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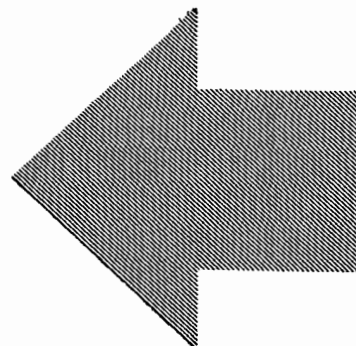
**FARMERS'  
EXPENDITURES IN 1955**

*Cooperative Survey*

VOLUME III PART 11

UNITED STATES GOVERNMENT PRINTING OFFICE 1956

**FAMILY LIVING EXPENSES • FARM  
PRODUCTION EXPENSES**





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## PREFACE

There has long been need for the comprehensive information on farmers' expenditures made available in this report. The rapidly changing character of agriculture in the post-World War II period has put a severe strain on the statistical resources available to measure these changes. Large agricultural programs have been undertaken, many of which derive their meaning from or are related to certain statistical measurements such as parity prices for farm products and the level of farm income. It is essential that changes in these statistical indicators be accurately portrayed in view of the large stakes involved for farmers, the government, and the people, generally.

The Department of Agriculture has long been aware that these measurements could be improved but resources for doing so had not been in hand previously. For example, the Parity Index is based on patterns of farmers' expenditures in the prewar period 1937-41, largely because information for recent years was lacking. This survey will provide the raw materials for up-dating to a recent period the weights used in this important index. Moreover, the estimates of farm income will be substantially improved by the recent information on farmers' expenses for the wide variety of goods and services agriculture requires today in producing food and fiber for a growing economy.

The tables presented in this report also provide the raw materials for a better measure of the total farm market than has been available since the beginning of World War II. The several Censuses of Agriculture which have been conducted in the last 15 years could necessarily provide only part of this kind of information essential to those who sell to farmers.

This joint survey represents a large cooperative undertaking which brings together the efforts of two major government statistical organizations. The survey contributes materially to the statistical programs of both agencies. A measure of the cooperative spirit of the undertaking is reflected in the early publication of the results.

Plans for the survey and this cooperative report were made by Ray Hurley of the Bureau of the Census and Nathan M. Kofsky, Earl E. Houseman, B. Ralph Stauber, and Emerson Brooks of the Agricultural Marketing Service. Principal responsibility for the project was carried by Albert R. Kendall, Bruno A. Schiro, and Ward Henderson of the Agricultural Marketing Service. Technical assistance and review in the planning, field work, and the summarization stages of the project were provided by Ralph G. Altman, Rex G. Butler, Frederic A. Coffey, Q. Francis Dallavalle, Ernest W. Grove, Roger F. Hale, Robert H. Masucci, Marvin W. Towne, and Lyman W. Wallin of the Agricultural Marketing Service; and Margaret Brew, Elizabeth Davenport, Minnie B. McIntosh, and Jean L. Pennock of the Agricultural Research Service. Responsibility for machine operations and tabulations was carried by Joseph F. Daly, Orville M. Slye, and Evelyn Jett of the Bureau of the Census.

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# UNITED STATES CENSUS OF AGRICULTURE: 1954

## REPORTS

**Volume I.—Counties and State Economic Areas.** Statistics for counties include number of farms, acreage, value, and farm operators; farms by color and tenure of operator; facilities and equipment; use of commercial fertilizer; farm labor; farm expenditures; livestock and livestock products; specified crops harvested; farms classified by type of farm and by economic class; and value of products sold by source.

Data for State economic areas include farms and farm characteristics by tenure of operator, by type of farm, and by economic class. Volume I is published in 33 parts.

**Volume II.—General Report.** Statistics by Subjects, United States Census of Agriculture, 1954. Summary data and analyses of the data for States, for Geographic Divisions, and for the United States by subjects.

### Volume III.—Special Reports

**Part 1.—Multiple-Unit Operations.** This report will be similar to Part 2 of Volume V of the reports for the 1950 Census of Agriculture. It will present statistics for approximately 900 counties and State economic areas in 12 Southern States and Missouri for the number and characteristics of multiple-unit operations and farms in multiple units.

**Part 2.—Ranking Agricultural Counties.** This special report will present statistics for selected items of inventory and agricultural production for the leading counties in the United States.

**Part 3.—Alaska, Hawaii, Puerto Rico, District of Columbia, and U. S. Possessions.** These areas were not included in the 1954 Census of Agriculture. The available current data from various Government sources will be compiled and published in this report.

**Part 4.—Agriculture, 1954, a Graphic Summary.** This report will present graphically some of the significant facts regarding agriculture and agricultural production as revealed by the 1954 Census of Agriculture.

**Part 5.—Farm-Mortgage Debt.** This will be a cooperative study by the Agricultural Research Service of the U. S. Department of Agriculture and the Bureau of the Census. It will present, by States, data based on the 1954 Census of Agriculture and a special mail survey conducted in January 1956, on the number of mortgaged farms, the amount of mortgage debt, and the amount of debt held by principal lending agencies.

**Part 6.—Irrigation in Humid Areas.** This cooperative report by the Agricultural Research Service of the U. S. Department of Agriculture and the Bureau of the Census will present data obtained by a mail survey of operators of irrigated farms in 28 States on the source of water, method of applying water, number of pumps used, acres of crops irrigated in 1954 and 1955, the number of times each crop was irrigated, and the cost of irrigation equipment and the irrigation system.

**Part 7.—Popular Report of the 1954 Census of Agriculture.** This report is planned to be a general, easy-to-read publication for the general public on the status and broad characteristics of United States agriculture. It will seek to delineate such aspects of agriculture as the geographic distribution and differences by size of farm for such items as farm acreage, principal crops, and important kinds of livestock, farm facilities, farm equipment, use of fertilizer, soil conservation practices, farm tenure, and farm income.

**Part 8.—Size of Operation by Type of Farm.** This will be a cooperative special report to be prepared in cooperation with the Agricultural Research Service of the U. S. Department of Agri-

culture. This report will contain data for 119 economic sub-regions, (essentially general type-of-farming areas) showing the general characteristics for each type of farm by economic class. It will provide data for a current analysis of the differences that exist among groups of farms of the same type. It will furnish statistical basis for a realistic examination of production of such commodities as wheat, cotton, and dairy products in connection with actual or proposed governmental policies and programs.

**Part 9.—Farmers and Farm Production in the United States.** The purpose of this report is to present an analysis of the characteristics of farmers and farm production for the most important types of farms as shown by data for the 1954 Census of Agriculture. The analysis deals with the relative importance, pattern of resource use, some measures of efficiency, and problems of adjustment and change for the principal types of farms. The report was prepared in cooperation with the Agricultural Research Service of the U. S. Department of Agriculture.

The list of chapters (published separately only) and title for each chapter are as follows:

Chapter I—*Wheat Producers and Wheat Production*

II—*Cotton Producers and Cotton Production*

III—*Tobacco and Peanut Producers and Production*

IV—*Poultry Producers and Poultry Production*

V—*Dairy Producers and Dairy Production*

VI—*Western Stock Ranches and Livestock Farms*

VII—*Cash-Grain and Livestock Producers in the Corn Belt*

VIII—*Part-Time Farming*

IX—*Agricultural Producers and Production in the United States—A General View*

**Part 10.—Use of Fertilizer and Lime.** The purpose of this report is to present in one publication most of the detailed data compiled for the 1954 Census of Agriculture regarding the use of fertilizer and lime. The report presents data for counties, State economic areas, and generalized type-of-farming areas regarding the quantity used, acreage on which used, and expenditures for fertilizer and lime. The Agricultural Research Service cooperated with the Bureau of the Census in the preparation of this report.

**Part 11.—Farmers' Expenditures.** This report presents detailed data on expenditures for a large number of items used for farm production in 1955 and on the living expenditures of farm operator's families. The data were collected and compiled cooperatively by the Agricultural Marketing Service of the U. S. Department of Agriculture and the Bureau of the Census.

**Part 12.—Methods and Procedures.** This report contains an outline and a description of the methods and procedures used in taking and compiling the 1954 Census of Agriculture.

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# FARMERS' EXPENDITURES, 1955

**Summary.**—Summary tabulations of the Survey of Farmers' Expenditures in 1955 indicate that total family living expenditures of farm-operator families averaged \$3,309 in 1955. The largest expenditure was for housing (including home furnishings and household operation) which averaged \$868; the second largest was for food, which averaged \$833. The food outlays represented purchased food only, excluding the value of food consumed on the farm where grown. Clothing expenditures, at \$427, and transportation, at \$378, ranked third and fourth, respectively. Farm family expenditures for medical care averaged \$240 in 1955. All other outlays combined, including insurance, recreation, and cash gifts, amounted to \$563, or 17 percent of the total.

Expenditures for goods and services used in farm production (excluding share rent and landlords' expenses for insurance, taxes, interest, and improvements) averaged \$5,093 per farm. Among the outlays for goods and services used in farm production, feed for livestock and poultry ranked highest, with expenditures averaging \$907 per farm in 1955. Other major outlays, in order of their importance, were: operating costs of vehicles and machinery, including petroleum products (\$691); purchase of motor vehicles and machinery (\$576); purchase of livestock and poultry (\$555); cash wages (\$548); and fertilizer and lime (\$292). The foregoing items accounted for 70 percent of all expenditures for production purposes. Total marketing expenses, for which rather detailed information was obtained for the first time in the 1955 survey, averaged \$238 per farm. Such outlays include the cost of containers, freight, and commissions.

**Purpose of the survey.**—The major purposes of the survey were threefold: (1) To provide a set of weights reflecting expenditure patterns of a recent year for use in calculating the Parity Index, (2) to improve the basis for estimating farm operators' production expenses, and (3) to provide data on many farm expenditures not available from the 1954 Census of Agriculture or other periodic surveys. The Parity Index and Farm Production Expenses are published regularly by the Agricultural Marketing Service.

The Parity Index—an index of prices paid by farmers for commodities used in living and production, including interest, taxes, and farm wage rates—is the yardstick used in the calculation of parity prices for farm products. Currently, the index is based on weights reflecting farmers' expenditure patterns in 1937-41. The information obtained in this survey will provide the means for bringing up to date the weighting pattern for the Parity Index, and thus will provide a more accurate measure of changes in prices paid by farmers and in the parity prices of farm products.

Information on farmers' expenditures for production items was also needed as a basis for revising and improving estimates of farm production expenses and of net farm income. For some important items of production expenses, current estimates are based mostly on limited surveys dating back to the mid-1930's. Technological changes in production have been a striking feature of agriculture in the last 15 years. The increasing dependence on the nonfarm sector of the economy for goods and services essential to farm production has resulted in a relatively inflexible high cash-cost structure in agriculture about which there was insufficient detailed information.

These were the main reasons for undertaking the survey. But it was also clear that the information to be obtained would be of even wider interest and use. For example, the survey would

provide the only comprehensive information on farm-family living and production expenditure patterns in a recent period. It thus offered a means of appraising farm-family levels of living, and the cost structure in production, and an opportunity to study some of the major factors determining them. The data obtained, by family and farm characteristics, will be especially useful in evaluating variations in levels of farm-family living and the cost structure in farm production associated with differences in these and other factors. Such analyses will be used to test and refine existing methods used in developing farm-operator level of living indexes. They will also be helpful in determining items for which information might be collected in the 1960 Census of Agriculture. Finally, the survey provided the first comprehensive information on the size of the post-war farm market.

**Agencies participating in the survey.**—The Department of Agriculture was responsible for initiating, planning, and conducting the survey. Personnel of the Department developed the sample design, prepared the survey forms and instructions to enumerators, and did the field work. They also prepared the plans for tabulation. The Bureau of the Census provided the basic lists from the 1954 Census of Agriculture from which the sample was drawn; furnished the personnel, except specialists for the editing and coding of questionnaires, and the machines necessary to make the tabulations of the survey data; and provided for printing the first results of the survey which are included in this publication.

Within the Department of Agriculture, the major responsibilities centered in the Agricultural Marketing Service, which regularly computes the Parity Index and develops the estimates of farm income. Significant contributions at all stages of the survey were also made by the staff of the Household Economics Research Branch of the Agricultural Research Service.

## LIMITATIONS OF DATA

**Expenditure data.**—In the interests of making the survey results available promptly, the data are shown in substantially the same detail as obtained from the respondents. The survey data have not yet been evaluated and checked against independent sources of information available from the 1954 Census of Agriculture and elsewhere. It is recognized that the error involved for some expenditure items which are purchased infrequently by farmers could be substantial. Thus, in many cases, the raw survey data may have to be adjusted to take account of other available information before they are integrated in the weighting system of the Parity Index and in farm production expense estimates.

Further, experience with earlier expenditure studies uncovered many difficult problems, one of the more important of which is the difficulty of respondents to accurately recall expenditures made during some previous period. Studies of the accuracy of reporting expenditures using the recall method have indicated underreporting, although the amount of underreporting among the items is not uniform and, in fact, occasional items have been found to be overreported. The amount of underreporting has also been found to be inversely related to the number of recall questions used in the interview. In this survey, the recall problem was minimized insofar as possible by designing the schedules to provide aids to recall. This is not to suggest that the recall bias is not reflected in the results of this survey but rather to point out that every effort was made to minimize the bias.

## FARMERS' EXPENDITURES

In the tables presented in this report, croppers in the South were included in the economic class of the multiple unit from which they were drawn. Such multiple units were largely in Classes I and II. Thus, the averages of the 3 major economic class groups, as presented, are somewhat different from what they would have been if share-cropper farms could have been better identified by their own economic class.

**Income data.**—While the major objective of the survey was to provide expenditure data, the survey also provided the opportunity to obtain much-needed information relating to off-farm income received by farm people. A considerable body of data was obtained on the sources and amounts of off-farm income received by farm operators and their families. These data are shown in detail in this publication. As an aid in forthcoming analytical work in appraising levels of living of farm people, information was also obtained on total family income, both from farm and off-farm sources.

In interpreting the family income distributions given in this report, it should be kept clearly in mind that serious limitations exist regarding the income totals which will need to be carefully appraised before they are used in analyses. For example, the net income reported as received from the operation of the farm was substantially understated, perhaps by one third or more.<sup>1</sup> This understatement is similar to that experienced in other surveys relating to farm income. However, the total off-farm income reported in the survey appears to be about in line with other estimates.

## METHODS OF SURVEY

In this survey, the respondent was asked questions about all the specific commodities and services he may have purchased in 1955. This resulted in necessarily lengthy questionnaires and interviews. However, naming of the commodities and services included in the questions acted as an aid in recalling the purchase either of the commodity or service mentioned, or a closely related one.

Because of the large number of expenditure items on which information was to be collected, it was considered impractical to include all items on a single questionnaire. Production and living expenses, therefore, were put on separate questionnaires and a different sample was used for each set of questionnaires. These two questionnaires were designated "A" and "B," respectively, and the corresponding samples were called the A and B samples.

The survey of farm production expenses (Schedule A) was intended to represent the money expenditures made or incurred in the operation of farms by all farm operators and their landlords in the United States during the calendar year 1955. Also included in the survey coverage were selected production expenditures incurred by farm operators while engaged in farm custom work for others. Expenditures made by farm operators while engaged in any business other than farm custom work or the business of "operating this place" were excluded.

The survey of family living expenses (Schedule B) was intended to determine the money expenditures made or incurred in 1955 for family living by farm operators and members of their "economic" families. (See definitions below.)

**The design of the sample.**—The 1954 Census of Agriculture was used as a basis for sampling, primarily because it provided an easy method for varying the sampling rate. This approach substantially increased the statistical efficiency of the Schedule A sample as compared with the use of a uniform sampling rate.

In the following table, the 1954 Census of Agriculture distribution of farms and value of all products sold are shown by economic class of farm. Since production expenses tend to be distributed by economic class in about the same way as value of sales, the advantages of sampling large farms at a heavier rate than small ones were incorporated in the sample design. On the other hand, many family living expenses tend to remain fairly constant regardless of the economic class of the farm. Accordingly, the Schedule B sample to obtain these expenses was drawn more nearly in proportion to the total number of farms. Therefore the overall sample design, based on information made available by the Agricultural Census, took into account both the economic class and the total number of farms. Furthermore, an enumerating pre-test in three areas showed that the selection of the names of farm operators from the Agricultural Census lists presented no undue farm identification difficulties in terms of time. In consequence, the sample was drawn from names of farm operators enumerated in the 1954 Census of Agriculture.

NUMBER OF FARMS AND VALUE OF PRODUCTS SOLD BY ECONOMIC CLASS, 1954 CENSUS OF AGRICULTURE

Economic class	Farms		All products sold	
	Number	Percent of total	Total value (000 dollars)	Percent of total
I.....	134,003	2.8	7,767,926	31.3
II.....	448,945	9.4	6,683,636	26.9
III.....	706,929	14.8	5,084,640	20.5
IV.....	811,965	17.0	3,008,511	12.1
V.....	763,348	16.0	1,413,660	5.7
VI.....	462,427	9.6	349,518	1.4
Part-time.....	574,575	12.0	355,695	1.5
Residential.....	878,136	18.3	63,851	0.3
Abnormal.....	2,693	0.1	85,133	0.3
Total.....	4,783,021	100.0	24,813,570	100.0

Source: U. S. Bureau of the Census, *U. S. Census of Agriculture: 1954*; Vol. II, General Report, Chapter XI, Table 2, p. 1154.

In all, 11,869 farms were selected in 306 primary sampling units—7,378 and 4,491 for the A and B samples, respectively. For multiple-unit operations in the South, a sample of heads of such operations was selected, so the above numbers do not include croppers on these units. Multiple-unit operators were so designated on the lists sent to field personnel. The interviewers were instructed to list all subunits of the designated multiple units and to fill in schedules for a subsample of the subunits, objectively chosen, not counting the "home farm" as a subunit.

The sample was designed to provide estimates for eight geographic regions, although no regional estimates are presented in this report. These regions are coextensive with the nine Census Divisions except that the New England and Middle Atlantic States, including Maryland and Delaware, were combined to form the Northeastern region. The allocation of the sample to these eight regions represented a compromise between what was considered the most efficient allocation for national statistics and the most efficient allocation for regional statistics.

The A and B samples were allocated within each region to three economic groups of farms, which were formed by combining the nine economic classes used in the Census of Agriculture as follows:

- Group I—Economic Classes I and II
- Group II—Economic Classes III, IV, and V
- Group III—Economic Classes VI, VII, VIII, and IX

<sup>1</sup> Income received from the operation of the farm was obtained by asking the following question on the family living questionnaire. "After taking into account the production expenses and the wear and tear on buildings, equipment and machinery, about how much was the net money income from this farm in 1955 (before payment of income taxes and living expenses)?"



The A sample was allocated to the three economic groups approximately in proportion to value of sales whereas the B sample was distributed more nearly in proportion to number of farms. In both cases, the objective was to obtain optimum allocation in the sense of minimum variance. The number of farms to be selected from an economic group for both samples combined was divided by the corresponding Census number of farms to obtain an overall sampling rate for the group. Hence, in each region there were three overall sampling rates, one for each of the three economic groups of farms.

The number of primary sampling units used in the sample was determined primarily by the work (the coverage of about 40 farms) that could be accomplished by one interviewer in the time allotted for the field work. The use of only one interviewer to a primary sampling area was desirable in view of the investment in the training of interviewers and the goal of minimum sampling error. In essence, one primary sampling unit (usually a single county) was selected from a stratum with a probability proportional to size. The strata were approximately equal in size, and each stratum, formed on the basis of type of farming, was usually comprised of geographically contiguous counties. The sampling rate applied to a particular economic group in a county drawn in the sample was equal to the overall sampling rate for that economic group divided by the probability the county had of being drawn. Farms selected by the application of this rate were assigned in the appropriate proportions to the A and B samples.

**Identifying farmers to be interviewed.**—If a farm operator drawn from the 1954 Census of Agriculture continued to operate in 1955 any part of the farm he operated in 1954, he was eligible for inclusion in the survey regardless of the size of his 1955 operations. In the event that the 1954 operator did not operate in 1955 any part of the farm he operated in 1954, the schedules provided spaces to record who the 1955 operator was and his 1954 status. In order to avoid double sampling, the "new" operator(s) was eligible for inclusion in the survey only if he did not farm at all in 1954, or if he did not operate in 1955 any part of the farm he operated in 1954. By use of this procedure the survey reflected consolidations and split-ups of farms, permitted some new operators to fall into the sample, and at the same time prevented any one operator from having two chances of being drawn into the sample. Omitted from the sample were 1955 farms consisting entirely of tracts of land not farmed in 1954 and operated in 1955 by someone who did not operate a farm in 1954. This omission was not considered to be serious.

With respect to the family living sample, a schedule was obtained for the partner of a sample operator as well as for the sample operator, if the partner did not operate a farm separate from the partnership farm, and if his dwelling was located on the partnership farm.

**Completeness of the field work.**—Among the 11,869 farm operators selected, the interviewers were successful in identifying all but 89. They classified 646 as "ineligible," which was considerably more than expected and reflected some error in the classification of "borderline" farms. By procedural rules, 186 farm operators were "ineligible" because they were located more than 25 miles outside the sample county during the entire field-work period of the survey. Of the remaining 10,948 eligible farms, questionnaires were enumerated for 10,028. In addition, there were 466 completed questionnaires for subunits of multiple landlord-cropper units and 69 completed B questionnaires for eligible partners giving a total of 10,563 usable questionnaires. Of these, 6,578 covered production expenditures and 3,985 were for family living expenses.

**Expansion of the sample.**—The estimates contained in this report correspond, in concept and farm coverage, to the population of farms actually enumerated in the 1954 Census of Agriculture with an allowance for the downward trend in number of

farms but with no adjustments for underenumeration of farms in the 1954 Census of Agriculture.

The classification of farms by economic groups used in this publication is in terms of their 1954 status as determined in the 1954 Census of Agriculture. Information necessary to determine economic class in 1955 was not collected in the survey. Hence, a farmer in Economic Class III in 1954, for example, might have been in Class II with respect to his 1955 operations. Another limitation in the interpretation of the data is the failure to ascertain the economic class of subunit farms in multiple-unit operations. For purposes of weighting they belonged in the same groups as their respective home farms and were left in such groups when the tables in this report were prepared.

**Collection procedures.**—The survey was conducted during February and March 1956. All of the information was obtained by direct interviews with the farm operator and the housewife. Local interviewers were hired and trained under the supervision of the State Statisticians of the Agricultural Marketing Service. State supervisors were trained at 4 regional training schools; interviewers were in turn trained by State supervisors.

The average interview time for the A Schedule was about 2½ hours; for the B schedule, about 3 hours. Interviewers asked for expenditures (and income) for the calendar year 1955, and recorded this information for "the place" or the "family" as it existed during the year. Thus, when a person was a member of the family for only part of the year 1955, income and expenditure for that person were recorded only for that part of the year during which he was a family member. Again, if an operator extended his operations to newly acquired acreage, say at mid-year, the expenditures recorded were restricted to those made by the current operator and did not include any expenditures on the new acreage made by its former owner.

Expenditures were reported in detail under 15 major groups of goods and services for the family living questionnaire, and under 27 groups for the production questionnaire. Space was provided for reporting the amount spent for each item or group of related items. Where experience had indicated that the best estimate was secured by obtaining the number bought and the unit price paid, space also was provided to report these data on family living items. Price and quantity were obtained for most of the production expense items. On the production questionnaire, expenditures usually shared by landlords and tenants were reported separately for the landlord. Expenditures ordinarily made by landlords and not shared by tenants were collected from a subsample of the reported landlords, and recorded on a special questionnaire for landlords. The subsample consisted of the first two landlords (if more than two for each farm) for a subsample of farms in the sample for production expenses. A total of 671 usable special landlord questionnaires were obtained in the survey. Information obtained from this questionnaire is not included in the tables presented in this report.

**Expenditures recorded.**—The expenditures recorded included the total money expense paid or incurred in 1955, whether or not all payment was made during the year. Financing charges and interest on installment purchases, delivery and installation charges, and sales and excise taxes were included as part of the expenditure for the item to which they applied. Expenditures recorded and tabulated were net, after trade-in allowances, and, for a limited list of major consumer durable goods, and for autos, trucks, tractors and major farm machines, space was provided for recording these allowances separately.

The expenditure amounts recorded did not include estimates for the value of home-produced food or clothing, etc. However, materials or services purchased in 1955 for the production of such items were recorded as an expense.

Details of expenditures for the entire year 1955 were obtained for all goods and services except food purchased for consumption

at home. Past experience has demonstrated that it is not possible to obtain by the direct interview method reliable reports on the amounts spent on specific food items over periods longer than a week or two. Detailed weekly expenditures for items of food were obtained in the Survey of Household Food Consumption made in the spring of 1955 by the Department of Agriculture. Because of the availability of data from that detailed survey, considerable savings in interview time were achieved by excluding the weekly food check list from the family expenditure schedule. However, to obtain complete coverage of all expenditures for the families covered in the B Schedule an estimate of the annual amount spent for all food purchased for consumption at home was recorded.

**Other data recorded.**—In addition to expenditures, selected characteristics by which the data could be analyzed were collected on the questionnaires. On the production expense schedule, for example, information was obtained on such characteristics as color of operator, tenure, size and type of farm, value of products sold, and year farm was acquired. On the family living schedule, information was obtained on color, tenure, education of operator, age of operator and spouse, number of years married, farm residence, value of products sold, family income, family size, and family type. Subsequent publications will present family expenditures according to these characteristics, many of which have been found to be important factors affecting family expenditures.

**Separation of family and farm share.**—Several types of expenditure serve the dual purpose of family living and production. For example, automobiles and trucks are commonly used for both farm business purposes and for personal travel, and the cost of their purchase and operation cannot, therefore, be wholly assigned to either production costs or family living expenses. This is also true of expenditures for fuel, utilities, insurance, interest, taxes, and some other expenses. Such expenses are often billed to the farm as a whole. It is often difficult to separate them into expenditures for the farm dwelling, which for many purposes are considered to be living expenses, and expenditures for other farm structures and land, which are clearly production costs.

Various methods, described briefly below, were used to allocate such combined expenditures to either family living or production. Tables 1 and 2 present the family share of these expenses; tables 3 and 4 contain the production share only. Table 5, which summarizes production expenses for farms classified by type of farm, shows for such dual purpose expenditures only the total expenditure, including both family and business shares, since the tabulation procedure did not lend itself to segregating these shares by type of farm. For electricity and telephone services, table 5 shows only the farm business share.

For expenditures for coal, oil, water, electricity, etc., and for telephone, telegraph, and certain other items, the respondent was asked to estimate the breakdown as between farm production and living.

Expenditures for farm real estate taxes, fire insurance, mortgage interest, and for legal and settlement fees in connection with purchase or sale of farm real estate were allocated to living and production on the basis of the ratio of farm dwelling valuation to total farm valuation in 1955. Since no allocation was made of cash rent, the total was included under production expenses.

Outlays for purchase, upkeep, and running expenses for automobiles and trucks were allocated between farm and family on the basis of mileage driven for farm business, family business, and other business (including custom hauling). Family business was defined to include travel for shopping, visiting, church, school, clubs, recreation and vacations, and travelling to and from work for wages or salaries off the farm. Because it was necessary to obtain individual family estimates for transportation expense, this allocation was made on each family schedule. On the other hand, for production expenditures this allocation was made by

economic class within regions. Total expenditures for autos and motortrucks as derived from the A and the B schedules are shown separately in tables 6 and 7.

Expenditures made by landlords for taxes and insurance on real estate and personal property, interest, and for construction, repair, and maintenance of farm improvements are not included in any of the tables.

In the tables shown in this report item entries or class group components may not add to totals shown because no adjustments were made after rounding.

#### DEFINITIONS

The farm operator's economic family is that group of people who occupy the same dwelling and are related financially by pooling their income and drawing from the common fund for the things they buy. The group always included the operator, his wife and never-married children. In cases where other persons are present in the household, the payment of board or its equivalent was taken to indicate the financial independence of the person or persons covered by this payment. More particularly, the members of the farm operator's economic family are:

- (1) The operator.
- (2) The spouse and never-married children (including adoptions) living in the household.
- (3) Never-married children away at school, if dependent upon the farm operator for two-thirds of their support, but not a son or daughter away in the Armed Services or at work.
- (4) Other persons (except domestic and farm labor help) living in the household as their regular place of residence if they did not pay board or the equivalent or were dependent upon the farm operator.

Income was defined to include net money income received during 1955 from the sale of products of the farm, for work done, and for use of property, as well as money received from such other sources as unemployment compensation, relief, alimony, regular contributions from others, pensions, etc. It included money earned from wages and salaries or professional fees, interest received on money lent out, dividends on corporation stocks, rents, royalties, income from trust funds, and unincorporated business. For income from the farm, from other business, or from professional services, only net income—business receipts minus business expenses—was recorded.

Certain other kinds of receipts such as gifts received in single payment, inheritance, and lump sum receipts from insurance policies were not considered as regular income for purposes of this survey. Neither was money received from sale of personal assets (bonds, real estate, car, etc.) or money borrowed considered as regular income.

Income from "this farm" was not recorded for farms operated by hired managers unless the hired manager had farming operations of his own. Hired managers' earnings for operating the place were recorded as wages or salaries.

Other definitions and classifications employed in the production expenditure survey were essentially the same as those used in the 1954 Census of Agriculture for such concepts as farm, farm operator, farm size, tenure, value of sales, etc. However, for two items there are differences in classification. In the 1954 Census of Agriculture feed expenditures were reported as including expense for grinding and mixing. In this survey, grinding and mixing expenditures are included under machine hire and custom work. In the 1954 Census of Agriculture, expenditures for lime specifically excluded expenditures for gypsum; in this survey, gypsum and lime were reported in combination.

For a definition of a farm, economic class of farm, and type of farm, reference should be made to the Introduction of Volume II of the reports of the 1954 Census of Agriculture.