

ARKANSAS, AGRICULTURE, AND THE FUTURE

Address

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In considering what I might contribute to this agricultural credit meeting, I reached a conclusion in part by the process of elimination. First, I wished to avoid the favorite winter pastime - maybe it is even the year-round pastime - of prognostication, to which I am sure you are all amply exposed to from time to time. Second, I desired to avoid a discussion of the details of agricultural production in your state. Obviously, you and your University of Arkansas representatives have more detailed knowledge in this field than I have or am expected to have. However, despite these negative desires, I did hope that I could make some contribution to these sessions by discussing Arkansas agriculture from the viewpoint of one who is, in a sense, outside the field looking in. This approach, which is relatively free from the burdensome details of imminently pressing problems, may enable us to look with perspective at broader, longer-run considerations.

One of the trying characteristics of our time is the perennial necessity to be preoccupied with problems crying for immediate solution. At times we find ourselves deeply concerned, and no doubt rightly so, with such things as new loan activity, a variety of administrative problems, decisions about income and expenses, and problems of price and production. So serious are these pressures on our time that we often lack the chance to back away and consider in more general terms some of the continuing problems of understanding where we have been, where we are, where we are going, and how we expect to get there.

For the next few minutes I invite you to join me in an attempt to abstract from pressing current problems, important though they may be, and think with me about some broader facets of the long-run situation in which rural Arkansas is involved.

Tremendous Progress

A striking feature one observes from a distance about Arkansas farms is that tremendous progress has been made and is being made. Progress can be evaluated in many ways depending on the objectives in contemplation. Measurements which all will agree are of significance to rural areas are (1) production per hour worked, (2) real income, and (3) living facilities of farm families. Measurements by these criteria reflect credit on Arkansas.

Output per hour of work on American farms has increased a phenomenal 140 per cent in the last twenty years - an even faster rate of increase than has occurred in the mass-production, industrial sector of our economy. Several factors have made this possible. Farm mechanization, which we observe all about us; increased use of chemicals, a less obvious but equally important phase of farm innovation, and better feeding-breeding practices have been major contributors to this favorable trend in production efficiency.

Arkansas has shared in this pleasant evolutionary process of producing food and fiber with less physical effort. The number of farm tractors has more than quadrupled during the last two decades, while the number of horses and mules, which, I am told, are a "man-killing" source of power, declined accordingly. Mechanical harvesting of cotton, the crop which accounts for 50 per cent of Arkansas cash farm receipts, is increasing at a rapid rate.

There are an estimated 1,550 harvesting machines on farms in this state, 50 per cent more than a year ago. However, since Arkansas farmers and planters harvested mechanically only 15 per cent of their 1954 cotton crop compared with 24 per cent nationally, it seems reasonable to assume that there are choices between mechanical and hand picking still to be made.

In addition to mechanization, increased uses of chemicals, including fertilizers, fungicides, insecticides, weed killers and defoliants, have contributed greatly to new farm production efficiency records - witness a 60 per cent increase in Arkansas per acre cotton yields in the last twenty years. During this same period fertilizer applications increased more than 5 fold and the use of pesticides increased more than 10 times. As with machinery, a look into the future of agricultural use of chemicals reveals only opportunity. Based on estimates of the United States Department of Agriculture, it appears that per acre cotton yields in Arkansas could be nearly doubled by application of known chemical technologies. And, production from rotation pastures, which accounts for one-fourth of Arkansas cropland, could be doubled.

In addition to greater output per crop acre during the last twenty years, production per animal unit has increased rapidly. Production per hen and per cow in Arkansas has increased by approximately one-fourth, largely reflecting improved breeding and feeding practices. And, looking ahead, egg and milk output per animal unit could be increased an additional 20 and 60 per cent, respectively. A large portion of the rewards for these observed and contemplated production efficiencies have been and will continue to be retained by the farmers and their local communities.

Adaptations to production of those farm commodities for which there is a growing demand is an additional practice by which many farmers increase their long-run farm income. Observing the past suggests that Arkansas farmers have rapidly adapted their production to changing demand. The annual value of soybeans, a crop practically unheard of on Arkansas farms twenty years ago, now approximates \$25 million. This is in part a replacement for the 20 per cent decline in cotton acreage during a comparable period of time.

Arkansas has also met consumption pattern changes associated with a higher standard of living by increased production of broilers. In 1953 this state ranked fourth in the United States in cash receipts from this commodity with sales of over \$50 million; the most important single livestock product in the state. Notwithstanding the recent slump in broiler prices, the long-run consumption prospects appear to be favorable relative to the average for all agricultural products. Based on reliable estimates, the effective demand for poultry meats will increase during the next two decades by approximately 40 per cent; greater than the expected increase in the consumption of beef, eggs, dairy products, cotton, wheat and many other farm products.

In all probability adjustments in relative demand for agricultural products will from time to time temporarily disrupt farmers' economic activity. However, expected changes in consumption patterns will continue to provide opportunities to those ready and able to shift from one commodity to another.

These observations of increased production and changing production patterns suggest that by almost any measures you choose, tremendous progress has been made in efficient production of those farm commodities which consumers want, and great opportunities for further progress lie ahead.

Translating farm production efficiencies into real income reveals an equally impressive story. The fruits of increased production per hour may be of several forms. One reward, not yet very noticeable as to farmers, although important, is more leisure time, the manner in which approximately one-fourth of the increased efficiency of America's over-all productive capacity during the last twenty years has been reflected. Few of us, regardless of occupation, relish a sixteen-hour workday to provide the minimum essentials and reasonable pleasures of life. Virtues often morally or romantically associated with hard work diminish to near nonexistence as the number of hours worked reaches the point of drudgery. Observation of the rapid mechanization of this State's agriculture leads me to believe that Arkansas farmers have considerably mitigated such displeasure during the last two decades.

A more obvious advantage of production efficiency is increased real income in terms of purchasing power. The criterion of real farm income becomes more meaningful when we examine the incomes and problems of component groups, commercial and noncommercial farmers. At once we see a striking dissimilarity. With noncommercial farmers, which generally includes those with annual farm receipts of less than \$1,200, level of income obviously is a major problem in which we all have a sincere interest. This is in part a situation of underemployment on farms which will produce more efficiently when they are combined into larger units. It seems that the problems of many in this group, as well as those in other industries in which the relative demand for workers is declining, are inherent problems of a society dedicated to efficient production for the satisfaction and pleasure of its members. In brief, it is a part of the

problem referred to by some as "technological unemployment" which is largely a problem of attracting workers to those jobs which will be most productive for all.

Under-employment in a part of our agricultural industry is a complex socio-economic problem. Important though it may be, it is not my intent today to propose solutions for this group of rural residents. I only wish to separate them from the commercial farmers whom I now wish to describe.

First, may we observe the income growth of commercial farmers - the group operating 60 per cent of Arkansas farm units and producing 95 per cent of the food and fiber sold from Arkansas farms. Contrary to the belief in some quarters, commercial farmers are being repaid attractively for their endeavors. In fact, real income of all United States farmers in most postwar years equalled that of employed industrial workers. This was, however, considerable improvement from the pre-World War 11 disparity of approximately 25 per cent.

Translating increased efficiency and greater income per farm worker into a higher standard of living is the "proof of the pudding". I have always suspected that a large part of the romance of country living, as described by James Whitcomb Riley, vanished as one visited the little 6-ft. square, white building at the back of the house on a bitter cold winter morning. Nor, I suspect, did farmers appreciate cutting wood or carrying wood by hand to the box by the side of the old wood-burning cook stove as much as do the artists who draw these homely scenes for calendars. And surely lifting the telephone receiver

to call a doctor in case of an emergency is more convenient than hitching horses up to a buggy, or even getting into a new 1955 car and taking the patient to the doctor.

Certainly many aspects of gracious living have a deeper significance than material luxury, but who would deny that the 30,000 electric water systems in Arkansas homes in 1950, twice the number of 1945, were to be desired? Or that the convenience of a telephone, as enjoyed by twice as many Arkansas farm families in 1950 as in 1940, was not beneficial? Or that the miracle of electricity enjoyed by over 100,000 additional Arkansas farm families in the past twenty years is not something to strive for? Truly, the line which once clearly divided the city dweller from his country cousin is fast disappearing.

Causes of Progress

But we dare not reflect idly on the past with serene satisfaction. We should, with more wisdom, observe the past keys to progress and consider doors of opportunity which might be opened in the future.

To what can we attribute Arkansas' economic growth, and, more specifically, the rural progress which I mentioned a few minutes ago? Although modesty is considered by some to be the greatest of all virtues, and without any intent of flattery, I suspect you as Arkansas bankers would be unjust to yourselves if you did not recognize the services you have made available to the efficient farmers in your respective communities. You are serving rural areas, and incidentally yourselves, by loans outstanding to farmers of about \$160 million.

In handling this loan volume in 1955, bankers are, in some cases,

confronted with problems generally unknown twenty years ago. A moment ago I indicated that vast opportunities for further production improvements, including additional mechanization and chemical application, lie ahead. But these opportunities are not without problems. Capital is required. Mechanization was the greatest contributor to the \$10 billion physical increase in United States farm capital requirements the last two decades. And, as is often pointed out, investments new in type or volume frequently are accompanied by new and more complicated credit problems. For example, before the advent of the tractor and mechanical cotton picker, the typical farm credit problem in the Delta was one of seasonal requirement to carry the farmer over until the next harvest time. However, in some cases the size of additional investment, plus the limited, though favorable, repayment capacity of the farmer, precludes complete repayment at the first subsequent harvest. And this, I assume, is a part of the problem to which you addressed yourselves at this conference.

Knowledge, a very real form of capital investment, has also left its mark on your pages of progress. Your extension service has greatly expanded and improved its facilities since the passage of the Smith Lever Act in 1914. Educational meetings, such as this co-sponsored by the University of Arkansas, the Arkansas Bankers Association and Federal Reserve Bank of St. Louis, are an investment in the future. Although less tangible than a line of credit to a farmer, or a tractor, or an additional ton of fertilizer, technical know-how is an expensive production factor and is one of the real prime motivators of improved farm and bank practices. Your interest in this type of meeting clearly

suggests that you intend, over time, to continue to improve the quality of your services.

In addition to effective credit services and increased technical know-how, progress is motivated by other means. Continued leadership in nonfarm economic growth activities is to be praised. Non-agricultural growth, closely related to capital investments, in Arkansas has perhaps contributed as much to the welfare of rural areas as improvements from within the farm sector of this State's economy.

The process of increasing the amount of capital per agricultural worker which we have been describing is, of course, occurring in other areas of the economy as well. You need not look beyond the borders of this state to see some of the remarkable developments taking place in manufacturing, for instance. You are justifiably proud of new and expanding chemical plants, aluminum plants, oil refineries, wood and paper products plants, and many others too numerous to mention. Although we tend to think of manufacturing growth as unrelated to the problems of capital investment in agriculture, I suggest to you that there are two important bonds between them.

On the one hand, as investment in machinery and other labor-saving tools for the farmer proceeds, some farm workers become available for other employment, and this availability of labor increases the attractiveness of your communities as sites for manufacturing plants. On the other hand, increasing employment opportunity in manufacturing makes it possible to combine farm land into the larger units required for the most economical use of modern farm technology. An indication of the change taking place along this line is to be

found in the 50 per cent increase in the average size of Arkansas' farms in the 20 years from 1930 to 1950.

Clearly agriculture and industry progress together. Time was when there existed a large group of proponents of the belief that agriculture was somehow more important to the stability and growth of society than other segments of the economy. By now we have come more to think that agricultural and nonagricultural groups work hand in hand, sharing in proportion to their productivity in the stability and growth of an area. Drawing on a well understood analogy, time was when many believed the tail - agriculture - wagged the dog - the economy. But now we recognize that the dog simply has a big tail; how big it is, is shown by the fact that Arkansas' farm income equals one-fourth the value of non-farm income.

Conclusion

In conclusion, during the past two decades, American agriculture, working hand in hand with non-agricultural sectors of our economy, has made tremendous strides in efficiencies of production with resulting higher standards of living. The 110,000 commercial Arkansas farms have shared, indeed, at a faster rate than for the United States, in these measurements of progress. The rapidity with which this trend continues may be influenced greatly, and we assume positively, by three important aspects of human activity. First, the extent to which farmers adjust food and fiber production patterns in harmony with the higher standard of living desired by our growing population will in part determine the gross rewards which the economy decides to bestow upon them; second, the

level of efficiency accomplished in producing these desired commodities will in part determine net rewards; and third, the adroitness with which we mobilize human resources to produce farm and non-farm products in harmony with the needs and wants of consumers will in part determine the per capita rewards.

To transform these goals into realities will require a healthy economic climate. We would be derelict in our duties if we did not learn to use more effectively the monetary controls which Congress has delegated to us, and you may be assured that we who carry out the functions of the central banking system will at all times be striving earnestly to contribute to economic stability and growth which will be in the best interest of Arkansas farmers, of your state, and of this nation of ours. To suggest that Arkansas bankers will continue to make great contributions to economic growth is, I am sure, a statement of the obvious.

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