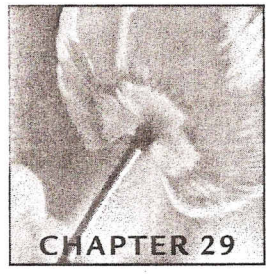

Industrialized Agriculture and Disorganized Labor

The evolution of modern agriculture in California is a story of great complexity, marked by occasional moments of high drama. Through the middle of the twentieth century, agriculture remained California's largest single industry. The value of the state's farm products exceeded the value of the output of any branch of manufacturing in the state—or rather of any *other* branch of manufacturing. California farms themselves, in the words of Carey McWilliams, had long been "factories in the field."

The structure of agriculture in the state was not only extraordinarily complex in itself; it was also closely interrelated with other industries, especially the canning, packing, processing, transportation, and marketing of food and kindred products.

Green Gold

Among the states, California had ranked first in farm income since the 1930s, and its lead was steadily widening. Several of its climates permitted year-round growing and favored the production of fruit and truck crops for luxury markets at seasons when other states could offer little or no competition. California's unmatched level of farm capitalization permitted the greatest use of scientific techniques and resulted in the nation's highest level of farm productivity.

California's agriculture was not only the most prosperous in the country but far and away the most diversified. Because of the variety of its soils and climates it had 118 different types of farms, according to the United States census classification, whereas Pennsylvania, which ranked second in this respect, had only 25 types. Thanks in part to the genius of Luther Burbank of Santa Rosa, nearly 300 different agricultural commodities were produced in California, including all of the nation's commercial supply of almonds, artichokes, figs, nectarines, and olives; a third of the nation's fruit, including most of the apricots, grapes, pears, plums, and prunes; and

more than a fourth of the nation's vegetables, including most of the asparagus, broccoli, carrots, celery, and lettuce.

Although California agriculture as a whole was remarkably diversified, the great majority of the farms were extremely specialized. Specialization even within a crop was common. For example, many farms produced peaches exclusively for canning or for drying, and many produced grapes only for the table or for raisins or for wine.

The Empire of Agribusiness

Throughout the twentieth century, successful farming in California was becoming a business organized in larger and larger units. This process of consolidation was occurring not only through *horizontal integration,* or the merging of farm units into larger ones, but also through the still more revolutionary process of *vertical integration,* in which a large company operated at every level from the field to the supermarket. The men who had pioneered in the formation of these vertically integrated agricultural corporations were two Italian immigrants, Mark J. Fontana and Joseph Di Giorgio.

Fontana had created the California Fruit Canners' Association in 1899 and in 1916 had been instrumental in merging four large packing concerns into the California Packing Corporation (CalPac), which became the world's largest canner of fruits and vegetables. CalPac was the grower as well as the packer of many of the goods that were sold under its Del Monte label. Joseph Di Giorgio had become a large grower in the southern San Joaquin Valley early in the century and had bought the marketing and shipping interests of the Earl Fruit Company in 1910. The canned goods produced by the Di Giorgio Corporation were known to consumers through its S&W label.

Another integrated farmer was Schenley Industries, which raised many of the grapes that went into its wines. Hunt Foods and Industries, headed by Norton Simon, did not operate as a grower but was important as the world's largest processor and distributor of tomato products and as a major producer of salad and cooking oils.

The backing of such large aggregations of capital facilitated the constant development of new technological advances in all of the complex operations of agribusiness. An indispensable ally in this process was the University of California's college of agriculture. The federal and state funds that supported the college's tremendously successful research program were augmented by contributions from the Giannini Foundation of Agricultural Economics. A. P. Giannini, founder of the Bank of America, was also a regent of the university. His son, Lawrence Mario Giannini, succeeded him both as a regent and as head of the bank.

The impact of science and technology on California agriculture was astounding. In 1961 university agricultural engineers devised a mechanical tomato picker so efficient and gentle that when they ran a fresh egg through it, the egg was deposited in the box uncracked. Soon afterward they developed a mechanical thumb that could press down on the top of each head of lettuce, decide electronically whether it was ready to be picked, and signal another part of the machine to pick it. Nine-tenths of California's cotton was being picked by machinery before the rate reached one-tenth in the southern states. Agricultural scientists developed mechanical tree