

Impact of Expanded Almond Plantings in California

Members of the California Action Network have been economically harmed by the overexpansion of almond plantings in California and the resulting low prices returned to growers. Expanded almond plantings have been encouraged by the supply of cheap irrigation water by the Bureau of Reclamation to new production regions and by the failure to properly enforce acreage limitation provisions of Reclamation Law.

Almond Production in California

Virtually all U.S. almonds are produced in California. Prior to 1963 the state total of bearing acreage was less than 100,000 acres and the U.S. share of world production amounted to about 33%.¹ Large new plantings were established in the late 1960's and 1970's, primarily in the San Joaquin Valley. By 1987 harvested acreage reached 411,000 acres, a 311% increase over the bearing acreage just 25 years previously.²

The enormous increase in almond plantings led to even larger increases in production. This is because the newer plantings utilized higher tree densities and younger plantings generally give higher yields as compared to older orchards. Whereas annual production in the mid-1960s hovered around 80,000 tons, 1987 production was 330,000 tons.³ As a result of this very large increase of production prices to growers have softened, most dramatically after the first of the enormous crops were harvested in the mid-1980's.

Established growers found themselves in a new situation. Despite substantial efforts to market the large crops, lower prices placed many producers in a cost-price squeeze. In 1985, grower Fred Montgomery, then President of the California Almond Growers Exchange (CAGE), stated, "There is no secret about the fact that the market is currently operating at a level which will not return a profit to the grower. As a matter of fact, I would say that, despite growing an excellent crop, most of the growers will be operating with some red ink."⁴ CAGE took the extraordinary step of closing its rolls to new members, sending a signal that production needed to be reduced. A new member waiting list was established, according to Roger Baccigaluppi, to serve as a source of new members "...if the current membership is reduced through tree removal..."⁵

Since all almond plantings in the San Joaquin Valley require irrigation, the availability of reliable water supplies is crucial to establishing new plantings. Moreover, a number of years of maturation of new plantings are necessary before crops can be harvested. Thus, new producers must be assured of irrigation supplies as well as sufficient capital resources to operate for several years without any return.

Bureau records indicate that, in 1986, the agency supplied irrigation water to 157,566 acres of bearing almond orchards.⁶ The sub-total for the Friant Division was 69,230 acres while the sub-total for the Central Valley Project was 116,409 acres.⁷ The sub-totals for Sacramento River Water Diversions, Corning Canal and

Shasta Division water users amounts to less than 25,000 acres.⁸ Therefore, the largest portion of water supplies for almond production furnished by the Bureau are San Joaquin Valley deliveries.

Kern County Almond Production

The most dramatic increase of almond plantings has occurred in Kern County. In 1966 there were only 190 bearing acres (of a state total of 107,280 acres).⁹ By 1987 Kern had 73,395 bearing acres (of a state total of 410,898 acres) establishing itself as the leading almond county.¹⁰ Clearly, Kern County was the principal site of newly established almond plantings in this period.

Water deliveries to Kern County involve both CVP water as well as State Water Project (SWP) deliveries. The important role of SWP supplies has been documented elsewhere.¹¹ Approximately 30,015 acres of almond plantings are located in water districts who contract with the CVP and whose area includes land in Kern County.¹²

Examination of data on almond farm operations shows that Kern County almond producers have very large average holdings. Table I shows the 1987 size distribution of Kern County almond farms.

TABLE I

Kern County Almond Farm Size, 1987

<u>Size of almond orchard</u>	<u>Number of Farms</u>	<u>Acreage</u>
80 acres or less	99	4,533
81-160 acres	53	6,973
161-320	36	9,072
321-480	10	4,052
481-640	6	3,234
641-960	5	3,554
961-1,280	8	9,297
1,281-2,560	4	7,309
2,561-5,120	2	8,236
5,121 acres or more	3	23,180
Total	226	79,440

Source: Kern County Department of Agriculture, 1987
 Restricted Material Permit Applications, compiled by
 the California Institute for Rural Studies.

The data of Table I show that the average Kern County almond farm holding is 351 acres of almonds. Moreover, the 17 farms with more than 960 acres of almond plantings have a total almond acreage of 48,022 acres, or 60% of the county total. This suggests that the county has an unusually concentrated farm structure with extremely large almond farm holdings. It should be noted that the total almond acreage indicated in Table I exceeds the harvested acreage in that it includes non-bearing plantings as well.

REFERENCES

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