AGRICULTURE IN A DYNAMIC ECONOMY

Address by Chas. N. Shepardson,

Member, Board of Governors, Federal Reserve System,

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I have often thought of the very pleasant and profitable year that I spent in graduate work at Iowa State some thirty years ago and it is a real pleasure to have the privilege of coming back to Iowa and being with you at this time. I realize that the general theme of the meeting this morning is "Swine Production" but I have had little experience in that field and you do have a number of other speakers who will deal with various phases of that subject. For that reason I have chosen to speak to you for a few minutes on some of the problems of the whole field of agriculture in our present dynamic American economy. Never in our history have we witnessed such a growth in our economy as in the past fifteen years.

First of all, let us look at this expansion in broad, national terms. The total value of the nation's product currently is approaching 400 billion dollars a year. This is almost four times the rate in the prewar year of 1940 -- when gross national product had finally recovered to the earlier record level of 1929. This growth was stimulated first by the tremendous wartime pressures of 1940-45, but has continued rapidly and fairly steadily since then. Three waves of rapid price increases have occurred since 1940, followed by fairly extended periods of relative stability. After allowing for the price increase over the entire period, however, the aggregate physical volume of output of the country is now at a rate almost double that of 1940. Industrial production is a little more than double.

Total employment this summer exceeded 65 million for the first time. In 1940, about 48 million were employed -- about the same as in 1929. The increase in employment since 1940 has been greater than the growth of the labor

force and has led to a reduction in the number of unemployed to about 2 million now from over 8 million in 1940.

It is this gain in production that is primarily responsible for our higher level of real income and the corresponding increase in standard of living. As disposable personal income rose from $75 billion in 1940 to $271 billion this year, all types of consumer spending also rose, reflecting the spirit of confidence generated by the high level of income. At the same time, net personal savings, after a sharp drop immediately following the war, have held reasonably stable at an average of about $18 billion for each of the past five years. All of this has given us one of the most prosperous periods in our history; in fact, so much so that it is becoming a matter of concern to many people as to how long this rate of expansion can be maintained.

Within the general framework of marked expansion of production and of employment, incomes, and living standards, developments have differed among industrial sectors and some geographic areas. In a dynamic economy such as ours, such shifts in the pattern of growth are continually occurring.

So let us take a look at the agricultural segment of our economy. During the past fifteen years, agriculture has felt the impact of the forces that have made for over-all economic expansion, and many special factors have made the changes in agriculture fully as dramatic as those in industry. The term "technological revolution" has aptly been applied to these changes in the output, productivity, financial structure, and many other aspects of farming. The machine age reached agriculture in full measure during this period. In addition to marked growth in use of machinery, tremendous improvements also have been made in seeds, use of fertilizers, stock breeding, insecticides and other production techniques.

As a result of these changes, growth in farm productivity, which during the earlier decades had lagged behind growth in industrial productivity, has been greater than that of the industrial economy over the last decade and a half.

At the same time the net income of farm operators, in spite of recent falling farm commodity prices and rising costs, increased from $4.6 billion in 1940 to $12 billion in 1954. This rising income, shared by a decreasing number of people on farms, has resulted in a rise in per capita farm income for persons on farms from $174 to $648, an increase of 270 per cent, and a rise in total, including off-farm, income from $262 to $907 or 250 per cent, compared with a rise in per capita income of persons not on farms from $690 to $1830 or 165 per cent. On the basis of these figures, it would appear that agriculture has improved its position and, in a measure, that is true if we ignore the relatively unfavorable position of agriculture in 1940 and the difference in trends in the agricultural and non-agricultural income in the last four years.

In 1940, farm prices had recovered some from the low point in 1932 and stood at 81 per cent of parity, compared with the low of 58 per cent. While this was a marked improvement, agriculture was still at a comparative disadvantage. This situation improved rapidly in the early years of the war to 113 in 1943 and then dropped back to 108 under the restriction of price controls.

Following the war, as a result of a pent-up domestic demand and a world-wide need for food and fiber, demand outran production for a time and prices of farm commodities rose rapidly so that in 1947 agriculture had

attained a parity ratio of 115. Under this war and post-war pressure, production increased rapidly. New land was brought into cultivation, much of it land that is normally submarginal for sustained cultivation but, under the unusually long series of good crop years, land that was most productive during the period of world need.

Since 1947 the trend has been reversed. Farm prices rose sharply during the Korean outbreak but they have fallen steadily since that time. Farm costs also rose and, except for 1951, the parity ratio has declined steadily from the peak of 115 in 1947 to about 85 at present. Obviously, it was not to be expected that agriculture would long maintain its position at 115 per cent of parity. The difficulty lies mainly in the continuing drop to the present level.

Many reasons are given for this decline. It is not my purpose to discuss the adequacy or inadequacy of the various programs suggested or followed to correct this situation but, rather, to look at some of the basic causes and to suggest some possible avenues of approach to the problem.

Shifts in land use and increased productivity, both on a per man hour and a per acre basis, have given us a rising agricultural output. Per acre yields are up about 22 per cent and man-hour output about 90 per cent in the last fifteen years. The land required for production of horse and mule feed has continued to decrease from 42 million acres in 1940 to 25 million acres in 1947 and to less than 11 million at the present time. As a result of these changes, total farm output for human consumption is up about 35 per cent, notwithstanding a decrease of 28 per cent in farm population.

Incidentally, this reduction in farm population is a two-fold benefit. It allows the available land to be combined into larger, more efficient units and releases the resulting surplus farm labor to help meet the growing demand for man-power in other industries. It should be borne in mind, however, that such transfers are dependent to an important extent upon maintaining a prosperous and expanding industrial economy. In fact, the depressed condition of agriculture in the early thirties was materially aggravated by the depressed condition of other industry and the backing up of surplus labor on the farm, which in turn retarded the advent of many of our recent developments in farm mechanization.

Unfortunately for farmers, the per capita consumption of agricultural commodities has not expanded in proportion to the consumption of non-agricultural items. With a rising disposable income, consumers have expanded greatly their demand for larger and better houses, more cars, household appliances and other items. But the capacity of the human stomach has certain limits and, while the quality of our diet has improved through increased consumption of certain animal and poultry products and fresh fruits and vegetables, the increase in consumption of these products has been partly offset by lower consumption of other foods.

At the same time, the war and post-war demand for agricultural exports has decreased materially as other countries have reestablished and, in some cases, increased their own production. These factors have more than offset the increased demand due to rising domestic population and higher income, and, as a result, agriculture finds itself faced with a real problem of burdensome surpluses, especially in cotton and wheat. While acreage control programs have tended to retard or prevent further surpluses, these are not entirely

effective, as witness the recent outlook report for the current cotton crop, which now promises to be slightly larger than last year's crop in spite of a 14 per cent reduction in acreage. In fact, increased productivity has frequently nullified the anticipated reduction in supplies through acreage control programs.

What, then, can we do to alleviate the situation? It seems to me that there are several things. One is to seek more favorable foreign trade relations in order to increase our volume of exports, especially to those countries still living on substandard diets. This may involve some further adjustment in prices to meet world competition.

Another is to retire a considerable acreage of submarginal or hazardous crop land from cultivation and restore it to grass or timber. In this connection, it is important to remember that, while much of the new land that was put into cultivation during the war was extremely productive under better than normal rainfall, this land burns out quickly in dry weather and it cannot normally stand continuous cropping without becoming a dust hazard. Restored to grass, it can rebuild its soil structure and fertility and again become a source of land reserve against the time when it might be needed for crop production. In some cases, this can be done by private owners, while in others it will require some type of public assistance.

A third approach is continued effort toward increased productivity and lowered unit cost of production. This is important if we are to meet the present competition for an increased share of world markets and it is imperative if we are to meet the future needs of our increasing population. In many cases, this means enlarged family farm units and increased use of

mechanization and modern technology. It may also mean the diverting of cash-crop land to grass and forage crops and the addition or enlargement of an animal production program which may provide for better use of land capabilities, a more diversified and hence more stable income, and a more efficient use of farm labor throughout the year.

The opportunities for increased efficiency are enormous when we consider the difference in per acre or per animal unit production between the level presently attained by our more efficient farmers compared with that of the average, to say nothing of that of the least efficient farmers. In the case of the less efficient and usually smaller operator, there would seem to be three alternatives. He may enlarge his unit to an economically sound operation capable of utilizing efficiently his full time and ability; he may convert his operation to one that will afford more time for off-farm employment and seek to increase his income in that way; or, he may decide to give up farming entirely and seek employment in other fields.

In this connection, there is need to separate in our thinking the situation of the efficient commercial farm operator and that of the person on an inefficient marginal unit. It has been estimated that 85 to 90 per cent of farm output comes from 2 million farms; the other 3.5 million farms contributed the remainder. Included in the latter group are the marginal farms as well as many farms used primarily as residences, or for purposes other than farming as a business enterprise. Over-all income statistics need to be evaluated in the light of these great differences. Better current statistics on the behavior and positions of these various groups in agriculture would be helpful to all of us concerned with lending to farmers and with economic policy matters.

It is in this area of increased productivity and efficiency, it seems to me, that the commercial banker has both an opportunity and a responsibility to make a further contribution.

Modern farming is becoming increasingly industrialized and the farmer's need for investment and operating capital has increased accordingly. A look at the agricultural balance sheet reveals that investment in enlarged acreages of improved farm lands and improved buildings and facilities has increased over 10 per cent since 1940 in terms of 1940 prices and 170 per cent at current prices. Although land values fell off in 1952-53, the latest report shows an increase of 5 per cent in the last twelve months. While livestock assets, including work stock, have changed little in terms of 1940 prices, they have increased about 120 per cent at current prices, notwithstanding the big drop from the 1951 peak. The big increase has been in farm machinery and equipment. This item in the agricultural balance sheet has jumped from 3.2 billion dollars in 1940 to 17.7 billion in 1955, an increase of over 450 per cent at current prices and 160 per cent in terms of 1940 prices. In the aggregate, this amounts to an average investment of about $15,000 per farm worker, or four times the amount in 1940. Most family-size commercial farms in the Corn Belt require a much larger investment per worker than this. For example, the average cash grain farm in the Corn Belt requires an investment of about $60,000 per worker.

The above are what we might term productive assets. Another item which is not strictly in that category but which is equally important in terms of keeping ambitious, progressive, and capable farmers and farm families on the land is the improvement in household furnishings and equipment. Total

investment in this item has increased 50 per cent in terms of 1940 prices and about 160 per cent at current prices. When we realize that the number of farms has decreased one-seventh during this same period, the increased investment per farm becomes even more significant.

Much of the modern farm equipment is composed of large and expensive units with a relatively long life which cannot normally be paid for out of one crop. This means that the farmer needs term credit that will permit him to amortize the cost over a reasonable period. The same is true of land improvements, including clearing, grading, seeding and fertilizing pastures, and installation of drainage and irrigation facilities. It may also be true where proper land use dictates the need to change over in part or in whole from cash crop production to pasture, feed, and livestock production with the attendant investment in barns, equipment, and breeding flocks or herds.

Such investments all require careful long-range planning with realistic estimates of cost and probable rate and amount of return. Many country banks and some of the larger city correspondent banks are doing an excellent job of meeting this type of credit need. They have established agricultural departments in their banks, staffed with competent agriculturally trained officers who can provide, on the ground, guidance and assistance to their farmer customers in planning such programs and who are also in position to keep a follow-up check on their development. Through their contact with the soil conservation and land use programs in their area, they can be of inestimable value in helping and encouraging their farmer customers to work out and develop the best long-range land use programs for their particular farms.

And, in the case of the small farmer who decides from choice or necessity to seek either part or full-time off-farm employment, they can play a real part by providing counsel and leadership in the development of a community program to secure small industries and other non-farm employment opportunities together with the development of vocational training programs to help qualify farm people for such opportunities.

I mentioned earlier some of the changes in the agricultural balance sheet. I also want to mention some others. Liabilities have increased 80 per cent since 1940. By themselves, these figures might give cause for concern. However, when we consider that total assets increased over 200 per cent and farmers' equity 230 per cent, the picture is somewhat different. True, the recent picture has not been as favorable. From January 1, 1953 to January 1, 1955, total assets decreased 3 billion dollars while total liabilities increased 2 billion dollars, including an increase of 1.7 billion in CCC loans, leaving a decrease in net worth of 5 billion or about 3 per cent in the last two years. The decrease in assets is largely a reflection of falling prices, with most of it due to livestock. Certainly, this is a matter of concern but I would call attention to two possible lines of approach in improving this situation. One is increased emphasis on increased per capita consumption. While per capita consumption of all meats has increased about 20 per cent in the last fifteen years, we are still considerably below the consumption rate in several other countries. Livestock, dairy, and poultry producers are to be commended on their present sales promotion and merchandising programs but they need to be further enlarged and intensified.

The second approach is along the line of quality improvement and greater attention to consumer preferences. One of the great wastes in livestock production at the present time is the over-fattening of many of our meat animals. Surely, a certain degree of fatness or finish adds to the flavor and tenderness of meat. But the degree of over-fattening that we frequently get is the most expensive gain put on the animal and the least desirable to the consumer, who has to trim off large quantities of unwanted and excess fat.

The recent increase in liabilities reflects two forces and we lack the information to tell how much is due to each. For some farmers, it doubtless represents losses on operations for the past two years and that is certainly unhealthy. Some of it, however, represents loans for the purchase of additional land and equipment or livestock, which may well represent efforts to improve efficiency of farm operations rather than losses.

The figures that I have been giving are national figures. We all realize, of course, that there are wide variations both between different sections of the country and between individual farmers even in the same area. I also realize that there are problems that involve national policy, which is in process of study and possible revision at the present time. I have purposely avoided dealing with those problems and have tried to confine my remarks to those areas where the farmer, with your counsel and assistance, can do something about improving his situation.

Proper land use is essential at all times if we are to conserve this great natural resource for the use of future generations.

Increased efficiency and continued technological advancement is the key to the rising level of our economy and no segment can afford to fall

behind even though increased productivity may at times seem to compound our problem of temporary surpluses and depressed prices.

And the need for adequate,sound credit facilities to finance our increasing technology in agriculture is but a part of the total credit structure on which our present dynamic economy is built.

To the extent that these problems can be met and solved by individual or group effort on the part of farmers and business, the need for government action is reduced and the maintenance of a free economy is enhanced.

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