

OCCUPATIONS AND LEVELS OF LIVING

OUR economic development during the past century is reflected in changes in the occupational structure of our labor force and the rural-urban composition of our population. Our agricultural labor force continued to grow the first 50 years of the past century and nearly doubled by 1910, but it grew at a much slower rate than the nonagricultural labor force, which had a sixfold increase from 1860 to 1910.

Employment in the nonagricultural sector in the past 50 years climbed to two and one-half times that of 1910, while agricultural employment declined, first gradually and then faster, so that by 1962 agricultural employment amounted to 5.2 million and represented less than 8 percent of the Nation's employed civilian labor force.

A parallel change was a decline in the relative size of the rural population and in the absolute and relative size of the farm population. The urban population of the United States was 70 percent and the rural population was 30 percent of the population in 1960. An increasing proportion of the rural population resides in rural non-farm areas, and a declining proportion lives on farms.

These changes have been part of our historical economic development and could not have taken place were it not

for revolutionary changes in the productivity and efficiency of our agricultural plant, which year by year has set new records in productivity per man-hour of labor and in aggregate production, more than enough to meet the needs of our growing population.

We should take a closer look at the effect our economic development has had on the occupational structure and levels of living of the rural population and the extent to which all sectors of population have shared in the gains in level of living.

First is the fact that the rapid growth of cities has meant a relative but not an absolute decline in the size of the rural population. The rural population in 1910 was 50 million. The rural population numbered 54 million in 1960. The sharp drop occurred in the farm component of the total rural population—from 32 million in 1910 to 14.3

million in 1962; 91 percent of the decline occurred after 1940.

We can summarize the trends in the rural labor force in terms of occupation and industry. The occupational classification relates to the kind of work people do (carpentry, plumbing, and farming, for example). The industry classification relates to the type of establishment in which a person works (for example, furniture factory, clothing store, construction firm).

Among the 54 million persons living in rural areas in 1960, 18.2 million were in the civilian labor force (the employed and those who were unemployed and looking for work). The size of the rural labor force in 1960 did not differ greatly from that in 1950, but because of the substantial increase in the urban labor force the proportion that the rural comprised of the total labor force dropped from 31.6 percent in 1950 to 27.2 percent in 1960.

With the sharp decline in farm population and agricultural employment, the occupation and industry mix of the rural labor force has changed greatly.

Farmers and farm laborers are no longer the largest occupational group among workers living in rural areas. Nearly one-half of the rural employed in 1940 were farm operators, farm managers, or farm laborers. Only one-fifth were in the agricultural occupations in 1960.

The skilled and semiskilled industrial workers have surpassed the farm occupations as the most numerous class. More than 5.5 million craftsmen, foremen, and operatives were resident in rural areas in 1960, compared to a little more than 3.5 million farmers and farm laborers. The white-collar occupations had about 4.8 million workers and thus also were more numerous than the number of rural persons in farm occupations.

Manufacturing, the single most important industry group, accounted for 4.2 million rural persons, or 24 percent of the total, compared to 3.8 million persons, or 22 percent, in agriculture in 1960. A decade earlier, agriculture ac-

counted for twice as large a proportion of the rural labor force as did manufacturing—36 percent and 18 percent, respectively. Wholesale and retail trade establishments comprised in 1960 the third most important industry group of the rural labor force. Establishments engaged in professional and related services were the fourth largest group.

Manufacturing industries increased their employment of rural persons by nearly 900 thousand during 1950-1960, a gain of 27 percent. This percentage increase was one and one-half times greater than the one in manufacturing employment among urban residents.

Large absolute and relative increases during the decade also occurred among rural people employed in professional and related services, wholesale and retail trade, finance, in insurance and real estate, and the other categories of industry.

Employment in agriculture, as I indicated, declined sharply between 1950 and 1960. Reductions also occurred in employment in the other extractive industries, mining, forestry, and fisheries, which employ mostly rural residents. The drop in mining was quite substantial, 234 thousand rural persons or a decline of 40 percent from 1950 to 1960, mainly because of the drop in coal mining.

The changes in occupation and type of industry during the decade in the rural labor force were like the change that occurred among city people, among whom the greatest relative gains occurred in the occupations connected with professional, technical, and distributive services. Nevertheless, rural people are still relatively more numerous in the skilled and semiskilled groups among occupations that require less education and formal training, but the differences between urban and rural occupational profiles are lessening.

Thus we are developing an increasingly more urbanlike occupational structure among rural people. In view of the generally higher incomes obtained in nonagricultural occupations than in agriculture, the effect of these

shifts has been to increase average incomes among rural families and to raise their levels of living.

A SIGNIFICANT trend in the rural population between 1950 and 1960 was the growth of the labor force living in rural nonfarm areas as compared to the decline of the labor force living on farms. This, of course, follows from the fact that the farm population has dropped sharply while the rural nonfarm population has gone up.

The civilian labor force in the rural nonfarm population increased from 10.4 million in 1950 to 13.4 million in 1960, but the labor force in the farm population fell from 8.1 million in 1950 to 4.8 million in 1960.

A part of this large drop in size of the rural labor force is due to the more restrictive definition of farm population adopted in 1960, but a large part of it is due to the actual decline in number of farms, farm population, and agricultural employment.

The major distinction in the occupational distribution of the rural nonfarm as compared with the farm labor force is the preponderance of employment in agriculture among farm residents and the very small percentage engaged in agriculture among rural nonfarm residents. Only about 7 percent of the rural nonfarm labor force in 1960 were engaged in farming occupations, and this percentage was about the same as in 1950 and 1940. Thus, more than 90 percent of the labor force living in rural nonfarm areas customarily have been employed in occupations other than agriculture.

Most of the gainfully employed members of the farm population have traditionally been engaged in farming, but this situation has been changing over some decades, and the changes have become progressively more rapid in recent years. Thus, of the employed population living on farms in 1960 only 60 percent were engaged in agriculture and 40 percent in nonagricultural occupations. Agriculture accounted for 70 percent in 1950 and nearly 80 per-

cent in 1940. The proportion of the employed population living on farms and working in nonagricultural occupations therefore doubled between 1940 and 1960.

LET US examine a little more closely what has been happening to agricultural employment.

The number of persons employed in agriculture between 1950 and 1960 dropped 24 percent, from 7.5 million to 5.7 million, according to estimates of the Department of Labor. Further decreases in 1961 and again in 1962 cut agricultural employment to 5.2 million. The agricultural labor force is now no larger than it was shortly after 1850, more than 100 years ago. The decline since 1950 has been greatest among farm operators themselves, following the sharp drop in the number of farms.

The decline in unpaid family workers has been roughly proportional to the decline in total agricultural employment. Among hired farmworkers, however, there has been no clear, persistent trend in either direction since the end of the Second World War. Thus, because of the decline of farm operators and unpaid family workers, the relative importance of hired farmworkers has increased, rising from approximately one-fifth of the total agricultural employment shortly after the war to one-third by 1962.

The agricultural employment has dropped in every region of the country. The South, however, experienced the largest absolute and relative drop; by 1960, the South accounted for only 40 percent of total agricultural employment in the United States, compared to 52 percent in 1940.

In view of the extensive mechanization on farms since 1940 and the sharp decrease in labor requirements and labor input in agriculture, it seems rather surprising that employment of hired farmworkers has shown little change in numbers since the end of the war.

Apparently the effects of mechanization and other laborsaving practices on

the employment of hired farmworkers have been counterbalanced by the increase in the number of farms with a value of sales of 10 thousand dollars and more. These farms are the principal employers of hired labor, and they increased from 484 thousand in 1949 to 795 thousand in 1959. Farms of that size accounted for 83 percent of the total expenditures for hired labor in the United States in 1959.

Changes in the level of living of farm and nonfarm families have come about partly because of the differences and changes in occupational patterns that I have discussed.

Various indicators influence or reflect the economic and social well-being of rural families. Among them are income, the possession of certain goods, the extent of educational attainment, and the availability of health services.

Median family money income increased about 80 percent between 1950 and 1960 in each of the three residence categories. A rise in living costs absorbed a part of the increase. The real increase in median family income for the United States was 50 percent, after adjusting for changes in the Bureau of Labor Statistics Consumer Price Index. The median money income in 1959 of farm families of 3,228 dollars was about two-thirds of rural nonfarm and a little more than one-half of urban families. These relationships were practically the same a decade earlier, although at lower income levels.

Nearly a third of all rural farm families had incomes of less than 2 thousand dollars, compared with less than a fifth for rural nonfarm and only one-tenth of the urban families. The proportions of families with less than 2 thousand dollars income had declined by one-half or more in the urban and rural nonfarm areas. Among farm families, the proportion of low-income families did not decline so much.

While farm families in 1959 comprised only 7 percent of all families in the United States, they had 18 percent of all families with incomes of less than

2 thousand dollars. Thus, while substantial economic progress was made by all sectors of the population, farm and nonfarm, the wide differentials between the farm and nonfarm sectors continued to persist.

We should note that family income in the South in 1959 was substantially below that of the other regions—about 4,500 dollars, as against 6 thousand dollars in the rest of the United States. In both 1950 and 1959, about one-third of all families and more than 45 percent of all low-income families lived in the South.

In view of our interest in occupational patterns, we may also note the income differentials among major occupational groups. Of the 11 major occupational groups, farmers ranked the third lowest in 1961, farm laborers next to the lowest, and private household workers (mostly domestic servants) the lowest.

BESIDES current income, measures of level of living usually include data on the facilities available to families—such as television sets and telephones, automobiles, homefreezers, and hot and cold water in the house—which can serve, with some reservation, as partial indicators of level of living.

The ownership of television sets between 1950 and 1960 has grown remarkably among all groups, rural and urban. Only 3 percent of the rural farm households had television sets in 1950; 80 percent had them in 1960.

Almost all urban housing units but only two-thirds of the farm homes had hot and cold water in 1960, although the proportion of rural farm housing units equipped with hot and cold water more than doubled in 1950-1960.

By 1959, almost all farms were electrified; 80 percent had automobiles; two-thirds had telephones, and more than one-half had homefreezers—almost five times the proportion reporting homefreezers in 1950.

Thus, as far as the possession of these facilities reflects level of living, marked improvement can be seen in the past

decade, partly because families had more money to buy them.

An index developed in the Department of Agriculture based on data of the census of agriculture to indicate variations in the level of living of farm operators by counties shows a substantial rise from a county average of 59 in 1950 to 100 in 1959. The index brings to light marked geographic variations. For example, in both 1950 and 1959, the South ranked lowest on the index and the West ranked highest.

Our information on the educational attainment of the adult population (persons 25 years old and over) suggests that the differences favoring the urban population in 1950 had persisted and in some instances widened by 1960. For example, in 1960 half of the adults in the farm population had completed 8.8 years of schooling—a gain since 1950 of only 0.4 of a year in the median grade completed; whereas the median years of school completed by the urban population of 11.1 in 1960 rose by practically a full year since 1950.

In both 1950 and 1960, the adult farm population contained the highest proportion of individuals who may be characterized as functionally illiterate (those with fewer than 5 years of school completed) and the lowest proportion of high school graduates. The proportion of farm high school graduates in 1960 was considerably below that for urban residents 10 years earlier.

Nevertheless, the decade did record educational progress in the farm as well as in the nonfarm population. The proportion of adults with at least a high school education has increased, and the proportion with very little schooling has dropped.

The future looks still more promising. Particularly noteworthy is that the proportion of farm youths of high school age enrolled in school increased substantially between 1950 and 1960 and reached the level characteristic of the urban population.

A few comments on health facilities: Despite the rapid acceptance of health

insurance programs, the proportion of the farm population covered by health insurance is substantially below that of both the urban and rural nonfarm. Only about 4 of 10 farm persons but more than 7 of 10 urban persons were covered by hospitalization insurance in 1959. Also, proportionately fewer health facilities are available to rural residents than to persons in or near metropolitan areas. Partly because of rapid population growth, there was little difference in the ratio of physicians to population in 1949 and in 1959, but in both years the rural areas were at a substantial disadvantage compared with the metropolitan areas.

WHEN WE discuss occupational and level-of-living changes, we are dealing with the effects of extremely broad and pervasive forces, concerning which short-range projections are not very meaningful and long-range projections are hazardous.

Science and technology in agriculture have brought about a sharp polarization in income and competitive position between farms that are of adequate size to permit efficient family management and an adequate level of family income and farms of inadequate size.

In the readjustments that have been occurring in agriculture, the family commercial farms of adequate size have been increasing at an accelerated rate since 1950. Farms with gross sales of less than 10 thousand dollars and particularly those with less than 5 thousand dollars of gross sales have been steadily decreasing in numbers, and their rate of decrease has also accelerated. Such adjustments will continue, and bring further reductions in the total number of farms, but with an increasing number and sharp gain in the relative importance of the family farm of adequate size.

Aside from hired farm employment, which is concentrated very heavily on the farms with gross sales of more than 10 thousand dollars, the size of the total agricultural labor force and of the farm population is determined principally

by what happens to the nearly 80 percent of the farms that in 1959 had sales below 10 thousand dollars. There can be little doubt as to the continuing decrease in their number, with a consequent downward movement of farm population and agricultural employment. By 1965, agricultural employment (as measured by the labor force series of the Department of Labor) may decline to about 4.5 million, and by 1970 to around 4.0 million, if recent trends continue.

We should also bear in mind that future reductions in agricultural employment, as measured by the Department of Labor, will reflect as in the past increasing prevalence of part-time farming. The proportion of farm operators with more than 100 days of off-farm work has risen steadily; 30 percent of all farm operators were in this category in 1959. (Many of them do not report farming as their chief occupation and therefore are not counted in agricultural employment.)

Some general observations are in order.

We can be fairly sure of a continued high rate of total population increase for some decades to come.

The trend toward further urbanization for all practical purposes is irreversible, and a further shrinkage of the rural proportion is quite certain. The absolute size of the rural population, however, may not drop significantly below current level. Thus, for example, should the rural proportion decline at the rate of the past 40 years, then by 1980 only 20 percent of the population would be rural, compared with 30 percent in 1960. But this 20 percent would still be equal to at least 50 million people under the several projections of total population.

If our assumption as to the future size of the rural population is tenable, the decrease foreseeable in the farm population and its labor force will be offset by increases in the rural nonfarm population.

The occupational and type-of-industry attachments of the rural nonfarm

population characteristically have been much more like those of the urban population than of the rural farm population. With declines that have occurred in mining and some other industries that have typically employed rural dwellers, the rural nonfarm and urban labor forces are tending to become ever more similar.

As I have indicated, the farm population has also become increasingly diversified in its occupational and industrial attachments. Nonfarm occupations already claim 40 percent of the farm population who are gainfully occupied, and this proportion has shown a steady upward trend, which is likely to continue.

The national trend of greater participation by women in the labor force also has reflected itself in the case of women living on farms. Thus, of all girls and women 14 years of age and over living on farms, the proportion who are in the labor force has risen from 12 percent in 1940 to 16 percent in 1950 and to 23 percent in 1960, and the proportion employed in nonfarm occupations (75 percent in 1960 and 60 percent in 1950) has risen. The proportion of workers among farm women in 1960 was considerably lower than among urban women (37 percent) and rural nonfarm women (29 percent).

Should employment opportunities available to farm women expand, an increasing number of them would undoubtedly take jobs.

The technological revolution in agriculture that has so drastically reduced labor requirements and increased productivity per worker is thus freeing an increasing proportion of individuals in farm families for employment outside of agriculture. For some it has meant migration to rural nonfarm or urban areas. For others it has increasingly become a matter of commuting to their jobs, while continuing to live on farms. Thus the distinctions in occupational and living patterns between the rural and urban population and between the rural farm and rural nonfarm segments are rapidly diminishing.

The adjustments that still need to take place with respect to half or more of the farms and the people on those farms with units that are too small to provide a minimum adequate living from agriculture are of great magnitude and involve a long-term process of development of human and physical resources.

THE SAME THING may be said for substantial segments of the rural nonfarm population. Some of these rural nonfarm people were previously classified in the farm population under a somewhat less restrictive definition of farm population used before 1960. It is therefore well that the Rural Areas Development program does not draw sharp distinctions between rural farm and rural nonfarm low-income people who have had common problems of inadequate employment opportunities and, under existing conditions, an inadequate potential for development of their human and physical resources.

Nevertheless, it is well to recognize the more acute and special nature of the problem confronting the low-income farm families and their heavy concentration in some areas. The information presented indicates that while progress has been achieved in the improvement of levels of living of farm families generally and further progress may be anticipated, there are still wide discrepancies, not only in income between farm and nonfarm families but also in educational preparation, health facilities, and other measures of general well-being.

The farm population has a disproportionate number of its people among the poorly remunerated, the poorly educated, and the underprivileged. The agricultural wageworkers, by and large, have a more precarious and less adequate level of living than many low-income farm-operator families.

The importance of agricultural wageworkers to the operation of our highly productive sector of commercial agriculture is too obvious to need any special reiteration. Hence their needs and

well-being should be fully considered in such programs as Rural Areas Development, manpower training and development, or other programs designed to expand opportunities and raise the level of living.

We know that the requirements of the economy in years ahead will make necessary a well-trained and well-educated labor force. Those with limited education will be at a considerable disadvantage. The importance of increased investments in basic education and the continuous raising of the level of education of rural youths cannot be overstressed.

Meeting the needs for higher levels of basic educational attainment and for training and retraining of rural and urban workers in skills that are currently and prospectively in demand are problems of national proportions that can be expected to continue to receive increasing attention.

LOUIS J. DUCOFF is Chief, Farm Population Branch, Economic and Statistical Analysis Division, Economic Research Service. He joined the Department of Agriculture as a junior agricultural economist in 1935. Dr. Ducoff is the author of a number of publications about agricultural labor, and in 1953 he received the Department's superior service award.

For further reading:

Bancroft, Gertrude, *The American Labor Force*. John Wiley & Sons, Inc., New York, 1958.

Cowhig, James D., *Farm Operator Level-of-Living Indexes for Counties of the United States, 1950 and 1959*. Statistical Bulletin 321, U.S. Department of Agriculture, 1962.

Education, Economy, and Society, A. H. Halsey, Jean Floud, and C. Arnold Anderson, editors. Free Press of Glencoe, Inc., New York, 1961.

Iowa State University Center for Agriculture and Economic Adjustments, *Labor Mobility and Population in Agriculture*. Iowa State University Press, Ames, 1961.

Miller, Herman P., *Income of the American People*. John Wiley & Sons, Inc., 1955.

Taylor, Carl C., and others, *Rural Life in the United States*. Alfred A. Knopf, Inc., New York, 1949.

Woytinsky, W. S., and associates, *Employment and Wages in the United States*. Twentieth Century Fund, New York, 1953.