

# Participation in federal farm commodity programs

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*Most California farmers consider the cost of lost income too high when compared with benefits of support programs involving acreage set-asides.*

**P**rice and income supports have long been a major component of U.S. agricultural policy. The Food and Agriculture Act of 1977 continued this tradition by providing for target prices and loan rates through 1981 for most major crops. The three key features of the commodity programs as established by the Act are deficiency payments, nonrecourse loans, and disaster payments. The programs are based on a two-tier price policy, using target and average market prices.

The programs are voluntary, and in the past many farmers in California have chosen not to participate. We surveyed California farmers to find out how they felt about federal price and income support policies. This report describes the programs, characteristics of participants and nonparticipants, and reasons for their decisions.

The survey produced a variety of responses, such as the following:

*If the government would keep their nose out of agriculture everyone would be better off . . . Agriculture should be free to operate on the free enterprise system and we should work at building up good export markets and then take care of them.*

**Kern County farmer**

*Why pay someone not to produce? That in my book is silly.*

**Modoc County farmer**

*I feel if it wasn't for the government farm program I would not be operating right now.*

**Sutter County farmer**

*Some programs help the smaller farmer but the most help is to the large operator that probably would survive without it.*

**Modoc County farmer**

*Government programs are run by people that don't know what is going on. . . one day you are told the program and the next week everything they say is different.*

**Sutter County farmer**

*Farm programs are not satisfactory for stabilizing production and price mainly because all areas of the country have vastly differing conditions.*

**Kern County farmer**

*Farmers, when doing well, do not need government. But when things are bad as drought and low prices, then they want help.*

**Solano County farmer**

Under the two-tier price policy of the programs, the target price is used to establish deficiency payments. If the average market price of a commodity is below the target price, deficiency payments are activated for participating farmers. The per-unit payment roughly equals the difference between the target price and the average market price or the loan rate, whichever is higher. Loan rates determine the level of nonrecourse loans available from the Commodity Credit Corporation (CCC). A participating grower can take out a loan equal to the amount of crop produced multiplied by the loan rate. If the average market price falls below the loan rate, the CCC assumes ownership of the crop in lieu of loan repayment. The third component of the programs—disaster payments—are made to farmers for prevented plantings or unusually low yields.

A separate but related program is farmer-owned reserves. Under this program farmers may obtain 3- to 5-year loans on crops placed in storage and receive storage payments from the government.

Eligibility is determined primarily by the willingness of producers to meet any acreage set-aside requirements in effect, which are designed to prevent supply increases from depressing market prices. In general, the acreage set aside, or removed from crop production, must be devoted to conservation. A farmer considering participation must weigh program benefits against costs (foregone income) resulting from set-aside requirements.

There were set-aside requirements in 1978 and 1979 for four crops—wheat, barley, corn, and sorghum. In 1980, primarily because of heavy export demand, the programs changed somewhat, and set-asides were not required. It is quite possible, however, that some form of set-aside provisions will reappear in future years if supply increases are expected to reduce market prices below "equitable" levels.

California farmers tend to participate less in federal commodity programs than American farmers in total, mainly because most of the wide variety of crops grown in the state have no government program. As a result, California farmers receive a small proportion of the government payments, although both participants and nonparticipants receive indirect benefits through price support operations, which at times keep market prices higher than they otherwise would be.

Direct payments were made in 1978 to producers of wheat, barley, corn, sorghum, rice, and cotton. Total government expenditures

nationwide in 1978 for deficiency payments, diversion payments, disaster payments, and wheat haying and grazing payments were \$2.03 billion. (A provision of the Food and Agriculture Act of 1977 allowed producers to designate some of their wheat acreage to be used for haying and grazing rather than for commercial grain production. Participating farmers received a payment based on a rate set by the U.S. Secretary of Agriculture.)

California farmers received \$52.3 million or 2.6 percent of the total. California acreage planted in program crops made up 2.4 percent of the national total, and deficiency

payments were \$19.4 million, disaster payments were \$30.6 million, diversion payments \$2.2 million, and wheat haying and grazing payments \$0.1 million.

Many farmers chose not to participate in the programs with required set-asides. Of the 163 million acres planted in wheat and feed grains in 1978 in the United States (as reported by the Agricultural Stabilization and Conservation Service), 71 million or 44 percent were not in compliance with government commodity programs. In California, the nonparticipation rate was much higher—71 percent. By 1979 the California nonpartici-

pation rate had reached 84 percent.

### Grower survey

On September 27, 1979, we sent a survey on the federal commodity programs to 826 California farmers, divided equally among participants and nonparticipants, who were primarily growers of set-aside crops. Counties chosen were Colusa, Kern, Kings, Modoc, Sacramento, San Joaquin, Solano, Sutter, and Tulare, representing a wide range of growing conditions and crop alternatives. We received completed surveys from 248 individuals, 30 percent of the total surveys mailed out. Participants accounted for 47 percent of the responses.

On the average, nonparticipants had been farm operators slightly longer than participants (table 1). Although the differences were not statistically significant, nonparticipants were slightly older and had larger farms, higher net worth per acre, and a smaller percentage of income from nonfarm sources than did participants. Average debt per acre was significantly greater for participants, and they had a slightly higher debt-to-asset ratio than nonparticipants. Because they were further in debt, the participants or their bankers may have desired the risk protection of the commodity programs.

Participants and nonparticipants had quite similar rental arrangements and business organizations. A large percentage of both groups cash- or share-rented at least part of the land they farmed—89.9 percent of participants and 93 percent of nonparticipants.

A slightly higher proportion of participating than nonparticipating farms were part-time operations—10.1 compared with 5.6 percent. The majority of both groups considered their operations family farms—63 percent of participants and 62 percent of nonparticipants. The category family corporation applied to 20.2 percent of participants and 22.5 percent of nonparticipants. A sizable portion of each group classified their operations as partnerships—23.5 percent of participants and 31 percent of nonparticipants. A small but equal percentage (4.2) of both groups indicated that they were corporations. (Because the categories are not mutually exclusive, the sum of the percentages exceeds 100.)

The two groups gave relatively uniform responses when asked whether they intended to sell, stay about the same, expand, or reduce the size of their operations. Approximately two-thirds of each group intended to keep the size constant, about one-fifth

**TABLE 1. Socioeconomic Characteristics of Participants and Nonparticipants, Average Values\***

|                    | Participants | Nonparticipants |
|--------------------|--------------|-----------------|
| Age                | 51.4         | 53.8            |
| Operator years     | 24.0         | 27.9            |
| Cropland (acres)   | 887          | 1,059           |
| Nonfarm income (%) | 20.0         | 14.0            |
| Net worth/acre     | \$1,494      | \$1,808         |
| Debt/acre          | \$516        | \$294           |
| Debt/assets        | 0.31         | 0.28            |
| Loan payments/acre | \$139        | \$96            |

\*The only statistically significant differences between the two groups (at the 10 percent level of significance) were for operator years and debt per acre.

**TABLE 2. Participants Distributed According to Reasons for Participating**

| Reasons*   | Most important single reason |          | First or second most important reason |          |
|--|------------------------------|----------|---------------------------------------|----------|
|  | Number                       | Percent† | Number                                | Percent† |
| Loan officer favored or insisted on participation        | 2                            | 2.7      | 4                                     | 5.4      |
| Landlord favored or insisted on participation            | 4                            | 5.4      | 6                                     | 8.1      |
| Expected participation to result in higher net income    | 42                           | 56.8     | 53                                    | 71.6     |
| Expected participation to reduce price and/or yield risk | 14                           | 18.9     | 41                                    | 55.4     |
| Other  | 9                            | 12.2     | 10                                    | 13.5     |

\*Reasons are in order listed on survey questionnaire.

†Percentages were calculated as the number of participants giving the indicated response divided by the total number of participants (74) answering this question.

**TABLE 3. Nonparticipants Distributed According to Reasons for Not Participating**

| Reasons*   | Most important single reason |          | First or second most important reason |          |
|--|------------------------------|----------|---------------------------------------|----------|
|  | Number                       | Percent† | Number                                | Percent† |
| Loan officer did not favor participation                 | 0                            | 0        | 0                                     | 0        |
| Landlord did not favor participation                     | 2                            | 4.1      | 0                                     | 3.9      |
| Expected nonparticipation to result in higher net income | 11                           | 22.5     | 15                                    | 28.9     |
| Opposed to government involvement in agriculture         | 23                           | 46.9     | 28                                    | 53.9     |
| Other  | 8                            | 16.3     | 12                                    | 23.1     |

\*Reasons are in order listed on survey questionnaire.

†Percentages were calculated as the number of nonparticipants giving the indicated response divided by the total number of nonparticipants (49) answering this question.

# Are Sierra lakes becoming acid?

Gordon R. Bradford □ Albert L. Page □ Ian R. Straughan

*Tests show essentially no change in the acidity of Sierra lakes during the past 15 years.*

**I**ncreasing acidity of some lakes outside California, particularly in eastern United States and Canada, and in the Scandinavian countries, is attributed to oxides of nitrogen and sulfur from automobile exhausts and industries. The U.S. Environmental Protection Agency has recently included the Sierra Nevada as part of a larger area in the United States considered to be sensitive to lake acidification. We have studied the problem, because of the presumed sensitivity of these lakes to acidification.

Fortunately, we obtained data on the acid content of 170 Sierra lakes in 1965 ("Trace and major element content of 170 Sierra lakes in California," *Limnology and Oceanography*, Vol. 13, no. 3, July 1968, by Bradford et al.). These data provide a valuable resource to

## Commodity programs, *continued*

planned to expand, and very few intended to sell or reduce size. Several researchers have argued that commodity programs have been one cause of the trend toward fewer and larger farms. The stated intentions indicate that California program participants are no more likely than nonparticipants to enlarge their operations, at least in the short run.

Surprisingly few of the surveyed participants, 1.7 percent, had sought the nonrecourse loans available under the commodity program. Apparently, the low-interest loans were not sufficiently attractive to offset perceived disadvantages and were not an important inducement to program participation.

Survey respondents were asked to rank a list of reasons for participating or not participating in the 1978 programs (tables 2 and 3). Nearly all farmers operate with credit from a variety of sources, but only 2.7 percent of the participants listed the loan officer's influence as their most important reason for participating. More than half (56.8 percent) said their most important reason was that they "expected participation to result in higher net income." Nearly one-fifth (18.9 percent) "expected participation to reduce price and/or yield risk." Overall, when considered as the first or second most important reason for participation, expected higher income was mentioned the most frequently (71.6 percent), and expected risk reduction was the second most mentioned.

Higher expected income was a much less important reason for nonparticipants' decisions. Almost half (46.9 percent) indicated that they primarily were "opposed to govern-

ment involvement in agriculture." Overall, when considered as the first or second most important reason for nonparticipation, opposition to government intervention was mentioned most frequently. Of course, government involvement could be opposed for a number of reasons: a perception that management freedom is restricted, that government control is too pervasive, or perhaps simply that income might be higher in free markets, since many farmers believe that government programs result in a "cheap" food policy that discriminates in favor of consumers and against farmers.

### Conclusion

Most California farmers have chosen not to participate in the federal price and income support programs when required to set aside a portion of their acreage. Many view the cost in foregone income as excessive in comparison with program benefits. Others are philosophically opposed to governmental intervention in agricultural markets. A large number of those who chose to participate anticipated that the program would enhance their income or reduce income risk.

Many farmers probably will continue to choose not to participate in the commodity programs whenever set-asides are in effect. The large investments in machinery and irrigation equipment characteristic of the state's agriculture translate into higher income and perhaps lower risk and thereby reduce incentives for program participation.

California farmers do not seem to gain a great deal from the commodity programs

established by the Food and Agriculture Act of 1977. Although it is difficult to predict the outcome of those deliberations on a new act to be passed in 1981, it appears likely that the disaster program will be phased out in favor of an expanded crop insurance program. Congress has already passed legislation to expand the crop insurance program with subsidized premiums. Because of the stability of yields in California when compared with those in other states, farmers here will probably not be greatly affected by elimination of the disaster program. California taxpayers may be better off with the paid crop insurance program than with the disaster program, depending on the level of subsidization.

The potential elimination of the disaster program illustrates one effect government programs have on decision making in agriculture. The programs are designed in part to reduce price and yield uncertainty in agriculture, but they often introduce another uncertainty—about policy. Frequent changes in program features and requirements make long term planning more difficult for farmers.

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