Appalachian Region

This special chapter contains tabulations for the Appalachian States which include Virginia, West Virginia, North Carolina, Kentucky, and Tennessee.

SUMMARY

The Appalachian Region has a large farm population pressing hard upon meager and inadequate natural resources with a correspondingly low value of products per farm and per person in the farm population. This Region included 18.7 percent of the entire farm population of 1940 in the United States; 17.3 percent of the farms; 10.2 percent of the gross value of farm products sold, traded, or used by the farm household; 7.8 percent of the land in farms; and 7.1 percent of the cropland harvested. The Region reported only 8.6 percent of the gross value of products sold or traded in the United States. Almost one-third of all the farms in the Region reported 1 to 9 acres of cropland harvested in 1939. This fact is extremely important to an understanding of the low value of products reported in the Region. On the other hand, some of the best farms in the United States are located in these States.

The Appalachian States had a high percentage of farms with a low value of products in 1939. Slightly more than three-fourths of all farms had less than $1,000 value of products; one-fourth had less than $250 gross value of products.

The lowest fourth of classified farms, those with less than $250 value of products, had 12 percent of the land, 8 percent of the cropland harvested, and 5 percent of the value of products.

The middle one-half, those with $250 to $999 value of products, reported having about one-half of the land, one-half of the cropland harvested, but less than two-fifths of the value of products for these States.

Farms with $1,000 and over value of products, although only one-fifth of the farms, had almost two-fifths of the land, almost one-half of the cropland harvested, and approximately three-fifths of the gross value of products.

VALUE OF PRODUCTS UNDER $250

The outstanding fact about the 256,777 farm operators reporting less than $250 gross value of products per farm was the small income resulting from the operators' efforts. The average gross value of products reported by these groups was $144, three-fourths of which was consumed by the farm household; approximately $36 worth of products were sold or traded in 1939.

One-half of the operators in these value groups did not report any work off the farm in 1939. Approximately one-fourth of the group reporting such work spent less than 100 days at this type of activity. Two-thirds of all operators with less than $250 value of products, therefore, did not report any work off the farm for pay or income or reported less than 100 days. Although no wage or salary figures are reported by the Census of Agriculture, the gross income per operator from work off the farm could not have been very much for the group reporting less than 100 days work off the farm. Four-fifths of the operators working off the farm reported they were performing nonfarm work.

One out of 16 operators in these value groups were men under 25 years of age; approximately one-fifth were 65 years of age and over and therefore probably farming less intensively than they did as young men. Some of these older men may be living in semiretirement and doing practically no farm work. The remaining three-fourths of the operators in these groups, however, should be fairly well established as farmers, particularly the group above 35 years of age.

The farm operators with less than $250 value of products had very limited resources. One-fourth had farms of less than 10 acres; another one-third had between 10 and 29 acres; about two-thirds had between 1 and 9 acres of cropland harvested in 1939.

One-fifth of the operators did not have any horses, mules, cattle, and/or hogs; three-fifths did not report any horses mules, or tractors. About 2 out of 5 did not milk any cows in 1939; less than one-half milked one cow. Hogs were reported by one-half of the farms.

About one-fourth of the operators had automobiles but very few had motortrucks or tractors. One-sixth of the dwellings were lighted by electricity; approximately 7 percent had telephones.

The land and buildings on these farms were valued at $1,318 per farm, about $33 per acre, or almost $5 per acre less than the average for all farms in these States. As the number of acres in these farms was small the value per acre was determined largely by the value of the buildings.

VALUE OF PRODUCTS—$250 TO $999

The middle one-half of the classified farms reported $250 to $999 gross value of products, with one-third to three-fifths of the products being consumed by the farm households.

More than three-fifths of the operators in these value groups did not report any work off the farm in 1939. More than two-fifths of the groups reporting such work spent less than 100 days working off the farm. Four-fifths of the 560,925 farm operators in this middle group, therefore, did not report any work off the farm or had less than 100 days, a proportion higher than for the groups with less than $250 value of products. Three-fourths of the 171,837 operators working off the farm reported they were engaged in nonfarm occupations. Only about 3 percent reported work on other farms as well as nonfarm work.

About three-fifths of the operators were between 35 and 65 years of age, with approximately the same proportion in each of the 3 age groups—35 to 44, 45 to 54, and 55 to 64 years. One out of 7 operators was 65 years of age or older, or about two-thirds of the proportion noted in the groups with less than $250 value of products. Only about 4 percent of the operators in the $250 to $999 value groups were under 25 years of age.

The farm operators with $250 to $999 gross value of products also had limited resources, although the resources available usually increased with an increase in the value of products. The average acreage for farms in this middle-value group was 71 acres. Almost one-third of the farms had less than 30 acres and one-sixth between 30 and 49 acres—a total of about one-half of the farms with less than 50 acres. More than one-fourth of the farms had between 1 and 9 acres from which crops were harvested in 1939.

More than one-fourth of the farms did not report any horses, mules, or tractors, but only 1 out of every 20 operators did not have any horses, mules, cattle, and/or hogs. Almost one-fifth did not report milking cows during any part of 1939; two-fifths milked 1 cow. One-fifth of the operators did not have any cattle on their farm April 1, 1940. Almost one-third were without any hogs on this date.

One-third of the operators had automobiles, about 1 out of 16 had a truck, but very few had a tractor. Less than one-fifth of the dwellings were lighted by electricity; more than one-tenth had telephones.

The land and buildings on these farms were valued at $2,218 per farm or about $32 per acre. The value per acre was practically the same as the corresponding value for the groups with less than $250 gross value of products.

VALUE OF PRODUCTS—$1,000 AND OVER

This group includes all farms with $1,000 or more gross value of products. The farms are so diverse with respect to size of farm, number of acres of cropland harvested, value of land and buildings, and many other items summarized for the two other groups that no summary will be attempted; only a few selected items will be mentioned.

Three-fourths of the operators in these value groups did not report any work off the farm in 1939. Almost three-fifths of the operators working off the farm reported less than 100 days spent at this type of activity in 1939. Five-sixths of all operators with $1,000 or more gross value of products, therefore, did not have any work off the farm for pay or income in 1939 or reported less than 100 days. Three-fourths of the operators working off the farm did nonfarm work.

These value groups, $1,000 and over, had a greater concentration of operators in the 35 to 64 year age groups than the value groups under $1,000 gross value of products. Very few operators were less than 25 years of age; about 1 out of 6 was under 35 years of age. More than 10 percent of the operators were 65 years of age and over.

Practically all of the farms reported one or more of the following classes of livestock—horses, mules, cattle, and/or hogs—but 1 out of 12 did not report any horses, mules, or tractors. Almost one-fifth did not milk any cows in 1939; more than one-fourth milked 1 cow. About one-fifth of the farms did not report any hogs on hand April 1, 1940.

Almost two-thirds of the operators had an automobile, less than one-fifth had a motortruck, and about 1 out of 7 had a tractor. One-third of the dwellings were lighted by electricity; more than one-fifth had telephones.

LAND RESOURCES

The average size farm in the Appalachian States, as revealed by the 1940 Agriculture Census, was 79 acres and the average value of products sold, traded, or used by the farm household, $772. Practically all of the farms (95.7 percent) had land from which they harvested crops; the average was 23 acres per farm, or 28 percent of all the land in farms. About $3,000 per farm was invested in land and buildings, an average of $38 per acre. The gross income from products was 26 percent of the investment in land and buildings. The average size farm in the United States was 174 acres and the average gross value of products $1,309. The average cropland harvested was 56 acres per farm reporting, or 30 percent of all the land in farms. About $5,500 per farm was invested in land and buildings, an average of $32 per acre. The gross value of products was one-fourth of the investment in land and buildings.

The average farm in the Region, thus, was less than one-half the size of the average for the entire United States, had about two-fifths as many acres of cropland harvested, had farm real estate valued at approximately one-half, and produced about three-fifths the value of products sold, traded, or used by the farm households in the United States in 1939.

The prevalence of low-income farms with low-income farm operators in this Region is further indicated by the concentration of farms in the low-value-of-products groups.

More than two-fifths of the classified farms in this Region had less than $400 value of products as compared with about one-third in the United States as a whole.

The farms in these value groups reported 12 percent of the total value of products in the Region; the same value groups for the United States reported 5 percent of the total value.

In the Appalachian Region, 1 out of every 4 acres of the farm land was included in the farms in the 3 lowest-value groups, $1 to $399. One out of every 8 acres of farm land of the United States was included in farms with this small value of products.

The Region has its larger and more productive farms but these farms are a smaller percentage of the total than in the United States as a whole; the Region, proportionately, has more farms than the United States in each of the value groups under $1,000 and fewer in each group with $1,000 or more gross value of products.

One-sixteenth of the farms in the Appalachian Region were in the $1,500 to $2,499 value groups and produced 16.6 percent of the value of products from 12 percent of the land in farms in this Region; one-ninth of the farms in the United States were in these same value groups and reported 17 percent of the value of products from 14.5 percent of the farm land.

The $4,000 to $9,999 value groups in the Appalachian Region included 1 percent of the farms, 5 percent of the land in farms, and about 10 percent of the value of products; the same value groups for the United States included 4 percent of the farms, 13 percent of the land, and 19 percent of the gross value of products.

For the Appalachian Region, as well as for the Nation as a whole, the average size of farm in each value group increased with the increase in the value of products. The average size farm in the $250 to $399 value group was 51 acres in the Appalachian Region and 74 acres for the United States. The comparable figures for the $600 to $749 value group were 79 and 114 acres, respectively. The acreages for the $4,000 to $5,999 value group were 266 and 442, respectively.

The size of the farms in each of the value groups in this Region, however, varied widely within each value group. Although the average farm had 32 acres in the $1 to $99 value group, more than one-third had less than 10 acres, more than two-thirds less than 30 acres, and about 2 percent 180 acres or more. The average size of farms of operators reporting $2,500 to $3,999 value of products was 201 acres; but 4 percent of the farms had less than 30 acres; 6 percent had 500 acres and over;

whereas, the group which included the average had only 35 percent between 180 and 499 acres. The variations in the acreage per farm within a value-of-products group may be explained in large part by such factors as the differences in the terrain, the character of the soil, double cropping, the growing of crops such as tobacco and truck which yield a high gross value per acre in contrast with corn, wheat, and oats yielding a low gross income per acre, the extent of livestock production, the price at which the crops or livestock were sold, the intensity of farming, the efficiency with which the farm enterprise was operated, and other factors associated with the type of farming. Areas in which the acreage per farm is much larger than the average for a value group are generally areas where the value of land is low, either because of low productivity or because a smaller proportion of the land is cropland.

The average number of acres of cropland harvested in each value group increased with the increase in the gross value of products in the Appalachian States and in the United States, but the averages are smaller in the Appalachian States than for the Nation as a whole.

Almost one-third of all farms in the Appalachian States reported 1 to 9 acres from which crops were harvested in 1939. The mountainous terrain of these States in large part is responsible for the small area of land from which crops can be harvested. Approximately one-half of the 331,004 classified farms reporting 1 to 9 acres cropland harvested were in the 2 groups with $1 to $249 gross value of products. Another one-fourth were in the $250 to $399 value group. As long as farm operators continue to work with such limited land resources and under the conditions existing in these States their gross value of products will be small.

The percentage of farms in this Region not reporting any cropland harvested was the largest in the lowest- and highest-value groups, 17 and 7 percent, respectively. All of the value groups between $600 and $3,999 reported less than 1 percent. This is in contrast with the distribution in the United States as a whole where the largest percentages also occurred in the 2 lowest groups, 24 and 10 percent, respectively; but no other value group reported less than 1 percent of the farms not reporting cropland harvested. Rural residences with cows or poultry but no crops, feed lots, dry-lot dairies, poultry farms which buy all their feed, hatcheries, fur farms, and farms with a complete crop failure in 1939 are illustrations of farms reporting no cropland harvested. Livestock farms which did not grow crops or cut any hay in 1939 are also included in this classification, as are farms, such as many greenhouses, which have only a small fraction of an acre of land in crops. The Appalachian States had a smaller proportion of farms in each value group not reporting cropland harvested than was true for the United States as a whole.

If the same value groups are considered in both the Appalachian Region and the United States, the gross value of products per acre of land in farms and per acre of cropland harvested was higher for the farms in the Appalachian Region than for the United States. The production of crops, such as tobacco, cotton, and peanuts, which have a high gross value per acre, and of gardens and livestock products for home consumption account in large part for the high value of products per acre in this Region.

In each value group in this Region the percentage of farms reporting the use of farm products by the household was slightly greater than for the comparable value group for the entire United States. Only about 2 percent of the classified farms in the Region did not report using in their households any of the farm products obtained from their farms in 1939, not even vegetables from a home garden. The 2 extreme groups, $10,000 and over and $1 to $99, had the largest proportion not reporting the value of products used by the operator's family, 10 and 7 percent, respectively. In the $6,000 to $9,999 value group the percentage was 4. Between 1 and 3 percent of the farms in each of the other value groups did not report the use of any farm products by the household.

The percentage of the value of products used by the farm household declined as the total value of products increased. Almost three-fourths of the total products of the $100 to $249 value group were consumed by the farm household. The percentage dropped to one-half in the $400 to $599 value group; to about one-fourth in the $1,000 to $1,499; and to 8 percent in the $4,000 to $5,999 value group.

On the other hand, the average value of the products used by the farm household in the Appalachian States increased with an increase in the total value of products and at a faster rate than for the United States as a whole. In other words, the families which presumably needed a large quantity of home-grown products because of low gross farm incomes actually reported the smallest value for home living. The $1 to $99 value group, on the average, consumed products valued at $51 per farm. The $100 to $249 group used practically 2½ times as much. Products valued at $263 were used by the $600 to $749 value group. In the $6,000 to $9,999 value group the products used by the farm households had an average value per farm of $441. The average value placed on the farm products used by the households in every value group in this Region exceed the value of products for the same value groups for the United States by 10 to 70 percent. The average value of products used by the farm households in the Appalachian Region was $223; the average value for the United States was $197.

The average amount sold or traded in each of the value groups is smaller in the Region than for the United States. This smaller average of products sold or traded is due to the traditional practice of living largely off the products of the farm which practice has been encouraged in this Region by poor roads and inadequate local marketing facilities. This traditional way of life has been influenced, but not radically changed, by the introduction of motortrucks carrying products to and from metropolitan centers over hard-surfaced highways.

The value of land and buildings per farm increased with the increase in the value of products in this Region just as it did for the Nation as a whole. The value of land and buildings per farm was higher for the United States than in the Appalachian Region, but the value of land and buildings per acre was higher in the Appalachians than for the United States. Below the $400 to $599 value group there seems to be no relationship between the average value of land and buildings per acre and the value of products. Above $400 value of products, however, the value per acre increased with an increase in the value of products. This fact suggests that the types of farming followed in these States are similar enough for these value groups to produce this relationship. It does not exist for the United States as a whole (see ~~Technical Release No. 3,~~ Land Resources and Size of Farm, for a discussion of the factors involved in this relationship). chapter III

The value of products as a percentage of the value of land and buildings increased as the value of products increased, but the percentages in each value group for the Appalachian Region were generally higher than those for the United States. The farms in the $1 to $99 value-of-products group had a gross value of products which was 4.6 percent of the value of land and buildings compared to 2.9 percent for the United States. This ratio for the Region followed the general pattern of the United States, increasing to 23.3 percent in the $400 to $599 value group and to 41 percent in the highest-value group. The small percentage in the low-value groups is partly explained by the fact that many of the farms in these value groups are primarily rural residences, the home of part-time farmers, or operators who are living in semiretirement. In the higher-value groups the relationship between the gross value of products and farm real estate is less direct or significant because land and buildings generally constitute a smaller proportion of the total farm capital—real estate, livestock, and equipment. This is particularly true of livestock farming which makes up a large proportion of the farms in the higher-value-of-products groups.

AGE OF OPERATOR

The younger farm operators are more frequently found in the lower-value groups in the Appalachians than for the United States as a whole. This situation is accounted for in part by the large number of young people in the area, the relatively poor opportunities for shifting to other occupations, the practice of dividing the home farm to give the young people a start in life, and the limited land resources of the Region. There are also fewer large farms demanding the services of young men as hired managers.

The older farm operators in the Appalachians, on the other hand, are less frequently found in the lowest-value groups and more frequently noted in the higher-value groups. One-tenth (10.4 percent) of the operators in the $6,000 to $9,999 value group in this Region were 65 years of age or older compared to 7.7 percent for the United States; the comparable figures for the 55 to 64 year age groups in the same value group were 24.8 and 20.2 percent, respectively.

WORK OFF FARM AND DAYS WORKED

Work off the farm assumed more importance in the Appalachian States than for the United States as a whole but in evaluating the relative significance of off-farm work in the agricultural economy of these States the fact that 3 out of 5 farm operators reported they did not do any work off the farm for pay or income in 1939 should be kept in mind. The average number of days worked by those working off the farm was 148 in the Appalachians and 137 days for the United States. Almost one-fifth of the operators in the Appalachian States but only 15.5 percent of the operators in the United States as a whole worked 100 days or more off the farm. The corresponding percentages of farmers working less than 100 days were 12.1 and 13.2 percent, respectively.

Working off the farm in this Region was not confined to operators with small value of products or low-income farmers. In every value-of-products group, except the $4,000 to $5,999, at least 1 out of every 7 operators reported working off the farm for pay or income in 1939 and even in the $4,000 to $5,999 value group almost 1 out of 8 reported work off the farm. Approximately one-half of the 256,777 operators with value of products of less than $250 worked off the farm. The proportion reporting in each value group, except for the 2 highest-value groups, generally decreased with an increase in the value of products. On farms with products valued at $600 to $749 one-fourth reported work off the farm, as did one-seventh of the operators with value of products of $2,000 to $2,499. Almost one-fifth of the operators in the $10,000 and over value group also reported work of this nature.

The average number of days worked in each value group varied from 176 days in the group with less than $100 gross value of products to 93 days in the $10,000 and over group.

The wide variation in the number of days worked within each value group suggests that some operators had only odd or spare-time jobs; and for them the supplemental income was small. Other operators evidently obtained the major portion of their income from off-farm work. For this latter group farming was probably secondary in importance as a source of income. Data from other sources indicate that many of these individuals working off the farm do not consider themselves farmers. The number of farmers and farm managers, as reported on the Population Schedule, was only about three-fourths of the number of farm operators as reported by the Agriculture Schedule. The occupations of operators not considering themselves farmers were reported on the Population and Agriculture Schedules as coal miners, laborers, machinists, bankers, merchants, carpenters, etc.

These figures on the number of farm operators working off the farm, however, do not indicate the full extent to which the family income may have been supplemented from other sources. In many instances members of the farm family, other than the operator, work off the farm and pay for their board and room or make other contributions to the family income. Some of the family income may come from pensions, public assistance, legacies, investments, or the like.

The Appalachian States had a larger proportion of operators working off the farm and reporting nonfarm work, and a smaller percentage working on other farms, or working at both types of work than for the entire United States. More than three-fourths of the operators working off the farm reported working at nonfarm work; one-fourth worked on other farms, while 2.8 percent reported both types of work.

Individuals working off the farm thus work either at nonfarm work or on other farms; they seldom do both types of work. This pattern of working either on other farms or at nonfarm work is found in all value groups, but operators in other States more frequently do both types of work than do the operators in the Appalachians.

From one-fifth to one-third of the operators reporting work off the farm in each value group in the Appalachians worked on other farms. The percentage usually increased with an increase in the value of products up to the $1,000 to $1,499 value group; above that point the pattern was not so definite, but in general, the percentage decreased with an increase in the value of products. In the United States the proportion of operators reporting work on other farms generally increased with an increase in the value of products except in the 2 highest-value groups. In the lower-value groups the percentage of operators working on other farms was about the same in both the Appalachians and the United States, but in the higher-value groups there were marked differences which may be illustrated by the situation in the $2,500 to $3,999 value group. In the United States two-fifths of the operators working off the farm reported work on other farms; in the Appalachians only one-fourth of those working off the farm reported this type of work. Part of this difference is due to the fact that the farms in the Appalachian Region are smaller, family labor is more abundant, and money is scarcer. Therefore, other operators in the neighborhood or community are seldom hired to help plant or harvest the crops.

The proportion of operators working off the farm and reporting nonfarm work is the complement of the number reporting work on other farms, except for the small percentage which do both types of work. The percentage reporting nonfarm work in the Appalachians varied from more than two-thirds in the $750 to $999 value group to more than five-sixths in the $4,000 to $5,999 value group. In most value groups the proportion reporting nonfarm work in the Appalachians was greater than the corresponding percentage for the United States. This was particularly true in the higher-value groups.

The greater proportion of operators in the higher-value groups working off the farm plus the fact that more than one-half of the operators, who reported both work off farm and a gross value of products of $6,000 and over, worked 100 days or more a year at nonfarm work suggests that the Appalachian States had a larger proportion of operators who combined farming with some other occupation, profession, or business than was true for the United States. They spend the major portion of their time in their respective occupations, professions, or business; their farms are country residences, hobbies, or at least something less than a full-time occupation for the individual listed as operator on the Agriculture Farm and Ranch Schedule.

Farm operators working at nonfarm work average almost two and one-half times as many days of work as operators working on other farms—169 and 70, respectively. This ratio remains fairly constant for all the value groups in the Appalachians, although the average number of days worked at each of these 2 kinds of work usually decreased with the increase in the value of products. In the United States, however, the proportionate decrease in the number of days worked was greater for work on other farms than for nonfarm work. The decrease in the number of days worked on other farms in the Appalachians is illustrated by the drop from 95 days for operators with value of products of less than $100 to about 40 days in the $2,000 to $3,999 value groups. The extent of the decrease in the average number of days at nonfarm work is indicated by the drop from 190 days in the $1 to $99 value group to 121 days in the group with $10,000 and over value of products.

Seven percent of all farm operators or about one-fourth of the operators reporting work off the farm spent less than 50 days at work other than on their own farms. On farms with less than $100 value of products 1 out of 9 operators performing off-farm work for pay or income reported under 50 days work off the farm in 1939. This proportion gradually increased, until on farms in the group with products valued at $1,500 to $1,999, approximately two-fifths of the operators working off the farm reported less than 50 days work. Above $2,000 value of products the proportion of workers with this small amount of off-farm work gradually decreased.

On the other hand, the proportion of operators working off the farm and reporting more than 100 days work varied from about 3 out of 4 reporting this amount and living on farms with less than $100 value of products to about 1 operator out of 3 on farms with products valued between $2,500 and $3,999. More than one-half of the operators on farms with $10,000 and over value of products reported this same amount of work off the farm.

Although work off the farm is important and represents the work relationship to other farms as well as the shifting back and forth between farming and other occupations and industries, it should be remembered that less than one-third of all farm operators reported any work off the farm for pay or income in 1939; only one-fourth of the operators reported nonfarm work. Most operators working off the farm had only a few days of work; only one-fifth of all operators reported as many as 100 days or more. In some instances members of the farm families, other than the operator, work off the farm and contribute to the family income, but for the great majority of farm families in these States the value of products from the farm represents the gross family income from which all expenses must be paid.

HORSES, MULES, CATTLE, AND/OR HOGS

About one-twelfth of the classified farms in the Appalachian Region and 9.7 percent of the farms in the United States did not report any horses, mules, cattle, and/or hogs. More than one-fourth of these farms without livestock had less than $100 gross value of products. Three-fifths of the farms in the Appalachian Region not reporting any of these types of livestock had less than $250 gross value of products. To obtain the same ratio for the United States it was necessary to also include the $250 to $399 value group. Each value group in the United States as a whole had more than 4 percent of its farms not reporting one or more of these classes of livestock, but about one-half of the value groups in the Appalachian Region, particularly the higher-value groups had less than this percentage not reporting any of these classes of livestock.

Most of the farms not reporting any of these classes of livestock are share-cropper units using livestock reported by the landlord, mountain farms cultivated with a hoe, retirement and residence units, or farms using livestock owned by relatives or neighbors.

In each of the value groups the percentage of farms reporting one or more of these classes of livestock was greater in the Appalachians than for the United States. In the Appalachian Region, 60 percent of the farms in the $1 to $99 value group, 85 percent of those in the $100 to $249 value group, and 92 percent or more in each of the other value groups reported one or more of these types of livestock.

CATTLE

The proportion of farms reporting cattle on April 1, 1940, was slightly larger for the United States than for the Appalachian Region, being 79.4 and 77.0 percent of all farms, respectively. The Appalachian Region had a slightly larger percentage in each of the value groups below $600 but above $750 gross value of products the proportions were usually larger for the United States. Except for the 2 lowest- and the 2 highest-value groups in the Appalachians, between 80 and 90 percent of the farms reported cattle on hand April 1, 1940; less than 70 percent in each of the 2 lowest-value groups and more than 90 percent in each of the 2 highest-value groups reported cattle.

COWS MILKED

The Appalachian Region had about the same percentage of its farms reporting cows milked during some part of 1939 as did the United States, 75.3 and 76.5 percent, respectively. Almost two-fifths of the farms in the Appalachians reported milking only 1 cow whereas less than one-fourth of the operators in the United States reported 1 cow milked. The comparable percentages for operators milking 2 cows were 19.8 and 15.2 percent, respectively. On the other hand, 1.9 percent of the farms reported 10 or more cows milked compared with 9.7 percent for the United States.

Approximately one-third of the farms in the $1 to $99 value group in the Appalachian Region and two-thirds of those in the $100 to $249 value group milked cows during some part of 1939. In the $250 to $5,999 value-of-products groups, between 80 and 86 percent of the operators reported milking cows; above $6,000 gross value of products the percentages were 92 and 94. In the

5 lowest-value groups and the 2 highest-value groups the Appalachian Region reported a higher percentage of farms milking cows than did all farms in the United States; the lowest-value group in the Appalachian States had fewer rural residences buying all of their milk from other sources; and the highest-value groups had fewer specialized farms, such as cash-grain, hatcheries, feed lots, etc., which ordinarily do not milk cows. The Appalachians in each value group had a larger percentage of farms milking 1 cow and for most of the value groups a larger proportion reporting 2 or 3 cows milked.

In the lower-value-of-products groups, however, most of the farms reported only 1 or 2 cows milked. For the value groups below $400 in the Appalachians, 92 percent of the farms with cows milked reported 1 or 2 cows compared with 83 percent for the United States. The $400 to $999 value-of-products groups in the Appalachian States reported that 72 percent of the farms milking cows had 1 or 2; 55 percent of the farms in the same value groups in the United States reported the same number of cows milked. For all farms with gross value of products of $1,000 or more, those milking 1 or 2 cows were 57 percent of the farms reporting cows milked in the Appalachians and 26 percent in the United States.

HOGS

Two-thirds of all farms in the Appalachians reported hogs on hand April 1, 1940, compared with about three-fifths of the farms in the United States. In both areas fewer farms reported hogs in 1940 than reported cows milked during some part of 1939. The number of farms having hogs sometime during 1939, however, was larger than the number reporting hogs on April 1, 1940, as 76 percent of all farms reported the butchering of hogs or pigs compared with 67 percent reporting hogs on April 1, 1940. Some farmers buy 1 or 2 pigs for butchering; others raise hogs but do no butchering, therefore the proportion of farms raising or butchering hogs in 1939 must have been somewhat over 76 percent. These figures indicate that home-butchered pork and home-produced milk were available during some part of 1939 for a large proportion of the farm families in these States. The proportion of farms reporting hogs and sows in the different value groups follows the same pattern as for cows milked, increasing toward the middle of the value groups and then decreasing slightly in the higher brackets. Only the value-of-products group below $100 had hogs on less than half of the farms.

About one-fourth of the farms in the Appalachian Region reported sows on April 1, 1940, compared with about one-third in the United States. The percentage of farms reporting sows in the Appalachians was 5 percent in the $1 to $99 value group but increased rapidly to approximately 50 percent on farms with a gross value of products of $2,000 to $9,999; the proportion of farms reporting sows in each value group in the United States was similar to that in the Appalachians but usually the percentages were higher for the United States.

Most of the farms in the lower-value groups that reported sows had only 1 or 2; in the groups with less than $400 gross value of products 92 percent reported 1 or 2 sows. In the groups from $400 to $999 the proportion was 87 percent compared with 72 percent in the United States. For the value groups from $1,000 to $2,499 and $2,500 and over, the percentages having sows and reporting 1 or 2 were 71 and 47, respectively, for the Appalachian Region, and 44 and 23, respectively, for the United States.

WORKSTOCK AND TRACTORS

One-third of all farms in the Appalachian Region reported not having horses, mules, or tractors; less than one-fourth of the farms in the United States were without workstock or tractors. In the lower-value groups the percentage of farms not reporting workstock or tractors was noticeably higher in the Appalachian Region than for the United States; in the higher-value groups the proportions were about the same.

Three-fourths of the farms in the lowest-value-of-products group in the Appalachian Region did not report having any horses, mules, or tractors; almost three-fifths of the $100 to $249 value group were also without workstock or tractors. Some of these operators may have used oxen, borrowed workstock from relatives or neighbors, or used workstock or tractors furnished by the landlord. Approximately one-fourth of the operators in these 2 lowest-value groups were young men under 35 years of age; almost one-half of the men in these value groups reported they did not do any work off the farm in 1939. These facts suggest there must have been a considerable number of young operators in these States who did not have a horse, mule, or tractor with which to operate a farm nor did they have any work off the farm to supply an income with which to meet their needs. Their report of less than $250 value of products indicates the very limited results they were able to obtain from their farms. For the value-of-products groups of $1,500 and over, the proportion without these types of power—horses, mules, or tractors—was less than 10 percent; comparable percentages of less than 10 percent were noted for all value groups of $1,000 and over in the United States.

More than three-fifths of the farms in the Appalachians reported horses and/or mules but no tractors; only one-half of 1 percent reported tractors but no horses or mules; and 4.1 percent reported both workstock and tractors. A smaller proportion, 53 percent, of all farms in the United States reported horses or mules but no tractor; the proportion of farms reporting tractors but no horses or mules was 4.5 percent; and the percentage reporting both tractors and workstock in the United States was 19, or almost 5 times as large as the proportion in the Appalachians.

The percentage of farms reporting horses and/or mules but no tractors in the value groups, $1 to $299, was slightly larger for the United States than for the Appalachian Region, but above the $400 gross value of products the percentage of farms with horses and/or mules but no tractors was much larger in the Appalachians. The greatest difference existed in the $2,500 to $3,999 value group where 73.4 percent of the farms in the Appalachian Region and 29.3 percent of those in the United States had workstock but no tractors. A smaller proportion of the farms in the Appalachian Region reported horses and/or mules or a combination of horses, mules, and tractors than did the farm operators in the United States as a whole. In the Appalachian Region the proportion of farms reporting horses and/or mules with no tractors and the proportion reporting horses and/or mules were similar, being 62 and 66 percent, respectively. For the United States as a whole, however, there were marked differences between these 2 groups; 53 percent of the farms reported horses and/or mules without tractors and 71.5 percent reported horses and/or mules. The mountainous terrain, the small farms, and the growing of crops demanding a large quantity of hand labor limited the number of workstock and tractors used as well as the gross value of products. The proportion of farms reporting tractors and the proportion reporting both tractors and workstock are larger for the higher-value-of-products groups in both the Appalachians and the United States. Only about one-third of the farms reporting tractors in the Appalachains were in the value groups below $1,000 but these groups contained more than three-fourths of all the farms in the Region. These value groups for the United States included about one-fourth of the farms reporting tractors and two-thirds of the total number of farms.

AUTOMOBILES, MOTORTRUCKS, AND TRACTORS

About two-fifths of the farm operators in the Appalachians reported automobiles in 1940 compared with approximately three-fifths in the United States. Motortrucks were reported on farms in the United States twice as frequently as in the Appalachians; 15.5 and 8.3 percent, respectively. Tractors were reported five times as frequently in the United States, by 23.1 and 4.6 percent, respectively.

The proportion of farm operators reporting these items—automobiles, motortrucks, and tractors—in the Appalachians increased with the increase in the gross value of products. Tractors, for instance, were reported by about 1 percent of the farms in the $1 to $249 value-of-products groups and by one-half to three-fourths of the farms with gross value of products of $6,000 and over. The proportion reporting motortrucks varied from 3 percent in the group with less than $100 value of products to 71 percent in the highest-value group; the percentage reporting automobiles increased from 21 percent in the $1 to $99 value group to 86 percent in the group reporting $10,000 and over gross value of products. Poor roads and inadequate funds with which to buy automobiles and trucks were important factors causing many farmers to depend upon horses and mules for transportation, but in this Region the greater dependence upon horses and mules for transportation and the smaller number of telephones causes many of the farm families in these States, particularly in the mountainous areas, to live in relative isolation.

ELECTRIC DISTRIBUTION LINES AND DWELLINGS LIGHTED BY ELECTRICITY

Less than two-fifths of the farms in the Appalachian Region were reported to be within one-quarter mile of an electric distribution line in 1940 and one-fifth of the farms reported dwellings lighted by electricity. The comparable percentages in the United States were 46 and 33, respectively. The proportion of dwellings lighted by electricity in the Appalachians increased with an increase in the gross value of products in all value groups above $100. The $1 to $99 value group had a proportion slightly larger than that for the $100 to $249 value group.

TELEPHONES

Only one-eighth of all farms in the Appalachians reported telephones in 1940; in the United States twice that proportion reported telephones on the same date.

For telephones—as for automobiles, motortrucks, tractors, and dwellings lighted by electricity—the percentage of farms reporting this equipment increased with an increase in the gross value of products obtained from the farm. In the lowest-value group 7 percent of the farms reported telephones; in the highest-value group 77 percent reported telephones.

BUSINESS WITH OR THROUGH COOPERATIVES

One out of 10 farm operators in the Appalachian Region and more than 2 out of 10 operators in the United States reported doing business with or through cooperatives in 1939.

The proportion of operators dealing with or through cooperatives in the Appalachian Region increased with the increase in gross value of products; in the lowest-value group only 3 percent reported this type of business compared with 45 percent in the highest-value group. The relative isolation of the operators in these States and their traditional independence also affected the amount of business done with or through cooperatives.