FACTORS AFFECTING THE SUPPLY AND COSTS OF LABOR

Means of lowering costs of farm production are of increased importance as farmers begin another year of high production and are faced with the possibility of lower farm commodity prices. Reduced labor costs through increased labor efficiency offers one means of attaining this objective, but the continued shortage and high costs of farm labor, particularly skilled workers capable and qualified to handle mechanized equipment, makes this solution difficult and uncertain of achievement. Consequently, it seems timely and appropriate to appraise the present farm labor situation and to evaluate steps that farmers may take to improve the supply of labor and to increase its productivity.

From the beginning of World War I until the end of World War II, there was a downward trend in the number of people engaged in agriculture. Between the periods 1910-14 and 1935-39, the average number of people employed on farms in the United States declined 10 percent, while a decline of about 7 percent occurred between 1939 and the close of World War II. Farm employment increased appreciably following the close of the last war as many people returned from the armed forces or war industries, but this increase was smaller than expected, and the number of farm workers is still well below the prewar average.

A combination of factors accounts for the small number of workers who returned to farms after the end of the war. Among these is job insecurity, an objectionable characteristic of farm employment that probably discourages many potential farm laborers. Farm laborers are hired usually by the day, or for a month or two, and seldom on an annual basis. Periods of work are irregular and do not provide a steady income. Moreover, working conditions on farms are usually less satisfactory than in many types of industry. Working hours are long, and the work frequently is hard and unpleasant, while substantial wage differentials between farm and nonfarm work requiring equal or similar skill usually exists.

Unsatisfactory living conditions also have been a factor in preventing the return of many workers. Housing is usually inadequate, and sanitation facilities frequently primitive. Schools, churches, roads, and other community facilities are often deficient. Usually there is a close and direct relationship between the type and quality of labor available and the standard of living conditions within a community.

Finally, labor skills required on farms changed during the war period as mechanization progressed and many new developments in farming occurred. Many farmers shifted their operations to the production of crops requiring less labor or to livestock enterprises which required a different type of labor. These shifts have created a demand not only for an increased number of skilled workers, but also for workers possessing a variety of skills. Some farmers are in need of workers who can handle mechanized equipment and also aid in caring for beef cattle, a dairy, or a poultry enterprise; others need workers who can do construction or repair work around the houses and barns as well as general farm work. As a result of the increased emphasis on skilled workers, many people who
left the farm before the war now find that they are not equipped to fill the better-paid jobs on farms. Therefore, they have sought other employment rather than return to farms and accept jobs as unskilled workers, or, at best, only semiskilled workers.

Altogether these factors have been instrumental in keeping many potential farm laborers away from the farm, despite the fact that farm wage rates are high in relation to prewar standards. Farmers of the Southwest, therefore, face two problems: additional capable workers must be attracted to farms and relatively high farm wage rates must be converted to lower labor costs per unit of product through more efficient use of labor. These two problems are interrelated and must be attacked simultaneously.

First, how can additional capable workers be attracted to farms? There are many steps that may be taken. Housing available to farm laborers should be improved. Farm employees want, and have reason to expect, housing conditions equal to those they could secure if they were employed in the city. Adequate housing includes the modern conveniences of light, water, plumbing and sanitation, and, in a broad sense, reasonably comfortable and pleasant living quarters. These conveniences are being installed on more and more farms today as power lines and other utilities are established and facilities are supplied by manufacturers.

Another important need on farms is continuity of employment. Although much has been done through mechanization to reduce the seasonal variability of labor requirements in some types of farming, the problem is still important. The continued need for seasonal labor is a factor which stands in the way of making farm employment more stable and more secure. Among the steps that may be taken to reduce the seasonality of labor requirements is further mechanization which will reduce the labor required at the busiest seasons of the year as well as reduce the total labor required. Diversification of enterprises also may help reduce the seasonal variability of labor requirements. As different crop and livestock enterprises require larger amounts of labor at various times of the year, it is usually possible to combine these enterprises so that their peaks in labor requirements will come at different seasons. As a result, the number of workers employed during the year may be reduced, and the tenure of those employed will be lengthened or made continuous.

Many farm laborers no doubt are attracted to the city because of better health and educational facilities. Such community problems as these must be attacked by the community as a whole, but the active interest of individual farmers will contribute towards greater community action in filling these needs. The aid of state organizations may also contribute towards solution of these community problems. Some efforts are being made by private groups or through state health departments and affiliated organizations to improve the health services available to rural people and to extend the services of hospitalization to rural areas. As more progress is made along these lines, it will have a bearing on the farm operator’s labor problem by enabling him to secure better and more efficient workers.

On the second point in regard to increasing the output per worker on farms, it should be recognized that the improvement in living and working conditions will itself be an important step towards increasing the productive efficiency of employees simply by attracting larger numbers of the more capable and more productive workers.

In the years immediately ahead, farmers must continue to increase the productive efficiency of their farm businesses in order to pay wages to employees which will provide them with a standard of living commensurate with that which they might enjoy if they worked and lived in urban areas. Continued progress in labor productivity will contribute to lowered labor costs per unit of product. This can be achieved in a number of ways. The productivity of labor can be increased on farms by greater use of machinery and other labor-saving devices, such as cotton hill
planters, cotton choppers, multiple-row cultivators, mechanical cotton pickers, hay balers, and milking machines. The time required to do many jobs can be reduced through farm work simplification, by proper arrangement of buildings and fields on the farm, by careful planning of the interior of buildings, such as dairy barns, poultry houses, granaries, or feeding barns, and by simplifying the harvesting and packing of vegetables. The output per hour of work may be increased also by the use of improved varieties of crops and chemical fertilizers to increase crop yield. Farmers depending most on hired labor are generally in the best position to make such changes and to profit by them. As they take steps to make farm work and farm living more attractive to workers and as they employ better workers which produce more for each dollar spent for wages, the farm operators will profit by securing a greater return on their investments and from their own labor. Those farmers that are most successful in lowering labor costs may face a probable decline in commodity prices with greater confidence.

FARM MANAGEMENT

Prospective Farm Supplies

The production of farm machinery in 1948 is expected to exceed greatly the production of last year, according to recent reports of the United States Department of Agriculture. More materials, new plants, and expanded facilities in established plants are all helping to roll more machinery off the assembly lines. The favorable outlook applies to all important items of farm machinery, with especially marked gains considered likely in production of one-plow tractors and adapted equipment, combines, and motor trucks. While some machinery will be exported, the supply available for domestic farmers will be larger than it was in 1947, and it is expected that the shortage will be relieved in many areas this year.

The supply of feed grains in the months immediately ahead is expected to be lower than during the first part of 1947. Stocks of corn, oats, and barley in all positions in the United States on January 1 were the smallest since 1937, and 25 percent below those of the preceding year. Total stocks of these grains and stocks per grain-consuming animal unit are both about 14 percent below the 1938-42 average. Most of this decrease from 1947 is due to a sharp reduction in stocks of corn. The corn shortage appears to be rather general, for such stocks in the five states of the Eleventh Federal Reserve District on January 1 were only about one-half those of a year earlier. Stocks of hay in the United States on January 1 were about as large as on January 1, 1947, and are considered adequate for the hay-consuming livestock on farms.

Supplies of byproduct feeds for the remainder of the 1947-48 feeding season ending September 30 are expected to be above the average of the past few years, but probably will be smaller than in the same months of 1947. Much of this decrease will result from a decline in the production of byproduct feeds from grain processing. The production of oilseed cake and meal, on the other hand, is expected to exceed that of 1946-47.

The outlook for fertilizer supplies in 1948 is very favorable in comparison with the supply situation last year. Farmers in the United States in 1947 used 16,500,000 short tons of fertilizer, or about 14 percent more than in 1946. It is expected that if there are no transport tie-ups, labor stoppages, or further diversions of supplies to export markets, the supply available for distribution within the United States and its possessions in 1948 may reach 18,000,000 tons. Supplies of materials for use in production of all types of fertilizer are expected to be larger than last year. There will be about 4 percent more nitrogen, 5 percent more potash, and 6 percent more phosphate than was available last year. Looking farther ahead the fertilizer manufacturing industry anticipates further expansion in production, with annual output reaching 20,000,000 tons by 1950. New plants are being built and equipped in every part of the country, with quite a large number being established in the Southwest, in anticipation
of greater use of fertilizer by farmers in this area.

Cream Marketing Project Will Determine Profitability of Marketing by Grade

A new marketing project has been inaugurated by the New Mexico Extension Service to encourage dairymen to market on grade in order to improve the quality of the State’s dairy products. Much of the project work will be conducted in the Clovis-Portales area, where dairy plants have agreed to buy cream according to grade. As a check on the general improvement of the dairy products marketed by cooperating farmers, creameries will keep records on the quality of products delivered. The project will stress the proper care of milk products from milking time until delivery at the creamery. Information will be gathered to determine the profitability of marketing graded products.

TECHNOLOGICAL DEVELOPMENTS

Vitamin A Important to Cattle

The importance of an adequate supply of vitamin A in cattle rations to the growth and proper development of cattle was emphasized by the results obtained in experiments conducted by the Spur substation of the Agricultural Experiment Station of Texas A. & M. College. In a recently concluded experiment, under the supervision of Paul T. Marion of the Spur substation, a group of 14 yearling steers, ranging in weight from 700 to 1,000 pounds, were fed a ration of cottonseed meal and hulls (a ration that is deficient in vitamin A) for 84 days, in which time they developed advanced symptoms of vitamin A deficiency. They were night blind, had poor appetites, and their average daily gain of 2.25 pounds per animal for the first 56 days dropped to 1.10 pounds the last 28 days. When cattle are fed green grass, wheat pasture, alfalfa or other green feeds, they are able to store carotene—a form of vitamin A—to supply their body requirements for as long as 100 to 180 days, but the experimental group developed the symptoms of vitamin A deficiency in less time because they had no green grass from the middle of July through October, due to the late summer and fall drought. Fifteen similar steers which were grazed side by side with the first group during the summer were fed a ration of alfalfa hay an silage, which contain carotene, and none of these steers developed symptoms of vitamin A deficiency.

Mr. Marion warns that the recent drought may have left many cattle in the Southwest without a reserve of vitamin A. This is particularly true of cows and calves wintering on dry grass. If such a condition is found to exist, it is possible to correct it within a short time, says Mr. Marion, by feeding two to four pounds of good quality green alfalfa hay per animal per day.

Recent Publications

Oklahoma Agricultural Experiment Station, Oklahoma Agricultural and Mechanical College, Stillwater:

Results of Tests on Vegetated Waterways, and Method of Field Application, Miscellaneous Publication No. MP-12, by Maurice B. Cox and Vernon J. Palmer.


Texas Agricultural Experiment Station, Texas Agricultural and Mechanical College, College Station:

Cotton Variety Test, Brazos River Field Laboratory, College Station, 1943-47, Progress Report 1108, by J. E. Roberts and D. T. Killough.

Cotton Variety Test, Main Station Farm, College Station, 1943-47, Progress Report 1109, by J. E. Roberts and D. T. Killough.


Copies of these publications may be secured by request to their respective publishers.