ECONOMIC RESEARCH OF INTEREST TO AGRICULTURE

The Giannini Foundation of Agricultural Economics and The Division of Agricultural Economics University of California

May 6, 1951
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The Arthur Cahill portrait of Mr. A. P. Giannini, painted in June, 1930, was presented to the University by the Bank of America and hung in Giannini Hall on May 6, 1951, the anniversary of Mr. Giannini's birth.
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Agricultural Experiment Station
College of Agriculture
University of California
Berkeley, California
ECONOMIC RESEARCH OF INTEREST TO AGRICULTURE

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FOREWORD

A little more than twenty years ago the Regents of the University of California received a gift of one million five hundred thousand dollars through the instrumentality of the late Mr. Amadeo Peter Giannini, to study and make better known the economic facts and conditions upon which the continued solvency and prosperity of California's agricultural industry must of necessity rest. With that gift there was created the Giannini Foundation of Agricultural Economics and a building to house its work, Giannini Hall.

May 6, 1951, is the eighty-first anniversary of the birth of Mr. Giannini in a farm worker's family at San Jose, California. On this occasion, through the courtesy and thoughtfulness of his son, Mr. Lawrence Mario Giannini, there has been presented to the University by the Bank of America, for permanent placement in Giannini Hall, a portrait of Mr. Giannini, painted a few years prior to his appointment as a Regent of the University.

It seems appropriate, therefore, that the University of California should give some accounting at this time of the trust placed upon it, and in so doing, pay tribute to Mr. Giannini. For there is no more striking proof of the service which he has rendered to his native State, and one might add, to the Nation, than the acceleration of research in agricultural economics during the past two decades, and the results which have as a consequence been achieved. It is the purpose of this brief report prepared by Professor Harry R. Wellman, Chairman of the Division of Agricultural Economics and Director of the Giannini Foundation, to trace the development of research in agricultural economics and to indicate the magnitude of the contribution which Mr. Giannini has made possible.

ROBERT G. SPROUL
ECONOMIC RESEARCH OF INTEREST TO AGRICULTURE

Historical Background

An historical account of research in agricultural economics in the College of Agriculture, at the University of California, must recognize that in the early years of the college, agricultural economics research was not a separate field of investigation. The Division of Agricultural Economics was not set up until many years after the college was established. Some economic phases of agriculture were investigated, but the results were included in publications primarily designed to answer technical questions about the physical aspects of agriculture. The emphasis at that time was not on how much it would cost to produce, harvest, and market a crop or what price the crop would bring; but on how much could be produced, how fast it could be harvested and made ready for the market. California's population increased so rapidly during the Gold Rush era (1848-1860) that food supplies could not keep pace.

Of considerable importance to later developments was the chartering by the state legislature of the State Agricultural Society, of an organization whose function was the stimulating of interest in better breeds of livestock, improved varieties of fruits and vegetables, and the diffusing of information on experiments being conducted throughout the state. The members of this society were joined by other California farmers in promoting the idea that the state's agriculture could be developed more rapidly if experiments were organized and controlled in a school for agriculture supported by the state. Federal aid became available for such a school through the Morrill Act of 1862, and the state legislature authorized such a college in 1866. The College of Agriculture, however, was not established until 1868.

During the first fifty years of its existence the College of Agriculture devoted its energies mainly to the development of better varieties of fruits and vegetables, improved feeding methods for livestock, disease-control activities in plants and animals, and many other functions which would increase food production within the state. Two reasons prompted this concentration of effort during the last quarter of the nineteenth century and the early part of the twentieth.

The first reason, and perhaps the one placing the heaviest emphasis on developments, was the real shortage of food within the state. California Agricultural Experiment Station Circular 96, published in 1912, indicated one phase of the shortage in its statement that "California is producing only one hog for every three people in the State. She is consuming more than three times that many." This same year, the Experiment Station sponsored a bean-raising contest and a potato-growing club to encourage and educate the "younger generation" of farmers toward increasing the acreage planted to those very important foods. One of the station's publications that year also dealt with another problem, "Increasing Dairy Profits" by eliminating low-milk-producing cows. Throughout all of the publications of the early years of the College of Agriculture, research and teaching emphasized increasing production of agricultural commodities.

The second reason for concentrating on purely technical agricultural subjects grew out of the provisions of the Morrill and Hatch acts which limited
in word and interpretation the use of federal funds provided under these acts for research and teaching in technical agriculture, with no extension of the term to include related fields.

Agricultural expansionists received additional support and encouragement during World War I when acreages planted to all commodities reached a new high in the state. With the close of the First World War, demand for staple foods decreased and the rapid decline in prices focused attention on economic and sociological problems. California farmers had learned to look to the College of Agriculture, with its Experiment Station and Extension Service, for help and guidance in treating the ills of agriculture. But some of the important ills from which agriculture was suffering in the 1920's were not to be diagnosed and prescribed for by the entomologist, the agricultural chemist, the plant nutritionist, or the soils expert. The new problems were those of finding new markets, cheaper methods of production, better farm-management practices, and different uses of land. In other words, farmers needed help from the marketing experts, the land utilization specialists, and the farm-management analysts, as well as from the technical scientists.

The Division of Rural Institutions, established in 1915, and the Division of Farm Management, set up about five years later, brought together valuable information. The problems of agriculture in the postwar period multiplied so rapidly, however, that the personnel of these two divisions was too small to cope with them adequately. It was recognized that something must be done, and in 1925 the solution began with the merging of the two divisions into the Division of Agricultural Economics. New personnel was added as rapidly as funds would permit. The work thus started was furthered by federal aid provided by the Purnell Act of 1925, "An act to authorize the more complete endowment of agricultural experiment stations." This act permitted federal funds to be used for economic research in its relation to agriculture and agricultural industries.

By 1926-27 the Division of Agricultural Economics was actively engaged in research in the following fields: farm management, land use, marketing, and prices. Activity, however, was still limited to the time and energies of a half-dozen men who, in addition to research, were endeavoring to develop and teach courses in the newly authorized curriculum in Agricultural Economics. Prior to 1926-27, courses in Agricultural Economics were offered under Agriculture, Animal Husbandry, Agronomy, and Rural Institutions. A major curriculum in Agricultural Economics was offered for the first time in 1926-27. By that year, therefore, resident teaching, research, and extension work in Agricultural Economics in the College of Agriculture, were clearly defined and their importance as a special field of endeavor recognized.

The Giannini Foundation of Agricultural Economics was established in 1928, in addition to providing funds for the building of Giannini Hall, the gift of Amadeo Peter Giannini created an endowment, the income from which has contributed much to the support of research pertaining to the economic problems of agriculture.

Throughout the depression years of the early and middle 1930's, the recovery and national defense years of the late 1930's, the World War II era, and then the postwar years, research in Agricultural Economics developed and contributed to the progress of the state and nation.
It is appropriate that we not only look at our findings, but also note the work in progress. The research work in Agricultural Economics at the University of California through 1950 is indicated by the comprehensive list of publications which follows this statement. A general account of work in progress is given by the following comments on various fields.

**Farm Management and Production**

Work in farm management and production was formally established in the College of Agriculture over thirty-five years ago, in 1914. Since then, California's agriculture has undergone much change. New enterprises and lines of production have been introduced, and marked changes have occurred in farming equipment and cultural practices. In view of the dynamic growth of our agriculture, it is necessary that farm management research be in the vanguard. Two of our current farm management research projects exemplify conditions which have raised new problems on the farm or ranch and which have heightened the need for new information.

In recent years difficulties have been encountered in heating orchards as protection against losses from low temperatures and freezes. The problem has its engineering phases, such as the development of new types of equipment. While this kind of work is in progress, we coordinate with it a study of the economic aspects. We are attempting to provide economic information on the most effective systems of protecting citrus groves from frost damage under varying conditions that exist throughout the major citrus areas of the state. This is being done to determine the conditions under which benefits from frost protection to the growers are greater than the costs, and the conditions under which the costs are greater than the benefits. These are timely questions which can be answered only by economic research.

The phenomenal increase in California's cotton acreage has made this state a leading producer. This phenomenon has had a marked impact on our agriculture. In the San Joaquin Valley, significant shifts in production have occurred. At the same time, important changes in the use of equipment have developed. The mechanical cotton harvester is a good example.

We are now making an intensive study to evaluate the economic influence of mechanical cotton harvesting on the earnings of individual producers and on farm organization. This involves the measurement of factors, such as relative costs and picking rates for comparison with figures on hand-picking of cotton. Matters such as effects of mechanical harvesting on grade and amount of field loss are also considered. And special problems concerning defoliation, influence of weeds, and cultural practices are recognized and evaluated. The figures and facts studied and analyzed are obtained from a sample of operators using mechanical harvesters. Thus, the results of the study reflect actual operating experience. In that manner, the findings provide others with realistic information which can be used in making their own plans and improving their operations and income.

**Land Economics and Conservation**

Conservation is a subject that has received much publicity, especially during the past decade or two. It is of great importance to the individual
farmer, as well as to the state and nation. Wise use of our natural resources is a difficult but necessary field of study. And we have several current projects bearing upon this area of work.

One of these projects is concerned with finding out how to measure the direct benefits of soil conservation. As a case study, work is progressing on determining the effects on yields of apple trees as a result of conservation practices. Consideration is being given to age distribution, such natural factors as soil and climatic characteristics, and management practices. The objective is to determine the effects of conservation management practices on the costs and returns for different natural conditions.

Associated with the general questions of conservation of natural resources and land economics is the problem of utilizing ground water. This is of crucial importance to California. Use of ground water in this state has led to a serious depletion. As a result, there have occurred falling water tables, increased costs for pumping, deterioration of water quality, deeper wells but still insufficient supplies, and competition for remaining supplies.

Much work has been done by engineers and geophysicists on ground water. But the economic and social aspects have been neglected or have been dealt with inadequately. One of our current projects concerns the economic aspects of this ground-water problem. This involves an appraisal of the physical, economic, social, and legal aspects. Work is progressing substantially on a regional analysis of ground-water basins, such as the Santa Clara Valley, the South Coastal Basin, the southern San Joaquin Valley. When completed, it should contribute to a better understanding of our ground water problems.

As a final example of some of the work we are doing on the economics of land, we may note a project on public-grazing-land tenure in the western states. Most people do not realize that about 40 per cent of the total land area of California is owned and administered by the federal government. A major use of this land is for grazing by private ranchers and farmers. Hence, there are problems in tenure and utilization. Economic research studies are being carried on to provide leads to the efficient and equitable use of these public lands in grazing.

Marketing

Farm management and production, conservation and land economics, subjects we have just briefly touched upon, are important. But they are part of a larger picture—the economic system. Another important part of this complicated economic system is the marketing structure which is concerned with getting farm products from the primary producers to the ultimate consumers. Interest in agricultural marketing has increased tremendously in recent years and many research projects have been initiated. Some of them are specialized and deal only with local problems, while others are of general interest. But nearly all of our marketing projects are concerned with one or more of the following four points: (1) whether any particular operation or process could be performed at a lower cost without sacrificing standards of quality and service; (2) whether the market operates smoothly, quickly, and effectively in equating supplies of and demand for farm products both in the short run and in the long
run; (3) to what extent new techniques affect established marketing practices and the supply and demand for particular products; (4) and how specific types of governmental activities affect the efficiency of marketing operations and procedures. As examples of several of our marketing projects, we may note the following:

Large proportions of the fresh fruits and vegetables produced in California are sold on a nation-wide market. This requires an elaborate handling, transporting, and selling system, the costs of which absorb an important part of the price received on eastern markets. More than half of the costs of placing these California products on eastern wholesale markets are accounted for by such local marketing operations as grading, packing, precooling, and loading for shipment.

The type of marketing costs considered here may be reduced through better organization and integration of existing facilities or through the development and use of improved methods. As a part of the program pertaining to marketing costs and efficiency, we are making a detailed economic analysis of operations in a number of deciduous-fruit packing houses. Economic statistical analyses are being made of daily volume of plant output and daily labor use; the costs of materials, power, and operating expenses; investments and annual costs for buildings and equipment. The data are being analyzed to determine how the costs of specific packing house operations are influenced by such factors as plant capacity and volume handled, the organization of space and equipment, and the work methods. The statistical analyses are supplemented by engineering studies of plant layout, equipment, and methods, and also supplemented by studies of the effects of proposed plant reorganizations on operating costs. Time and motion studies of key operations are included. This project, upon completion, is expected to provide leads for improved efficiency and lower costs in packing house operations.

We are also conducting economic research studies on citrus packing house operations and their allied activities. This research includes a series of separate but related phases, all bearing upon improved efficiency in citrus marketing operations. Some of the phases are a re-examination of packing techniques in orange houses, revised sampling techniques for use in juice plant operation, both with respect to equity problems and blending techniques, and bulk handling problems. The very recent but important changes occurring in the citrus industry emphasize the need for continued stress on economic efficiency in production and marketing.

There now are a considerable number of livestock auctions in California—as many as about 80. Hence, we are making an economic appraisal of the part such auctions play in the marketing of livestock. Data have been collected in the field to study the following types of questions: volume, kind, and class of livestock consigned to auctions by different types of consigners and purchased by different types of buyers; types of transportation used in moving livestock to and from the auction, the areas from which the livestock are received, and the feeding, weighing, pricing, and other marketing practices followed at the auction; the proportion of the various types of livestock bought and sold in different size lots, by types of sellers and buyers; the volume, character, and seasonality of livestock marketed through auctions; organization and methods of operation of livestock auctions; and the kinds
of services rendered by auctions and the charges made for such services. These
detailed objectives are listed for this project, only to illustrate some of the
ramifications involved in one of our economic studies.

While on the topic of livestock marketing, we might note an economic study
we are making on poultry-meat marketing in southern California. This is con-
cerned with analyzing the pricing and price-making process for poultry in the
Los Angeles area. In addition, we are looking into the competition between
fresh and frozen poultry meat at wholesale and retail. A substantial propor-
tion of the poultry consumed in the Los Angeles area comes from the Midwest.
Prior to World War II, shipments of live poultry came into the Los Angeles
market. Sharp increases in freight rates have encouraged more processing to
be done near the production areas. Hence, the majority of inshipments of poultry
now are in the eviscerated, cut-up, frozen form. This competes with fresh-
killed poultry produced locally. Here we have an example of how interregional
trade and changes in marketing practices bring new problems for study.

Among the various livestock products of importance to California and on
which we work is the group known as milk and milk products. Milk marketing
has long been a significant area of work for us, and remains so. Since milk
prices in California are established by a public agency, and not set on a free
market, it is essential that analyses be made to determine the importance of
economic factors which are no longer free to express themselves through the
mechanism of price. The continued existence of "improper" prices and price
relationships may result not only in failure to bring about the desired pro-
duction, but also in serious effects upon utilization, the quality of the
product, and the character and location of production. Hence, our economic
research on milk and milk products is to obtain a more complete understanding
of the contribution of the various complex interrelated forces and their effect
upon the determination of milk prices. This involves research in price re-
lations between markets, uses, pricing formulas, quality premiums, effects of
fat differentials in terms of returns to producers, cost to distributors, and
the general welfare of consumers, as well as the influences of health and
sanitary requirements on the prices and supplies of milk. A mere listing of
these factors serves to emphasize the complicated nature of the economic problems
being studied.

In California, over 1,125,000 tons of fruits and tree nuts are marketed
annually in fresh form. About 2,300,000 tons of vegetables for fresh con-
sumption are produced annually in this state. Thus, a total of almost 3.5
million tons of fruits, tree nuts, and vegetables are marketed for fresh con-
sumption. Cash receipts to California farmers from these marketings amount
to a very substantial portion of the state's agricultural income. In view
of the great importance of the fresh fruit and vegetable industries to our
state, we are making studies of the behavior of prices and margins of such
farm products.

One of those studies is now concentrating on the marketing channels and
margins for fresh fruits and vegetables marketed within California. We are
investigating the movement of selected products from the producing area to the
consumer. For example, how does Imperial Valley lettuce get to a retail store
in Madera? Does it go through Los Angeles or Fresno, or through both those
cities? Is there a substantial amount of crosshauling and backhauling that
might be eliminated to obtain more efficient marketing? We are also looking into the types of buyers and sellers, and their relative importance, involved in the state's marketing business for these fresh fruits and vegetables. A third point being studied is the size of the marketing margins taken by dealers before the fruit or vegetables reach the retail store. For example, if lettuce moves from the grower to a shipper, then to a jobber, and then to a retailer, what are the average margins charged by the shipper and jobber? Study of such questions provides information for making our marketing system more efficient for the benefits of producers, middlemen, and consumers.

Another one of our marketing projects is concerned with the shipment of fresh citrus fruits—oranges, lemons, and grapefruit—to the major eastern markets. Although California is a major citrus producing and marketing area, we must face heavy competition from other producing areas, such as Florida and Texas. Thus, it is important that we not only understand the behavior of citrus prices in general, but that we must also know of the differences which exist in the prices and the marketing of our citrus fruit compared with that from other states. How do the marketing margins for California oranges compare with those for Florida oranges? What are some of the impacts of the increased use of canned juices and fresh-frozen juices on the consumption and prices of fresh oranges? Another phase of this study is the relations between the daily and weekly changes in prices at the f.o.b. wholesale and retail levels. For example, many people believe that when the wholesale price goes up, the retail price goes up quickly, but when the wholesale price goes down, the retail price tends to lag behind. What are the facts? Only careful investigation of actual conditions and developments in the markets can give the answers. With the factual information, we are in a better position to appraise and improve our marketing practices.

Prices and Statistics

Among our research projects there are a number of continuing studies on the factors which affect the annual average prices of our farm products. These studies include statistical analyses of the supply and demand for products grown in the state. The results of such investigations provide the California agricultural industries with economic-statistical information for use in the formulation of production and marketing policies and plans. Particular mention might here be made of the orange and lemon demand studies which are used by the federal administrative committees, as well as marketing agencies, in their shipment planning; the canned cling peach studies which are used by grower associations, canners, and the Cling Peach Advisory Board in their discussions; the canned asparagus studies which are used by canners and growers. Similar statistical studies are made for canned apricots and canned pears, and for almonds. All of these types of price analyses are prepared and revised for use by various groups active in the state's agriculture. The work requires careful analysis and measurement, using the best available methods and techniques.

In addition to these types of investigations, we undertake the compilation and review of various statistical series of importance to California agriculture. Such data are necessary to chart the trends in production, shipments, uses and prices of the many commercial crops produced in the state. The figures are compiled for the various farm products on which we work. Also,
we have prepared and are keeping up to date, a comprehensive set of index numbers on major aspects of the state's agriculture. These index numbers measure, for the state as a whole, changes in production, shipments, and prices, by major commodity groups as field crops, fruits, vegetables, and livestock and livestock products.

Commodity Studies

Along with our economic research in farm management and production, land economics and conservation, marketing, prices and agricultural statistics, we prepare and issue commodity studies. They review the trends in production, shipments, uses and prices, and present an evaluation of the current situation and outlook for the respective commodities. These studies are based on comprehensive economic research, and involve careful analysis, but are presented in circulars for wide distribution to farmers, distributors, and others engaged or interested in California agriculture. These situation and outlook studies cover a wide range of California farm products. Examples include apples, asparagus, avocados, dried beans, eggs, grapes, lettuce, milk and milk products, olives, peaches, pears, plums, tomatoes, walnuts, sheep and wool. We are now preparing a comprehensive situation and outlook bulletin on lemons, which will be followed by one on oranges. We are also making a detailed economic analysis of the complicated interrelations existing among the grape industries, including wine, raisins, and fresh shipping grapes.

These commodity-situation studies emphasize the trends in our farm products, including many which are specialty crops for which we are the dominant or a leading producer. But in order to evaluate, in a well-balanced manner, the situation and outlook for one of our crops, it is necessary to have an adequate picture of the national situation, and even the international situation for some crops. For that reason, we must be cognizant of the trends in such items as national income, industrial production, employment, and the general price level. Adequate emphasis on such factors is a necessary part of our economic research in order to provide useful information for the state's agricultural industries.

Agricultural Policies and Programs

Another phase of our economic research which merits mention is the area of agricultural policy. It is well known that national and state legislation, in recent years especially, profoundly affects our agriculture. National agricultural policy on production, price supports, and marketing agreements is a subject of wide significance and interest. California also has its own legislation on marketing agreements and orders. These types of governmental influences are major aspects of some of the agricultural industries in this state. For those reasons, we make studies to analyze the effects of such government activities upon our agriculture and other parts of our economy. Our objective is to provide farmers, agricultural leaders, legislators, national and state officials, as well as the general public, with more adequate bases for making intelligent and constructive decisions on policies affecting, or pertaining to the nation's and state's agriculture.

H. R. Wellman
Director, Giannini Foundation of Agricultural Economics

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Introductory Note to List of Publications

The following list of publications represents the major research activities of the agricultural economics group in the California Agricultural Experiment Station. The list is not complete, in the sense that various items have been omitted either because they have been superseded by later publications, or because essentially the same information is available in other items included in the list. Yet the list is sufficiently comprehensive so that it well serves as a representative account of the publications which have been issued during the period covered. The list may serve not only as a record of published materials, but also as a reference guide to those who are interested in sources on various topics in the area of agricultural economics research.

The list of publications has been compiled so that it is composed of two parts. Part I includes all of the items, classified into various economic categories, and for that reason titled as Economic Classification. Part II, titled as Commodity Classification, includes only those items which pertain explicitly to particular farm products; with the titles on a single group of products brought together under a single heading. This arrangement is presented with the view of facilitating the use of the publications list.
Part I

ECONOMIC CLASSIFICATION

COMMODITY ECONOMICS AND THE AGRICULTURAL SITUATION


Inflation and Agriculture, by J. M. Tinley. (West. Farm Econ. Proceedings, 10th, 1937, p. 142-146. Processed)


Supplemented by mimeographed outlook charts issued annually for 1930, 1932-1943.


Trends in Pacific Coast Fruit Exports, by S. W. Shear. (Pacific Coast Econ. Assn. Proceedings, 19th, 1940, p. 81-84; Giannini Found. Agr. Econ. Paper 91)

Trends in the Pacific Coast Pear Industry, by S. W. Shear. (Blue Anchor, v. 17, no. 6, June 1940, p. 4-5, 19-20; Giannini Found. Agr. Econ. Paper 86)


The Influence of the War on the Agriculture of the Americas, by H. R. Wellman. (In The Meaning of the War to the Americas. Berkeley, Univ. of Calif. Press, 1941, p. 89-113)


War and Post-War Adjustment Problems in the Far-Western Fruit Industry, by S. W. Shear. (West. Farm Econ. Assn. Proceedings, 14th, 1941, p. 17-24. Processed)

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Commonwealth Club of California
The Crisis in Meat; Progress Report of War Service Committee on Food.
(Transactions, v. 37, no. 6, Dec. 7, 1942, p. 197-208)
H. E. Erdman, Chairman of committee.

Commonwealth Club of California
Will we have Enough Fats and Oils? Report of War Service Committee on Food. (Transactions, v. 37, no. 6, Dec. 7, 1942, p. 209-216)
H. E. Erdman, Chairman of committee.


Planning for Total Food Needs, by E. C. Voorhies. Berkeley, Univ. of Calif. Press, 1942. 34p. (Food in Wartime)


War Problems Affecting California Agriculture. (Section Progress Report) By H. E. Erdman. (Commonwealth Club of Calif. Transactions, v. 36, no. 6, June 15, 1942, p. 197-204)

Philosophy of Discussion and War Food Problems, by H. E. Erdman. (Commonwealth Club of Calif. Commonwealth, v. 19, no. 36, Sept. 6, 1943, p. 164)


Fruit Prices; Returns to Growers Influence Business Conditions in Many California Communities, by S. W. Shear. (Calif. Agr. Exp. Sta. California Agriculture, v. 3, no. 5, May 1949, p. 2)


FARM MANAGEMENT AND TENANCY


Combining the Results of Farm Management Research with Outlook Reports, by L. W. Fluharty. (West. Farm Econ. Assn. Proceedings, 5th, 1931, p. 109-112. Processed)

The Management of Large Farms, by R. L. Adams. (Agricultural Engineering, v. 12, no. 9, Sept. 1931, p. 353-357)


Contributors: H. R. Wellman, H. R. Tolley.


Also a 1937 edition.


Farm Problems in Meeting Food Needs, by R. L. Adams. Berkeley, Univ. of Calif. Press, 1942. 32p. (Food in Wartime)


Required Price of Hops to Adequately Reimburse California Growers (Not Including a Figure for Profits) By R. L. Adams. Berkeley, Univ. of Calif. Col. of Agr., 1942. 11p. Processed.


Do We Need Any New Farms? By A. Shultis. (West. Farm Econ. Assn. Proceedings, 17th, 1944, p. 228-230)


Use of Enterprise Efficiency Data in Planning Adjustments in Farm Organization and Production, by L. W. Fluharty. (West. Farm Econ. Assn. Proceedings, 17th, 1944, p. 139-143)


Commercialized Farming Requires Better Management, by A. Shultis. (Jour. American Society of Farm Managers and Rural Appraisers, v. 12, no. 2, Oct. 1948, p. 198-201)


   Also an edition of 1945.


Appraising Damages in Fruit Tree Destruction, by A. Shultis and B. B. Burlingame. (Journ. American Society of Farm Managers and Rural Appraisers, v. 13, no. 1, Apr. 1949, p. 56-62)


   Also issued annually, 1938-1947.

   Also an edition of 1941.


Irrigated Pasture Costs; Studies Revealed Costs per Animal-Unit Month Varied from $1.00 to over $7.00, by B. B. Burlingame. (Calif. Agr. Exp. Sta. California Agriculture, v. 3, no. 5, May 1949, p. 13)


Helping Farmers Adjust to Crop Allotment Programs, by A. Shultis. (West. Farm Econ. Assn. Proceedings, 23rd, 1950, p. 41-44. Processed.)


California. Agricultural Extension Service Enterprise Efficiency Studies. Currently studies are conducted and published annually on:

- Alfalfa, Alfalfa Seed, Almonds,
- Avocados, Beans (Red Kidney), Beans (Lima), Beef, Boysenberries, Cauliflower,
- Citrus Fruits, Dairying, Grapes, Irrigated Pasture, Peaches, Pears, Poultry,
- Rabbits, Rice, Sugar Beets, Tomatoes, Turkeys, Walnuts.

In previous years studies have been made for these additional enterprises:

- Apples, Apricots, Barley, Celery,
- Cherries, Cotton, Dates, Drying Cut Fruit, Flax, Fruit, Grain, Hay, Honey,
- Hops, Olives, Peas, Peppers and Paprika,
- Potatoes, Prune Dehydration, Prunes,
- Raisins, Rice Harvesting Costs, Sheep,
- Silage, Sweet Corn, Sweet Potatoes, Swine,
- Tomato Plant Growing, Turkey Eggs, Wheat.

These studies have been conducted and supervised by L. W. Fluharty, A. Shultis, B. B. Burlingame, W. Sullivan and A. D. Reed, assisted by the various county farm advisers.
AGRICULTURAL MARKETING AND INTERNATIONAL TRADE


The Farm Board's Proposal for Stabilizing the California Grape Industry, by E. A. Stokdyk. (Jour. Farm Econ., v. 12, no. 3, July 1930, p. 467-468)


The Significance of Transportation Rate Policies in the Marketing Problem, by M. R. Benedict. (Jour. Farm Econ., v. 13, no. 3, July 1931, p. 401-409)


Market Milk Problems of California Milk Producers, by J. M. Tinley. (American Cooperation, 1932, p. 204-216)


A Method of Prorating Costs Between Main Products and By-Products, by J. M. Tinley. (Jour. Farm Econ., v. 14, no. 2, Apr. 1932, p. 353-354)


Social Science Research Council. Advisory Committee on Social and Economic Research in Agriculture.

Research in Marketing of Farm Products - Scope and Method. New York, 1932. 221p. (Bul. 7)


The California Agricultural Prorate Act, by E. A. Stokdyk. (Jour. Farm Econ., v. 15, no. 4, Oct. 1933, p. 729-731)


Social Science Research Council. Advisory Committee on Social and Economic Research in Agriculture.

Research in Transportation in Relation to Agriculture - Scope and Method. New York, 1933, 94p. (Bul. 8)
Contributors: M. R. Benedict, J. B. Schneider.


Also in West. Farm Econ. Assn. Proceedings, 7th, 1934, p. 113-125. Processed.


Problems of Creamery Operating Efficiency in California, by J. M. Tinley. (Jour. Farm Econ., v. 17, no. 4, Nov. 1935, p. 732-735)


Problems of Industry Operating Efficiency in Agriculture, by J. M. Tinley. (Cooperative Jour., v. 11, no. 3, May-June 1937, p. 73-74)


Improving Local Methods of Farm Supply Distribution, by J. B. Schneider. (American Cooperation, 1938, p. 694-701)


Report on Alameda County area, Los Angeles area, Orange County area, San Bernardino-Riverside area, San Francisco area, with supplement, San Mateo area, and Sonoma area.

Alameda area, Orange County and Riverside-San Bernardino areas, San Francisco area, and Sonoma area.

Possibilities and Limitations of Control of Shipments as a Method of Dealing with Tree Fruit Surpluses, by H. R. Wellman. (American Cooperation, 1938, p. 478-495)


An Appraisal of the Movement to Increase Industrial Uses of Farm Products, by H. E. Erdman. (Scientific Agriculture, v. 20, no. 1, Sept. 1939, p. 20-26; Giannini Found. Agr. Econ. Paper 81)

Comparison of Small and Large Farmers Under Proration Schemes, by H. E. Erdman. (Jour. Farm Econ., v. 21, no. 3, pt. 1, Aug. 1939, p. 651-655)

The Distribution of Selling Effort Among Geographic Areas, by H. R. Wellman. (Jour. Marketing, v. 3, no. 3, Jan. 1939, p. 225-239)


Recent Developments in Agricultural Marketing, by J. B. Schneider. (Calif. Farm Bureau Federation. Minutes of meeting, 22d, 1940, p. 106-109. Processed)


Agricultural Marketing Control Programs in California, by J. B. Schneider. (Jour. Marketing, v. 6, no. 4, p. 1, Apr. 1942, p. 366-370)


Control of Food Prices, by J. M. Tinley. Berkeley, Univ. of Calif. Press, 1942. 33p. (Food in Wartime)


Rationing and Control of Food Supplies, by J. M. Tinley. Berkeley, Univ. of Calif. Press, 1942. 26p. (Food in Wartime)


Interpretation of Variations in Cost Data for a Group of Individual Firms, by H. E. Erdman. (Jour. Farm Econ., v. 26, no. 2, May 1944, p. 388-391)

- 21 -
The Food Problem, by H. E. Erdman. (In The Outlook for Postwar Europe. Berkeley, Univ. of Calif. Press, 1945, p. 27-40)


An Approach to the Determination of Intraseasonal Shifting of Demand, by G. L. Mehren and H. E. Erdman. (Jour. Farm Econ., v. 28, no. 2, May 1946, p. 587-596)


Some Considerations of Research in Marketing Horticultural Products, by H. R. Wellman and G. L. Mehren. (Jour. Farm Econ., v. 28, no. 1, Feb. 1946, p. 170-181)


National Planning Association


M. R. Benedict, a member of the committee. Asked by committee to prepare its report on the basis of committee discussion and comments and suggestions of the individual members of the committee.

Some Economic Aspects of Agricultural Control, by G. L. Mehren. (Jour. Farm Econ., v. 30, no. 1, Feb. 1948, p. 29-42)


Agricultural Marketing Research, by R. G. Bressler, Jr. (Jour. Farm Econ., v. 31, no. 1, pt. 2, Feb. 1949, p. 553-562)


Elementary Economic Theory of Marketing Control, by G. L. Mehren. (Jour. Farm Econ., v. 31, no. 4, pt. 2, Nov. 1949, p. 1247-1254)


U. S. Agricultural Research Administration


G. L. Mehren, Chairman of work group.
Using Price Research, by G. B. Alcorn. (Jour. of Farm Econ., v. 31, no. 4, pt. 2, Nov. 1949, p. 1096-1098)


Dairy Cow Replacements; About 90% of Los Angeles County In-Shipment in 1949 Came from Areas Other than the Milkshed, by E. C. Voorhies and N. S. Mewhinney. (Calif. Agr. Exp. Sta. California Agriculture, v. 4, no. 4, Apr. 1950, p. 2)


E. C. Voorhies, a member of the Technical Committee, and of the Policy Committee.


STATISTICAL ANALYSIS OF PRICES AND SUPPLIES


Social Science Research Council. Advisory Committee on Social and Economic Research in Agriculture.

Research in Prices of Farm Products - Scope and Method. New York, 1933. 271p. (Bul. 9)


An Investigation on Complementarity Relations Between Fresh Fruits: A Rejoinder, by S. S. Hoos. (Jour. Farm Econ., v. 24, no. 2, May 1942, p. 528-529)


Also issued for 1937-38, by H. R. Wellman, Mimeo. Report 68.


AGRICULTURAL COOPERATION

Collective Farming Among Vegetable Growers in the Coastal Region of California, by E. A. Stokdyk. (Jour. Farm Econ., v. 13, no. 4, Oct. 1931, p. 642-643)


Production Control and Shipment Pro­ratons as they Affect Cooperative Marketing, by F. R. Wilcox. (American Cooperation, 1935, p. 384-396)


Controlled Marketing - in the Cooperative Environment, by H. R. Wellman. (Cooperative Jour., v. 12, no. 6, Nov.-Dec. 1938, p. 145-148)


Experiments in Correspondence Courses, by H. E. Erdman. (American Cooperation, 1946, p. 251-254)


AGRICULTURAL FINANCE AND CREDIT


Social Science Research Council. Advisory Committee on Social and Economic Research in Agriculture.
Research in Public Finance in Relation to Agriculture - Scope and Method. New York, 1930. 174p. (Bul. 1)

Social Science Research Council. Advisory Committee on Social and Economic Research in Agriculture.
Research in Agricultural Credit - Scope and Method. New York, 1931. 158p. (Bul. 3)
Contributors: M. R. Benedict.

The Farm Mortgage Situation with Special Reference to the Eleven Western States, by R. L. Adams. (Jour. Farm Econ., v. 14, no. 4, Oct. 1932, p. 605-614; Gianinni Found. Agr. Econ. Paper 33)


Branch Banking and its Bearing upon Agricultural Credit, by J. K. Galbraith. (Jour. Farm Econ., v. 16, no. 2, Apr. 1934, p. 219-232; Gianinni Found. Agr. Econ. Paper 41)


Some Policy Problems in a Federal Farm Credit Program, by M. R. Benedict. (Jour. Farm Econ., v. 16, no. 1, Jan. 1934, p. 45-54; Gianinni Found. Agr. Econ. Paper 49)


The Relation of Public to Private Lending Agencies (in Agriculture) and Recent Trends in Their Development, by M. R. Benedict. (Jour. Farm Econ., v. 27, no. 1, Feb. 1945, p. 88-103)

Committee to Study Possibilities for Further Improvement and Strengthening of the System of Federally Sponsored Credit Services to American Agriculture. The Federal Sponsored Credit Services to American Agriculture; Suggestions for Improvement and Coordination. A Report by a Research Committee. (Jour. Farm Econ., v. 29, no. 4, pt. 2, Nov. 1947, p. 1429-1502)
M. R. Benedict, Chairman of the committee.

LAND AND WATER ECONOMICS


The Concept of Marginal Land, by G. M. Peterson and J. K. Galbraith. (Jour. Farm Econ., v. 14, no. 2, Apr. 1932, p. 295-310)


Land-Use Adjustment in California, by D. Weeks. (Plan Age, v. 2, no. 6, June-July 1936, p. 21-25)
The Economist's Approach and Objectives in Land Utilization by D. Weeks. (Agricultural Engineering, v. 18, no. 11, Nov. 1937, p. 492, 494)


- 33 -


Land Tenure in Relation to the Economic and Social Problems of the Western States, by M. R. Benedict. (In the People, the Land, and the Church in the Rural West. Chicago, Farm Foundation, 1943, p. 23-31. Processed)


U. S. National Resources Planning Board


Appendix C, Sample-Summary Statements. Regional Unit - Northern Sierra Nevada Area, California, by D. Weeks.


- 34 -


Acreage Limitation in Federal Irrigation Projects with Particular Reference to the Central Valley Project of California, by V. Fuller. (Jour. Farm Econ., v. 31, no. 4, pt. 2, Nov. 1949, p. 976-982)


Factores Económicos que Afectan la Conservación de los Recursos Naturales. (Trimestre Económico, v. 17, no. 3, July-Sept. 1950, p. 455-478)


U. S. President's Water Resources Policy Commission. Committee on Water Policy Involving Land Use Economics.


David Weeks, Chairman of the Committee.


AGRICULTURAL LABOR AND SOCIAL SECURITY


Gainful Workers in the Rural Farm Population, by G. M. Peterson. (Jour. Farm Econ., v. 19, no. 3, Aug. 1937, p. 800-802)


Agricultural Labor in the Pacific Coast States; a Bibliography and Suggestions for Research, by M. R. Benedict. San Francisco, Social Science Research Council, Pacific Coast Regional Committee, Sub-Committee on Seasonal Agricultural Labor in the West, 1938. 64p. Processed.

The Problem of Stabilizing the Migrant Farm Laborer of California, by M. R. Benedict. (Rural Sociology, v. 3, no. 2, June 1938, p. 188-194)


The British Program for Farm Labor - as a Contribution to American Thinking on the subject, by M. R. Benedict. (Jour. Farm Econ., v. 22, no. 4, Nov. 1940, p. 714-728; Giannini Found. Agr. Econ. Paper 87)


Labor Talk - Farm Bureau Panel, by R. L. Adams. (California Farm Bureau Federaion. Minutes of Meeting, 24th, 1942, p. 31-33. Processed.)


Sponsor: M. R. Benedict; Co-Sponsor: S. H. Stratham.

POPULATION

California's Population Increase, by D. Weeks. (ASCE (American Society of Civil Engineers, Los Angeles Section, v. 6, no. 1, Oct. 1933, p. 4-9))


Interstate Migration and Intervening Opportunities, by M. L. Bright and D. S. Thomas. (American Sociological Review, v. 6, no. 6, Dec. 1941, p. 773-783)


Sponsor: C. B. Hutchison; Vice-Sponsor: D. S. Thomas.

AGRICULTURAL POLICIES AND PROGRAMS

Effect of Centralized Holdings on Prices, by M. R. Benedict. (Journ. Farm Econ., v. 13, no. 3, July 1931, p. 486-487)

Association of Land-Grant Colleges and Universities

Report on the Agricultural Situation by the Special Committee of the Association of Land Grant Colleges and Universities Appointed by the Executive Committee of the Association; Submitted by the Executive Committee to the Executive Body of the Association at the 46th Annual Convention, Chicago, Illinois, November 14 to 16, 1932. n.p., 1932. 62p.

H. R. Tolley, a member of the committee


Social Science Research Council. Advisory Committee on Social and Economic Research in Agriculture.

Research in Agricultural Policy - Scope and Method. New York, 1933. 44p. (Bul. 21)


Agriculture's Share of the National Income, by G. M. Peterson. (West. Farm Econ. Assn. Proceedings, 9th, 1936, p. 64-70. Processed.)


Probable Economic Effects of the AAA Wheat Program, by M. R. Benedict. (American Cooperation, 1938, p. 200-212)


Association of Land-Grant Colleges and Universities. Committee on Postwar Agricultural Policy.

H. R. Wellman, a member of the committee.


U. S. Dept. of Agriculture

M. R. Benedict, Chairman of the committee.

Association of Land-Grant Colleges and Universities. Committee on Postwar Agricultural Policy.

H. R. Wellman, a member of the committee.


Sponsor: H. R. Wellman; Co-sponsor: S. S. Hoos.

Association of Land Grant Colleges and Universities. Committee on Agricultural Policy.

H. R. Wellman, a member of the committee.
H. R. Wellman, a member of the committee.


Development of Agricultural Policy, by A. Brekke. (Jour. Farm Econ., v. 32, no. 4, pt. 2, Nov. 1950, p. 839-856)


Stabilization of Farm Prices, by H. R. Wellman. (Food Technology, v. 4, no. 5, May 1950, p. 219-222)

Symposium of an Appraisal of the Proposals from the Viewpoint of a Production Economist, by H. R. Wellman. (In Farm Foundation. Educational and Methods Conference in Public Policy, January 19-21, 1950, Planned by the National Committee on Agricultural Policy, Sponsored by Farm Foundation. Chicago, 1950, p. 35-40. Processed.)

Conference in Public Policy, January 19-21, 1950, Planned by the National Committee on Agricultural Policy, Sponsored by Farm Foundation. Chicago, 1950, p. 35-40. Processed.)

ASPECTS OF ECONOMIC THEORY

Wealth, Income and Living, by G. M. Peterson. (Jour. Farm Econ., v. 15, no. 3, July 1933, p. 421-448)


Implications of Aggregative Theories for Agricultural Economists, by S. S. Hoos. (Jour. Farm Econ., v. 31, no. 4, pt. 2, Nov. 1949, p. 851-862)

STATISTICS: DISCUSSIONS


H. R. Tolley, a member of the committee.


M. R. Benedict, a member of the committee.


M. R. Benedict, Chairman of the committee.


Application and Uses of the Graphic Method of Multiple Correlation, by H. R. Wellman. (Jour. Farm Econ., v. 23, no. 1, Feb. 1941, p. 311-322)


The Use of Econometric Models in Agricultural Micro-Economic Studies, by G. M. Kuznets. (Jour. Farm Econ., v. 30, no. 1, Feb. 1948, p. 131-139)

STATISTICS: COMPILATIONS


Also compiled for Butte, Orange, Riverside, Sonoma, Tehama and Tulare counties.


Also issued in 1937, by J. B. Schneider and N. D. Hudson, and in 1938, by G. B. Alcorn, N. D. Hudson and J. B. Schneider.


Also issued in 1933, by W. Sullivan.


     Also issued annually, 1931-1942, 1945-1949 as Marketing Kern County Irish Potatoes. Various authors: J. B. Schneider, M. A. Lindsay, G. B. Alcorn, H. W. Longfellow, R. M. Barnes, D. N. Wright and R. C. Rock.


MISCELLANEOUS

Some Social and Economic Aspects of Rural Electrification, by H. E. Erdman. (Jour. Farm Econ., v. 12, no. 2, Apr. 1930, p. 311-319)


     Contributor: H. R. Tolley.


     Contributors: G. M. Peterson, H. E. Erdman.
Contributor: M. R. Benedict.


Nature and Scope of Training for Men Contemplating Work in the Field of Agricultural Economics, by C. L. Alsberg. (Jour. Farm Econ., v. 22, no. 1, Feb. 1940, p. 52-59; Giannini Found. Agr. Econ. Paper 84)


Carl L. Alsberg, 1877-1940, by E. C. Voorhies. (Jour. Farm Econ., v. 23, no. 2, May 1941, p. 535-536)

Training of Personnel for the Rural Social Sciences, by M. R. Benedict. (Jour. Farm Econ., v. 23, no. 4, Nov. 1941, p. 765-770)


The Determination of Military Subsistence Requirements, by S. S. Hoos. (Jour. Farm Econ., v. 28, no. 4, Nov. 1946, p. 973-988)


The Social Sciences in Experiment Station Research, by M. R. Benedict. (Jour. Farm Econ., v. 31, no. 2, May 1949, p. 253-265)


Milk and Dairy Products


Market Milk Problems of California Milk Producers, by J. M. Tinley. (American Cooperation, 1932, p. 204-216)

A Method of Prorating Costs Between Main Products and By-Products, by J. M. Tinley. (Jour. Farm Econ., v. 14, no. 2, Apr. 1932, p. 353-354)


Problems of Creamery Operating Efficiency in California, by J. M. Tinley, (Jour. Farm Econ., v. 17, no. 4, Nov. 1935, p. 732-735)


Also in West. Farm Econ. Assn. Proceedings, 11th, 1938, p. 227-237)


Dairy Cow Replacements; About 90% of Los Angeles County In-Shipments in 1949 Came from Areas Other than the Milkshed, by E. C. Voorhies and N. S. Mowhinney. (Calif. Agr. Exp. Sta. California Agriculture, v. 4, no. 4, Apr. 1950, p. 2)
California Agricultural Extension Service. Enterprise Efficiency Studies. Currently studies are conducted and published annually on: Dairying: Fresno County, Humboldt County, Kings County, Madera County, Shasta County, Stanislaus County, Tulare County.
In previous years some of these studies have been made in additional counties. These studies have been conducted and supervised by L. W. Fluharty, A. Shultis, B. B. Burlingame, W. Sullivan and A. D. Reed, assisted by the various county farm advisers.

POULTRY AND EGGS


Also an edition of 1945.


California Agricultural Extension Service Enterprise Efficiency Studies.

Currently studies are conducted and published annually on:

Poultry: Alameda County, Butte County, Lassen County, Los Angeles County, Monterey & Santa Cruz Counties, Riverside County, Sacramento County, San Bernardino County, San Diego County, San Joaquin County, San Luis Obispo County, Santa Clara County, Solano County, Sonoma County, Tulare County.
Poultry Meat: Fresno County, San Diego County.
Rabbits: Los Angeles County, San Bernardino County.
Turkey Meat: Fresno County, Tulare County.
Turkeys: Riverside County.

In previous years some of these studies have been made in additional counties. These studies have been conducted and supervised by L. W. Fluharty, A. Shultis, B. B. Burlingame, W. Sullivan and A. D. Reed, assisted by the various county farm advisers.

FRUITS AND NUTS


The Farm Board's Proposal for Stabilizing the California Grape Industry, by E. A. Stokdyk. (Jour. Farm Econ., v. 12, no. 3, July 1930, p. 467-468)


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Possibilities and Limitations of Control of Shipments as a Method of Dealing with Tree Fruit Surpluses, by H. R. Wellman. (American Cooperation, 1938, p. 478-495)


Also issued in 1937, by J. B. Schneider and N. D. Hudson, and in 1938, by G. B. Alcorn, N. D. Hudson and J. B. Schneider.

Trends in Pacific Coast Fruit Exports, by S. W. Shear. (Pacific Coast Econ. Assn. Proceedings, 19th, 1940, p. 81-84; Giannini Found. Agr. Econ. Paper 91)

Trends in the Pacific Coast Pear Industry, by S. W. Shear. (Blue Anchor, v. 17, no. 6, June 1940, p. 4-5, 19-20; Giannini Found. Agr. Econ. Paper 96)


War and Post-War Adjustment Problems in the Far-Western Fruit Industry, by S. W. Shear. (West. Farm Econ. Assn. Proceedings, 14th, 1941, p. 17-24. Processed)


An Investigation on Complementarity Relations Between Fresh Fruits: a Rejoinder, by S. S. Hoos. (Jour. Farm Econ., v. 24, no. 2, May 1942, p. 528-529)


Also issued for 1937-39, by H. R. Wellman, Mimeo Report 68.


Some Considerations of Research in Marketing Horticultural Products, by H. R. Wellman and G. L. Mehren. (Jour. Farm Econ., v. 28, no. 1, Feb. 1946, p. 170-181)


Appraising Damages in Fruit Tree Destruction, by A. Shultis and B. B. Burlingame. (Jour. American Society of Farm Managers and Rural Appraisers, v. 13, no. 1, Apr. 1949, p. 56-62)


Fruit Prices; Returns to Growers Influence Business Conditions in Many California Communities, by S. W. Shear. (Calif. Agr. Exp. Sta. California Agriculture, v. 3, no. 5, May 1949, p. 2)


California Agricultural Extension Service Enterprise Efficiency Studies. Currently studies are conducted and published annually on:

- **Almonds**: Stanislaus County
- **Avocados**: Orange County, San Diego County
- **Boysenberries**: Fresno County, Riverside County, San Bernardino County, Stanislaus County
- **Citrus Fruits**: Los Angeles County, Orange County, Riverside County, San Bernardino County, San Diego County, Santa Barbara County, Ventura County
- **Grapes**: Fresno County, Madera County, San Joaquin County
- **Peaches**: Solano County
- **Pears**: Solano County
- **Walnuts**: Sutter County, Tulare County

In previous years some of these studies have been made in additional counties, and also in various counties for these additional enterprises:

- Apples, Apricots, Cherries, Dates, Drying Cut Fruit, Fruit, Olives, Prune Dehydration, Prunes, Raisins. These studies have been conducted and supervised by L. W. Fluharty, A. Shultis, B. B. Burlingame, W. Sullivan and A. D. Reed, assisted by the various county farm advisers.
TRUCK CROPS


Collective Farming Among Vegetable Growers in the Coastal Region of California, by E. A. Stokdyk. (Jour. Farm Econ., v. 13, no. 4, Oct. 1931, p. 642-643)


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California Agricultural Extension Service Enterprise Efficiency Studies
Currently studies are conducted and published annually on:

Cauliflower: Los Angeles County
Tomatoes: Stanislaus County

In previous years some of these studies have been made in additional counties, and also in various counties for these additional enterprises:

Celery, Peas, Peppers and Paprika, Sweet Corn, Tomato Plant Growing. These studies have been conducted and supervised by L. W. Fluharty, A. Shultis, B. B. Burlingame, W. Sullivan and A. D. Reed, assisted by the various county farm advisers.
FIELD CROPS


Probable Economic Effects of the AAA Wheat Program, by M. R. Benedict. (American Cooperation, 1938, p. 200-212)


Also issued in 1933, by W. Sullivan.


Required Price of Hops to Adequately Reimburse California Growers (Not including a Figure for Profits) By R. L. Adams. Berkeley, Univ. of Calif., Col. of Agr., 1942. 11p. Processed.


- 70 -


Also issued annually, 1931-1942, 1945-1949 as Marketing Kern County Irish Potatoes. Various authors: J. B. Schneider, M. A. Lindsay, G. B. Alcorn, H. W. Longfellow, R. M. Barnes, D. N. Wright and R. C. Rock.


California Agricultural Extension Service Enterprise Efficiency Studies Currently studies are conducted and published annually on:

Alfalfa: Los Angeles County
Alfalfa Seed: Imperial County
Beans (Red Kidney): San Joaquin County
Beans (Lima): Ventura County
Irrigated Pasture: Colusa County, Sonoma County.
Rice: Colusa County
Sugar Beets: Imperial County.

In previous years some of these studies have been made in additional counties, and also in various counties for those additional enterprises:


These studies have been conducted and supervised by L. W. Fluharty, A. Shultis, B. B. Burlingame, W. Sullivan and A. D. Reed, assisted by the various county farm advisers.

HONEY AND BEES


California Agricultural Extension Service Enterprise Efficiency Studies

In previous years, 1928-1934 studies were issued annually in Orange County on Honey. These studies have been conducted and supervised by L. W. Fluharty, A. Shultis, E. B. Burlingame, W. Sullivan, assisted by the various county farm advisers.

LIVESTOCK AND WOOL


Commonwealth Club of California

The Crisis in Meat; Progress Report of War Service Committee on Food. (Transactions, v. 37, no. 6, Dec. 7, 1942, p. 197-208)

H. E. Erdman, Chairman of committee


Also issued for 1946 and 1947.

Also an edition of 1941.


Western Livestock Marketing Research Technical Committee
E. C. Voorhies, a member of the Technical Committee and of the Policy Committee.

California Agricultural Extension Service Enterprise Efficiency Studies
Currently studies are conducted and published annually on:

Beef: Lassen County, Monterey County, Scott Valley

In previous years some of these studies have been made in additional counties, and also in various counties for these additional enterprises:

Sheep, Swine

These studies have been conducted and supervised by L. W. Fluharty, A. Shultis, B. B. Burlingame, W. Sullivan and A. D. Reed, assisted by the various county farm advisers.