

States Productive Capacity

projections of 1955 levels and patterns of California's production anticipate 650,000 additional acres in crops

Trimble R. Hedges and Warren R. Bailey

This article is the second of a series of reports based on a study of California's agricultural productive capacity, that can be attained by 1955, which was conducted by the California State Committee on Survey of Agricultural Productive Capacity. The Committee included representatives of the University of California, the United States Department of Agriculture, and State agencies.

Important shifts in California acreage from noncrop land to cropland are projected for 1955—principally in changes from close-growing to intertilled crops, and from summer fallow or idle land into crop uses.

The shifts are expected to add some 650,000 acres to the state's 1950 total of 35½ million farm acres.

The purpose of the study upon which this report is based was to make an appraisal of California's agricultural productive capacity—to project what level of farm production is attainable in 1955 under an assumed set of conditions.

The conditions assumed were concerned with the over-all level of economic activity, the specific price relationships directly affecting agriculture, the availability of farm resources, management capacity and policies of farm operators, and the effectiveness of farm research and information programs.

The assumed 1955 price relationships represent certain changes from 1951, which are important in the projections of attainable acreage and yields. The position of cotton may be used as an example. The state average price in 1950 was 44¢ per pound, the same as the preliminary estimate for 1951. This price compares with 34¢, the average for 1947–1950, and a projected price of 38¢ for 1955. It seems evident that this projected 1955 price will not represent as sharp a competitive advantage for cotton, in comparison with alternative crops, as it enjoyed in 1950 and 1951.

The projected 1955 prices of feed grains and alfalfa hay both show important price increases in contrast with the projected decline for cotton prices. In livestock, the major shift in 1955 price relationships is that prices of beef cattle and lambs will be lower relative to hogs than in 1950 or 1951. The prices of chickens, turkeys, eggs, and milk will continue to be relatively favorable.

Shifts in Land Use, Crops

The attainable level of land use for 1955 must be viewed in relation to changes that occurred from 1950 to 1951.

The most important single shift in those years was 31% increase—582,000 acres—in the intertilled crops.

Such a large change in major land use between two consecutive seasons occurs only in response to unusual stimuli, and inevitably creates serious problems of readjustment throughout agriculture. This is true in California. The stimuli were related primarily to cotton, particularly the enforced acreage limitation by the 1950 allotment program. The normal reaction of farmers was to expand acreage in 1951 when there were no controls, to which was added a positive reinforcing encouragement—the sharp price increase for the crop of 1950.

As a result of the increased cotton acreage in 1951 an important fraction was expanded onto land not best suited to cotton; some growers not fully experienced with the crop or improperly equipped got into cotton; and, cotton acreage tended to expand to the limit of available water supply. That is significant because all California cotton is irrigated and on many farms must compete with other crops for part of the water used.

The acreage shifts projected between 1950 and 1955 reflect increased intensity and more complete use of farm land resources. It is expected that the total amount of cropland will increase by 3%—from 10.5 to 10.9 million acres—principally by bringing into cultivation land formerly in noncrop uses.

The other major increase in land use intensity by 1955 is the probable reduction of nearly 22%, or 267,000 acres, in summer fallow. The net result of adding new land and reducing summer fallow will be to increase the land in crops by 650,000 acres, or 7%, between 1950 and 1955. These changes in over-all land use will bring the acreage of close-growing—largely cereal—crops, and hay and pasture closer to 1950 levels without drastically reducing the acreage of intertilled crops.

For convenience in analyzing the acreage shifts crops were considered in four major groups:

1. Raw material, seed, and food crops, include cotton, rice, processing tomatoes,

dry beans, flaxseed, castor beans, and ladino seed.

2. Feed grains, as defined here, include barley, wheat, oats, corn, grain sorghums, and grain hay.

3. Hay and pasture with the major crops in this group being alfalfa hay and irrigated pasture, chiefly ladino or trefoil, alone or in combination with certain grasses.

4. Vegetables, fruits, and other specialty crops which are of dominant importance in California cash farm income.

Between 1950 and 1951, raw material, seed, and food crops increased by 800,000 acres or 44%. Feed grains decreased 421,000 acres or 14%. And, hay and pasture crops decreased 107,000 acres or 5%. The sharp increase in raw material, seed, and food crops, at the expense of both feed grains and hay and pasture, suggests the necessity for readjustments in all three groups. Those readjustments, as reflected in the projected 1955 acreages, are: a cut-back of 150,700 acres—6%—in raw material, seed, and food crops; an increase of 269,000 acres—

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11%—in feed grains; and, an increase of 328,000 acres—17%—in hay and pasture.

The projected 1955 attainable acreages of these major groups of crops, as compared to 1950 levels, are: 645,076 more acres—36%—of raw material, seed, and food crops; 152,000 fewer acres—5%—of grains; and, 221,000 more acres—11%—of hay and pasture.

Total vegetable acreage increased 9% from 1950 to 1951 while the projected acreage of all vegetables for 1955 is 2% less than 1951. A dominant fact in the production and marketing situation is that the existing acreage of most vegetables could supply larger quantities than the market now takes.

The total acreage of fruit shows little net change, either between 1950 and 1951, or the projections for 1955. The bearing acreage increased less than 1% from 1950 to 1951, and the projected acreage in 1955 would represent less than a 3% increase over 1950, 2% over 1951.

In contrast to minor change in all fruit, some important shifts are indicated among individual fruits. Acreage decreases are projected for apricots—3,000; figs, 1,000; grapefruit, about 1,000; oranges, 3,000; and prunes, 5,000. Increases of about 10,000 acres each are expected for almonds and walnuts; avocados, 6,000; grapes, 15,000; and peaches, 4,000.

Fruits are like vegetables in that the actual volume harvested and marketed may be varied rather widely in any given season, in response to market conditions.

Fruits and vegetables use over half of the fertilizer and comparable quantities of the pesticides in California. They also exert a tremendous demand on labor supplies, in greater proportion than acreage. In recent years, they have come to require specialized machinery such as blower-type sprayers, pruning rigs, and harvesting equipment.

Grazing Land

Open permanent pasture occupies 18½ million acres of California land in farms. An additional 3.3 million acres of farm woodland, out of a total of 4 million, are used in grazing.

A certain amount of grazing is available from other miscellaneous, noncrop land in farms with residue from harvested crops an important segment of the total feed consumed by livestock.

The approximately 65 million acres of land not in farms in California include about 7.7 million acres in national forests, 1.4 million acres in private land managed by the National Forest agency,

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	4 bags Sodium Cyanamide Dust 202*
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For experimental use on weed control	
Assoc. Seed Growers, Inc.....	9 lbs. Corn Seed
For use on variety test plots	
The Best Fertilizers Co.....	1400 lbs. 16-10-0 (Nitro-phos)
	1400 lbs. 16-5-0 (Nitro-phos)
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W. Atlee Burpee Co.....	6 lbs. Corn Seed
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	10 gals. Toxaphene and DDT
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6.5 million acres in privately owned range, and, roughly 6.5 million acres for public domain-type grazing. Except the 6.5 million acres of privately owned range most of the grazing land is under control of some public agency. These agencies, in general, have rather definite programs and policies covering utilization and farmers can do little to change the present level of production.

No appreciable changes in acreage of open permanent pasture and range in farms, or of nonfarm land used for grazing are projected for 1955.

To be continued

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