Selected Recent Research Publications in Agricultural Economics Issued by the United States Department of Agriculture and Cooperatively by the State Colleges [1]

ANDERSON, DALE L., AND SHAFFER, PAUL F. IMPROVED HANDLING OF FROZEN FOODS IN RETAIL STORES. U. S. Dept. Agr. Mktg. Res. Rept. 104, 24 pp., illus. (RMA)

Improved methods of receiving, price-marking, and displaying frozen food, as well as improved equipment, resulted in increases of 31, 36, and 44 percent in labor productivity over conventional methods and equipment. With improved methods the total labor requirements were 3.0 to 3.7 minutes per carton handled.

BIERMAN, RUSSELL W. U. S. MORTGAGED FARMS, 1950. ESTIMATES BY RATIO OF DEBT TO VALUE. U. S. Dept. Agr., Agr. Res. Serv., ARS 43–13, 54 pp., illus. August 1955.

In 1950, nearly 30 percent of all farms in the United States were mortgaged. The average mortgaged farm contained a little more than 200 acres. Its land and buildings were valued at nearly $15,000, and it had a mortgage of a little less than $4,000. These farms were mortgaged for about a fourth of the value of their land and buildings.

BROADBENT, EMER E., AND ZAWADZKI, MICHAL I. EGG SUPPLY AND MARKETING IN THE NORTH CENTRAL REGION. Ill. Agr. Expt. Sta. Bull. 591, 40 pp., illus. (Agr. Expt. Stas. of Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, S. Dak., and Wis. and USDA cooperating.) (North Central Reg. Pub. 61.) (RMA)

The North Central Region produced more than half the eggs of the United States in 1951. Three-fourths of the eggs sold came from flocks of 100 to 300 hens, and the average size of flock was just over 100. Local produce stations bought about 40 percent of the eggs sold by producers. Prices varied considerably, both by geography and by basis of payment.

BUTLER, CHARLES P. THE BUSINESS SIDE OF PRODUCING BEEF CALVES IN THE PIEDMONT AREA OF SOUTH CAROLINA. S. C. Agr. Expt. Sta. Bull. 426, 50 pp., illus. July 1955. (Agr. Res. Serv. cooperating.)

Many medium-sized farms in the Piedmont are not organized and operated in a way that permits full utilization of their resources. Their operators can add to their returns by improving the farm organization and production practices. Producing beef calves is an alternative that would make fuller and more profitable use of resources but considerable increases in investment and operating capital would be necessary. With cotton at 35 cents a pound and oats at 80 cents a bushel, prices of beef cattle would have to be $15 or more per 100 pounds if the addition of a beef cow-calf enterprise to a representative cotton-small grain system on a medium-sized farm is to be profitable.

DACHTLER, WILLIAM C., MCDONALD, EILEEN M., PHILLIPS, RICHARD, AND HARRINGTON, DAVID N. COSTS OF STORING RESERVE STOCKS OF CORN IN COUNTRY ELEVATORS, AT BIN SITES, AND ON FARMS. U. S. Dept. Agr. Mktg. Res. Rept. 93, 60 pp., illus. June 1955.

Elevator storage costs decrease more rapidly with increasing volume than do bin-site storage costs. Reduction of storage costs by increasing the average length of storage is more pronounced in bin-site storage than in elevator storage. For long storage, bin sites have a cost advantage, but for short periods, annual costs are lower in elevators. Storage on farm may not be economical beyond the first year but good management practices may justify it.

FARSTAD, EDMUND, COX, C. B., KRAMER, R. C., AND PHILLIPS, C. D. RETAILING MEAT IN THE NORTH CENTRAL STATES. Purdue Univ., Agr. Expt. Sta., Sta. Bull. 622, 32 pp., illus. March 1955. (Agr. Expt. Stas. of Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, S. Dak., and Wis. and USDA cooperating.) (North Central Reg. Pub. 55.)

Seventy-eight percent of the retail meat stores in the North Central States were independent stores, 7 percent were chain stores, and 15 percent were voluntary chains. More than half the stores sold less than $750 of meat a week; less than a tenth had sales of $2,500 or more.

GARLOCK, F. L., JONES, L. A. BIERMAN, R. W., TAYLOR, M. M., AND SCOFIELD, W. H., UNDER THE DIRECTION OF NORMAN J. WALL. THE BALANCE SHEET OF AGRICULTURE—1955. U. S. Dept. Agr., Agr. Inform. Bull. 145, 30 pp., illus. August 1955.

This is the 11th in a series of annual reports that carry forward the comparative balance sheet of agriculture first prepared for 1940. In 1954, farm assets rose slightly after declining in 1952 and 1953. On January 1, 1955, the value of such assets was $163.1 billion.

GARROTT, WILLIAM N. THE COMMERCIAL POTATO PEELING INDUSTRY. A SURVEY. U. S. Dept. Agr. Mktg. Res. Rept. 105, 13 pp., illus. (RMA)

Three methods of peeling potatoes were used by the plants studied: (1) Abrasive, (2) caustic, and (3) steam. Packages ranged from 12 ounces to 60 pounds capacity. Most of the containers were polyethylene bags, or paper bags that had been treated or that enclosed some impervious liner. Peeling losses varied widely. Losses from peeling with cautic solutions ranged from 5 to 28 percent; from abrasive peelers, 10 to 48 percent.

[1] Processed reports are indicated as such. All others are printed. State publications may be obtained from the issuing agencies of the respective States.

GERHARDT, FISK. USE OF FILM BOX LINERS TO EXTEND STORAGE LIFE OF PEARS AND APPLES. U. S. Dept. Agr. Cir. 965, 28 pp., illus. April 1955.

The marketing season of certain varieties of pears and Golden Delicious apples can be extended by using film box liners. Appearance, storage life, and dessert quality are maintained better by packing the fruit in films. Sealed liners are used for pears and unsealed ones for apples.

GOLDSBOROUGH, GEORGE H., AND ANDERSON, KENNETH E. POSSIBILITIES FOR EXPANDING THE MARKET FOR SUGARCANE BAGASSE. U. S. Dept. Agr. Mktg. Res. Rept. 95, 83 pp., illus. October 1955. (RMA)

Although bagasse has physical characteristics making it suitable for use in commercial products, only about 10 percent is being used commercially. This report evaluates the possibilities of further expanding the market for present and possible bagasse products.

GREAT PLAINS AGRICULTURAL COUNCIL, COMMITTEE ON TENURE, CREDIT, AND LAND VALUES, AND THE FARM FOUNDATION. CONFERENCE ON INTERMEDIATE CREDIT FOR AGRICULTURE, FORT COLLINS, COLORADO, JULY 19-21, 1954. PROCEEDINGS. 81 pp. 1955. (Great Plains Counc. Pub. 12.) (Processed.)

The general emphasis of the conference was on the need for intermediate-term credit, problems involved in the extension of intermediate credit, and opportunities for making intermediate credit available to farmers and ranchers under terms that would best satisfy their needs.

HARRIS, ROLAND G., AND LEE, W. A. EFFECTS OF METHODS OF PACKAGING APPLES ON COSTS AND RETURNS TO PENNSYLVANIA GROWERS, 1954. Pa. Agr. Expt. Sta. Progress Rept. 141, 6 pp., illus. (AMS cooperating.)

Purpose of the study was to develop cost and return information that would assist apple growers in choosing from among alternatives the most profitable apple-packing practices. Packing costs were lowest for the jumble pack in re-used field crates; most expensive, hand-bagged nine 5-pound mesh bags in a master carton.

HENDRICKSON, CLARENCE I. THE AUCTION MARKETING OF FLUE-CURED TOBACCO. A PRELIMINARY APPRAISAL. U. S. Dept. Agr. Mktg. Res. Rept. 101, 54 pp., illus.

Savings of more than 5 million dollars annually are possible by improving the tobacco auction system and reducing costs. These savings were found possible even though costs to growers selling tobacco at auction are not large and the system is generally satisfactory. The margin taken at the auction market is about 4 percent of the grower's returns.

JOHNSON, GLENN L., AND HARDIN, LOWELL S. ECONOMICS OF FORAGE EVALUATION. Indiana (Purdue) Agr. Expt. Sta. Bull. 623, 20 pp., illus. April 1955. (Agr. Expt. Stas. of Ill., Iowa, Kans, Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, S. Dak., Wis.; U. S. Dept. Agr., and Farm Foundation cooperating.) (North Central Reg. Pub. 48.)

Develops a framework for economic evaluation of forage which suggests that the value be: (1) Not less than the highest net value realizable by disposal—salvage value; (2) not more than cost of acquiring by the most economical means available additional forage units or their equivalent—acquisition cost; (3) the value through use—marginal value product—if this value falls between the limits of 1 and 2 above.

LEWIS, WILLIAM E. TEMPERATURES OF PRODUCE IN RETAIL-STORE TYPE DISPLAY CASES. U. S. Dept. Agr., Agr. Mktg. Serv., AMS–69, 16 pp., illus.

Temperatures of produce displayed continuously without refrigeration averaged 70° F., or 6 degrees below the display-room air temperature. Temperature differences between top and bottom layers were negligible. Produce displayed without refrigeration during the day and stored overnight in 32° and 40° F. "walk-in" coolers averaged 46° and 51°, respectively, for a 24-hour period. Temperatures in top and bottom layers were approximately the same. Three other methods of display were studied.

MCLURE, JOE H. PRICE QUOTATIONS FOR EVEN-RUNNING LOTS OF COTTON. U. S. Dept. Agr., Agr. Mktg. Serv., AMS–75, 19 pp., illus.

Purpose of study was to measure the extent to which the Department's cotton price quotations for even-running lots of cotton delivered to Group 201 mill points conformed to actual prices paid by cotton mills and to inquire into possibilities of improving the quotations to reflect more accurately the actual prices paid by mills.

METZLER, WILLIAM H. MIGRATORY FARM WORKERS IN THE ATLANTIC COAST STREAM. A STUDY IN THE BELLE GLADE AREA OF FLORIDA. U. S. Dept. Agr. Cir. 966, 79 pp., illus. January 1955.

Movement of workers from harvest to harvest, along the Atlantic Coast, has been more systematized than that of workers in other migratory labor areas. A study of employment and systematized movement of workers in the Atlantic coast stream, disclosed that most of these migrants came originally from Southeastern States other than Florida, were comparatively young, with small households, and were predominantly rural. In the 12 months before the interviews, they averaged 182 days of employment. Earnings per worker averaged $908.

MIXON, JAMES A., AND ALLEGRI, THEODORE H. SOME IMPROVED METHODS OF HANDLING FROZEN FOOD IN WHOLESALE PLANTS. U. S. Dept. Agr. Mktg. Res. Rept. 107, 44 pp., illus. (RMA)

Some wholesale frozen food distributors can reduce their handling costs 15 to 28 percent by adopting improved methods developed through marketing research. In a plant handling 2,000 cases of frozen food daily, substituting a power conveyor and straddle-type fork truck operation for a 4-wheel hand truck and roller conveyor system resulted in a saving of about 9 cents an order, or 15 percent of the cost of the former method.

MOORE, E. HOWARD, AND BARLOWE, RALEIGH. EFFECTS OF SUBURBANIZATION UPON RURAL LAND USE. Mich. Agr. Expt. Sta. Tech. Bull. 253, 36 pp., illus. September 1955. (Agr. Res. Serv. cooperating.)

Reports a study of the effects of suburbanization on rural land use patterns, property values, and local attitudes toward community services, in two segments of the suburban area that surrounds Lansing, Mich.

NORTH CENTRAL FARM MANAGEMENT RESEARCH COMMITTEE, SUBCOMMITTEE ON ECONOMICS OF FERTILIZER USE. PROFITABLE USE OF FERTILIZER IN THE MIDWEST. Wis. Agr. Expt. Sta. Bull. 508, 38 pp., illus. December 1954. (Agr. Expt. Stas. of Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, S. Dak.; Agr. Res. Serv., U. S. D. A., and Farm Foundation cooperating.) (North Central Reg. Pub. 54.)

Farmers need more localized testing of soil fertility and response of crops to varying rates of application of fertilizer. Then the additional yields associated with larger rates of application need to be translated into added dollars of net returns from the increased use of fertilizer under different price and cost conditions as outlined here.

PETERS, C. W. COSTS OF MARKETING CAROLINA PEACHES IN 1954. U. S. Dept. Agr. Mktg. Res. Rept. 103, 22 pp., illus. (RMA)

Peach-packing operations were studied in 14 plants in North and South Carolina. Major emphasis was on packing costs, but transportation and selling charges were also studied.

PURCELL, JOSEPH C. PROSPECTIVE DEMAND FOR MEAT AND LIVESTOCK IN THE SOUTH. U. S. Dept. Agr. Mktg. Res. Rept. 99, 78 pp., illus.

Per capita consumption of meat in the South is expected to increase about 28 percent by 1975. Under conditions of full employment this would mean a rise from an estimated 122 pounds in 1950 to 156 pounds in 1975. Aggregate demand for meat in the South is expected to rise from an estimated 3.8 billion pounds in 1950 to 6.6 billion pounds by 1975.

PURCELL, J. C., AND PENNY, N. M. COST OF PROCESSING AND DISTRIBUTING MILK IN THE SOUTH. Southern Cooperative Series, Bull. 45, 40 pp., illus. June 1955. (RMA)

Analyzes costs of processing milk in 16 fluid milk plants, and, in a more limited way, procurement and distribution costs in the same plants.

RICHEY, PERRY S., JOHNSON, THEW D., COTNER, J. B., AND FAISON, O. M. GRAIN MARKETING FACILITIES IN THE COASTAL PLAINS AREA OF NORTH CAROLINA. U. S. Dept. Agr. Mktg. Res. Rept. 100, 39 pp., illus. August 1955. (N. C. Dept. Agr. and Agr. Mktg. Serv. cooperating.) (RMA)

Corn is stored on farms under conditions that promote rapid infestation and damage by insects and damage by moisture in wet harvest years. Storage space is available to care properly for 5 million bushels, leaving 30 million bushels stored in facilities that do not protect the corn from serious damage. Efficiency of off-farm facilities for handling grain has increased greatly since 1948. Six locations for low-cost grain assembly and shipping elevators are suggested.

RYGG, G. L., AND GETTY, M. R. SEASONAL CHANGES IN ARIZONA AND CALIFORNIA GRAPEFRUIT. U. S. Dept. Agr. Tech. Bull. 1130, 44 pp., illus.

Gives results of research on seasonal changes in Marsh (seedless) grapefruit.

SMITH, HUGH M., CLEMENT, WENDELL E., HOOFNAGLE, WILLIAM S. MERCHANDISING WINTER PEARS IN RETAIL FOOD STORES. U. S. Dept. Agr. Mktg. Res. Rept. 102, 17 pp., illus. September 1955. (RMA)

A test of four methods of displaying winter pears indicated that retailers can stimulate sales by displaying combinations of medium-sized and large pears and medium-sized and small pears. Sales may be increased when displays include pears both in packages and in bulk.

STOCKER, FREDERICK D. THE IMPACT OF FEDERAL INCOME TAXES ON FARM PEOPLE. U. S. Dept. Agr., Agr. Res. Serv., ARS 43–11, 32 pp., illus. July 1955.

Federal income tax payments of farm people are assumed to have been negligible before 1941. Since then the increase has been large. The sharpest rise occurred between 1941 and 1948. After 1948, payments fell substantially until the outbreak of the Korean action, when they increased. In 1954, the amounts paid on 1953 income totaled $1,430 million, the largest ever recorded.

TAYLOR, MARLOWE M. FARM INVESTMENTS OF LIFE INSURANCE COMPANIES. U. S. Dept. Agr., Agr. Res. Serv., ARS 43–20, 15 pp., illus. September 1955. (Processed.)

At the beginning of 1955, farm-mortgage debt held by life insurance companies totaled $2,051 million, the highest amount held since 1931. The increase in 1954 was 8 percent as compared with 10 percent in 1953.

Statistical Compilations

UNITED STATES AGRICULTURAL MARKETING SERVICE. PRODUCTION OF MANUFACTURED DAIRY PRODUCTS, 1954. U. S. Dept. Agr. Statis. Bull. 167, 46 pp. October 1955.

UNITED STATES AGRICULTURAL MARKETING SERVICE. SUPPLEMENT FOR 1955 TO STATISTICS ON COTTON AND RELATED DATA, U. S. D. A. STATISTICAL BULLETIN NO. 99. U. S. Dept. Agr. 108 pp.

WALSH, LILLIAN V. FRESH FRUIT AND VEGETABLE PRICES, 1954. U. S. Dept. Agr. Statis. Bull. 166, 45 pp. September 1955.

AGRICULTURAL ECONOMICS
RESEARCH

Is published quarterly by the Agricultural Marketing Service, U. S. Department of Agriculture. The printing of this publication has been approved by the Director of the Bureau of the Budget, Feb. 9, 1955.

For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. 20 cents a single copy, 75 cents a year, domestic, $1 foreign.