Cotton Acreage Adjustment

major changes in San Joaquin Valley land use pattern in prospect for cotton areas in 1954

Ivan M. Lee

Short of a substantial voluntary cotton acreage reduction in 1953, acreage control may be forthcoming in 1954 under existing legislation.

No attempt is made in this report to project the probable land use pattern should cotton acreage controls materialize. But the data summarized below may suggest something of the nature and magnitude of the adjustment which accompanied the very substantial reduction in cotton acreage in California between 1949 and 1950—340,000 acres—and the even longer acreage increase between 1950 and 1951—an increase of 740,000 acres.

Acreage Changes: Cotton and Competing Crops Between 1949–50 and 1950– 51 in the Five Counties of Fresno, Kern, Tulare, Kings and Madera^a

	1949-50	1950-51
	thousand	s of acres
Small grain ^b	+135	- 126
Alfalfa	+ 66	- 82
Corn (maize)	+ 18	- 17
Safflower	+ 18	- 14
Grain sorghum	+ 15	- 26
Melons	+ 15	- 6
Potatoes	. + 13	- 37
Sugar beets	. + 8	- 13
Grapes	. + 5	- 4
Irrigated pasture ^e	. + 2	- 14
Total	+295	- 339
Cotton	318	+640

* Source: County Agricultural Commissioner Reports for all crops except cotton. Cotton from U. S. Bureau of Agricultural Economics, Crop and Livestock Reporting Service.

^b Barley and wheat. Includes dry and irrigated acreage except for Kern County where only irrigated acreage is included.

^c Reflects Tulare County only.

The tabulated summary represents estimated aggregate acreage changes in cotton and selected competing crops between 1949 and 1950 and between 1950 and 1951. The aggregates include only the five leading cotton-producing counties in the 1949–1951 period, which accounted for about 95% of the state total cotton acreage in 1949 and 90% in 1951. Similarly, these counties accounted for around 95% of the cotton acreage changes in 1950 and 85% of the changes in 1951.

Too much significance should not be attached to the absolute magnitudes of acreage changes indicated for individual crops. The data on which they are based are not free from error. Furthermore, it is recognized that the list of competing crops is probably not complete. Still, an inspection of the table focuses attention on the very material changes in acreages of other crops which accompany cotton acreage changes of the magnitudes which occurred in these years.

Displaced Cotton Land

Displaced cotton acreage in 1950 was used for other crops suited for culture in the soil and climate of the area. A large part of the increase in cotton acreage in 1951 was on land withdrawn from competing crops. The relative impact of a given cotton acreage change on acreages of other crops depends upon economic factors—price and cost relationships existing or expected at the time as well as certain noneconomic factors.

The small grain acreage change shown in the table includes nonirrigated acreage in counties other than Kern and to this extent reflects acreage not competing directly with cotton. The other crops listed are grown almost exclusively under irrigation in the five counties. Among these crops irrigated pasture acreage is not fully represented since irrigated acreage is reported separately only for Tulare County.

The large unexplained differences between cotton acreage changes and the net total changes in acreage of competing crops apparent in the table can be attributed primarily to the incompleteness and lack of precision in the acreage data. The gap in each year might be somewhat altered, however, by an appropriate adjustment for changes in total acreage under irrigation in 1950 and 1951. Data are not available on which to base such an adjustment. Assuming that irrigated acreage increased in both years, the adjustment would serve to increase the unexplained difference in 1950 and to decrease it in 1951.

Land Use Outlook

Direct projection of the probable pattern of land use in 1954 on the basis of the information summarized here might be misleading. Aside from the shortcomings of the data, the economic and noneconomic factors determining alternative land use may change over a period of time.

An inspection of average prices received by California farmers in 1952 indicates that prices of barley, potatoes, corn, and grain sorghum were more favorable relative to cotton than in 1949. Prices of wheat and alfalfa, on the other hand, were less favorable relative to cotton in 1952. Expected price and cost relationships will enter to influence the alternative land use pattern in 1954 should cotton acreage allotments materialize under the controlling legislation which exists.

Should a downward adjustment in cotton acreage promise to be of longer duration than was the case in 1950, more drastic changes in the type of agriculture in the San Joaquin Valley may be forthcoming. Assuming a favorable long-run outlook for livestock and livestock products relative to other commodities, a combination feed grain-livestock enterprise might well provide a profitable alternative to the cash crop enterprises now dominant in the agriculture of Fresno, Kern, Tulare, Kings, and Madera counties.

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Pr pu	ogress Reports of Agricultural Research, blished monthly by the University of Cali- fornia Division of Agricultural Sciences.
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