harvest times.”

- “We have had to decrease our strawberry and pole tomato plantings because of lack of labor. We have reduced strawberries from 80 to 17 in 2018; we had to walk away from half the field because we did not have enough employees to harvest the whole field. This year we only planted 9 acres of strawberries. Tomatoes have been reduced from 80-100 acres to 25 acres. We have had to increase our winter squash planting to 90 acres in 2018 because this crop does not require much labor to grow or harvest compared to strawberries and tomatoes. … We need 125 people but have only been able to retain 40-45 employees.”

- “Farming has become so difficult for smaller and entry farmers in California that my children see the problems, hard work and low profitability (and) they do not want to take over the farm as I had originally hoped and planned.”
Q: During which of the years listed below were you unable to obtain all the workers you needed to produce your main crop in your main county? (Please check all that apply or click “I don’t know.”)

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>70.29%</td>
</tr>
<tr>
<td>2017</td>
<td>71.43%</td>
</tr>
<tr>
<td>2016</td>
<td>54.20%</td>
</tr>
<tr>
<td>2015</td>
<td>34.92%</td>
</tr>
<tr>
<td>2014</td>
<td>22.68%</td>
</tr>
<tr>
<td>Other</td>
<td>7.26%</td>
</tr>
</tbody>
</table>

Survey results showed that despite raising wages, increasing benefits, converting to less labor-intensive crops, investing in mechanization and other changes, California farm employers continue to experience employee shortages, and have continued to alter their production practices in response.
Of the farmers reporting, 20 percent were winegrape growers, nearly 20 percent farmed tree nuts and “other crops not listed” made up about 15 percent.

Q: Which commodity produced during 2018 in your main county generated the highest percentage of your total sales?
Survey results reveal that California farmers are adapting to farm employee scarcity in many different ways. The vast majority of the farmers responding to the survey reported having raised wages in an attempt to retain an adequate workforce to meet their production needs. A total of 86 percent of all farmers reported they have raised wages to obtain enough workers.

Q: In order to obtain enough workers for the production of your main crop in your main county, have you increased the amount you paid for labor during the past five years?

![Bar chart showing the percentage of farmers who increased wages, with 86% responding positive, 11% responding no, and 3% responding I don't know.]

Of the farmers who answered “yes” to raising wages, responses show that has become more widespread in recent years, as chronic employee shortages continue.

Q: During which of the years listed below did you increase the amount you paid for labor in order to obtain enough workers to produce your main crop in your main county? (Please check all that apply.)

![Bar chart showing the percentage of farmers who increased wages in each year, with 2018 having the highest percentage and 2014 having the lowest.]

Of the participating farmers, 61 percent indicated they have used a farm labor contractor in the last five years to recruit employees.

The survey also explored the relationship between labor contractor use and agricultural employee scarcity by asking those who used labor contractors their reasoning for doing so. Nearly two-thirds (65 percent) answered that they first used labor contractors to make sure they had enough employees and 43 percent answered that they first used labor contractors to reduce the administrative burden associated with employment.

Q: What made you decide to use a farm labor contractor to produce your main crop in your main county that first year? (Please select all that apply.)
Although more farmers are using the H-2A agricultural visa program, it still makes up a small percentage of total agriculture operations. Just under 6 percent of surveyed farmers said they had enrolled in the H-2A program in the last five years.

**Q: During the past five years, have you enrolled in the H-2A visa program to bring in workers to produce your main crop in your main county?**

- Yes
- No
- I don’t know

Comments from individual farmers included:
- “H-2A visas aren’t practical for small growers in our area. We really need immigration reform that is practical for all growers, including portability options.”
- “The rules surrounding H-2A work visas for agriculture are unrealistic for small vineyards. Also, those of us with old vines are extremely limited in how much we can mechanize.”

We asked the respondents who had enrolled in the H-2A program what made them decide to do so. Their answers reveal that the vast majority—95 percent—enrolled in the H-2A program in order to make sure they had enough farm employees.

**Q: What made you decide to enroll in the H-2A visa program to produce your main crop in your main county during that first year? (Please select all that apply.)**

- I wanted to make sure I had enough workers
- Other (please specify)
The survey showed some farmers are switching to less labor-intensive crops. About one-third (31 percent) of farmers said they had changed the acreage of their main crop, and 48 percent of those said they had decreased acreage. Of the farmers who reduced acreage of their main crop, 46 percent reported they switched some acres. The survey asked those who reported decreasing acreage and who also switched some of those acres into another crop which crops they chose.

The survey found that 57 percent of those who changed crops reported switching some acreage into crops we could determine were non-labor-intensive, such as tree nuts (39 percent) or field or row crops such as corn or cotton (14 percent).

**Q: In your main county, which commodity did you switch the largest portion of those (...) acres into during that first year?**

Farmers are becoming more reliant on technology due to rising wages and increased farm employee scarcity. Fifty-six percent of the respondents indicated they have begun utilizing mechanization. Of those, 56 percent said they did so due to the employee shortages they continue to experience.

**Q: During the past five years, have you used a labor-saving technology that has reduced the amount of labor you require to produce your main crop in your main county?**
Most of the farmers who responded yes said they used a labor-saving technology because of the scarcity issues. Roughly three-quarters (74 percent) responded that they turned to technology because of rising workforce costs, and 56 percent responded they used it because there were not enough employees.

Q: **What made you decide to use the technology ... to produce your main crop in your main county that first year? (Please select all that apply.)**

Among those farmers who employed technology, the most frequent tactic, at 27 percent, was use of a mechanical harvester. Another 25 percent reported using a specialized tractor attachment and 33 percent responded that some “other” technology had allowed them to respond to ongoing employee shortages.

Q: **Which labor-saving technology reduced your labor needs the most for the production of your main crop in your main county?**
The survey asked farmers if they had adjusted their cultivation practices during the past five years. Thirty-seven percent responded “yes.” The survey then asked those farmers what changes they had made. The most common response was reduced pruning or weeding, selected by 42 percent of respondents; 27 percent indicated they delayed pruning or weeding. Sixteen percent said they had delayed harvest and 14 percent reported they had reduced harvest. Forty percent reported they changed some “other” cultivation practice.

**Q: During the past five years, which of the following cultivation practices has your farm operation changed? (Please select all that apply.)**
Conclusions

The results from this survey reveal that California farmers are trying to adapt to employee scarcity in a number of different ways. Most growers responding to the survey recently experienced some type of shortage, and those reporting shortages said the incidence of the scarcity has intensified.

California farmers are reacting through a variety of different coping mechanisms. More rely on farm labor contractors and the H-2A visa program to meet their workforce needs. Although only a small percentage of California farmers have turned to the H-2A program to fill job vacancies, the rate of H-2A use has increased.

Farmers are adjusting their crop mix, with some switching acreage from labor-intensive crops such as tree fruits and vegetables into non-labor-intensive crops that can be mechanically harvested, such as tree nuts and row crops.

In responding to the survey, farmers said they increasingly are adopting technology where possible. A majority of the farmers used a technology that reduced their reliance on a workforce at some point during the past five years.

Farmers are also changing their cultivation practices. More than one-third of the farmers in the survey reported changing cultivation practices during the past five years. Changes in cultivation practices have accelerated during the past five years.

The survey clearly shows that farmers face continuing challenges in agricultural employee availability. In California alone, farmers and ranchers hire nearly 473,000 employees during peak season. National estimates put the agricultural workforce at 2.5 million hired employees. Experts calculate that 50 to 70 percent of the hired workers are not authorized to work in the U.S.

Farmers in California as well as throughout the United States have been forthright about the fact that they rely on a largely immigrant workforce. Our survey shows that farmers face new challenges related to employee availability. It offers insight into the means farmers use to adjust to this reality. Farmers are paying higher wages and their farming practices are changing in response to reduced employee availability.

Efforts to hire U.S.-born employees on farms have remained unsuccessful. CFBF survey results in 2017 and 2019 show farmers trying a variety of tactics to fill on-farm jobs. Farmers continue to express the opinion that those efforts need to be complemented by agricultural workforce reform that provides existing employees with a legal status and allows entry for future guestworkers who desire to work in U.S. agriculture.

In the survey, individual farmers commented on the need for immigration reform; examples:

- “The country desperately needs a comprehensive immigration policy where workers are able to work legally and return home legally.”
- “Our vineyard manager is finding it increasingly challenging to maintain a sufficient number of employees for his business. This is partly due to the climate of fear and uncertainty in the Hispanic immigrant community and lack of reform.”
- “We just lost a year-round worker and see difficulty finding a replacement. One of two key workers is from El Salvador. He has a work permit, but we fear he could be deported and we are sure he would be hard to replace in this market.”

Recent studies indicate the availability of farm employees will continue to decline. The trends outlined in this report will likely continue, as farmers change production decisions and employ additional technologies in response to less availability of agricultural workers.

CFBF is encouraged by interest from the 116th Congress to address this issue in a bipartisan manner. Farm Bureau and other agricultural organizations will continue to work with Congress to create a secure, flexible, market-based agricultural immigration program.