

Agriculture's Responsibility in a Growing Economy

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I am glad to have the opportunity to discuss with you agriculture's responsibility in our nation's economy because I know many of you are thinking seriously about the future of agriculture and how you, your associations and other agricultural organizations will fit into the changing scene. Today, I would therefore like to do some thinking with you about the kind of history the sugar industry and other segments of agriculture are going to write.

Last spring, at the University of California, we held a symposium on "The Future of California Agriculture." We did some looking ahead to the 1970's and even to the 1980's and beyond. First, however, we looked back. We reviewed what had been done before we discussed the future.

Here, too, I would like to take a quick look at agriculture today and what is happening to it. We might say that the most important feature in the agricultural scene is change itself. Our friends in other fields of endeavor find present-day farming, with its airplanes, chemicals and great machines, baffling enough without peering ahead into the vague future of the 1970's and 1980's.

We know that American agriculture today is feeding and clothing 180 million people in this country alone. In addition, the production of one out of every six acres of our land is exported to feed and clothe people in foreign lands. In 1963, our farmers set a new high level of total food and fiber production on the smallest number of acres harvested at any time in the twentieth century. We also know that consumers are spending the smallest share of their income on food in the history of our nation, and that this share is the smallest of any nation in the world.

Our agriculture has already entered the domain of science, engineering and business management. The fruit and vegetable packer, the canner, the freezer, the miller, the creamery operator, the feed manufacturer, the rice dryer, and the cotton ginner are all part of agriculture. So are the shippers who send produce to market and the merchandisers who sell it from the market shelf, even though most of them do not realize it. Agriculture also embraces the suppliers who provide feeds, seeds, fertilizers, farm machinery, petroleum, hardware, lumber, cans and processing equipment, and the bankers who provide credit and financial guidance to farmers. It includes research scientists and

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the agricultural extension workers of the universities and of the members of the United States Department of Agriculture.

But most of all, agriculture counts upon those who raise the livestock, produce the meat, milk, and eggs and till the soil and grow the crops. They are the people really responsible for the great contributions agriculture has made to our nation's economy. Without their willingness to accept and adopt new ideas, the agriculture of our nation could not have become the envy of all of the nations of the world.

Agriculture is our largest industry. It employs approximately 7 million workers on the farms and ranches. This is more than the combined employment in transportation, public utilities, and the steel and automobile industries. Farm and ranch assets total about \$210 billion, or nearly three-fourths of the value of current assets of all corporations in the United States and about two-thirds of the market value of all corporation stocks on the New York Stock Exchange.

Our 3.7 million independent farmers and ranchers are perhaps the best customers that our nonagricultural people have, for they spend about \$27 billion a year for goods and services to produce crops and livestock. Farm and ranch people spend another \$15 billion a year for food, clothing, drugs, furniture, appliances, and other materials which they use for everyday living.

Farmers and ranchers are also creators of private employment. We do not have a full count of the people engaged in each of the associated services and manufacturing industries. We do know that the figure is huge and that four out of every 10 jobs in private employment relate to agriculture. Ten million people have jobs storing, transporting, processing and merchandising the products of agriculture. Six million have jobs providing the supplies that farmers and ranchers buy. All in all, without stretching our figures, we can say that total agriculture employs approximately 26 million people and accounts for roughly 40 per cent of the national economy.

Agriculture has also contributed greatly to the nonagricultural growth of our nation's economy. First, output per man hour has been increased to the extent that one hour of farm labor today produces more than four times as much food and fiber as it did in 1920. Hundreds of thousands of people have been released from agriculture to other occupations as plumbers, carpenters, lawyers, doctors, school-teachers and technicians of all sorts who produce the products and services associated with higher standards of living. Second, increased efficiency in agriculture has made it possible for consumers to spend a greater

part of their income for products and services other than food. U. S. consumers are today spending approximately 20 per cent of their income for food while consumers in England spend 41 per cent, in Norway 44 per cent, in France 38 per cent, and in the Soviet Union 53 per cent.

Although agriculture is perhaps the nation's most important single industry and has contributed greatly to the growth of the nation and to the well-being of our citizens, it is an industry that has had and is having problems. Its major problem during the greater portion of the past four decades has been income. Right now average per capita farm income on a nation wide basis is barely half that earned by comparable people in other industries. Moreover, incomes earned in agriculture are far more variable and unstable than those earned in other industries. The low per capita income reflects the status of the many under-employed people in agriculture. It also reflects the fact that farmers and ranchers have not been able to increase their income or even to keep the savings made possible by the development and adoption of new technological innovations.

Many people fail to understand how an industry that has so greatly increased its efficiency has been unable to increase its per capita income. Farmers have not been able to increase their income despite greatly improved efficiency because of the competitive structure of agriculture. The agricultural improvements adopted during the past 40 years have been primarily capital-using, labor-saving, and output-increasing. When demand does not increase to offset the increased output, such improvements initiate a three-stage economic reaction.

Stage 1 is the adoption of new techniques by early innovators. Once a new technology is developed, it attracts the attention of a small number of farmers who always keep their eyes and ears open for anything that will reduce their per unit costs. Once these farmers find an innovation they think will help them make a profit, they generally adopt it. Since these early adopters expect the innovation to increase profit, they also tend to increase their crop acreage or livestock numbers associated with the new technology. But since few farmers are involved at this stage, their increase in output is relatively small and has little effect upon market prices.

Stage 2 is general adoption of the new technique by other farmers, who have observed the success achieved by the early adopters. As many more farmers adopt the innovation, output is increased considerably and prices fall. Sometimes the price falls to the point where the farmer may actually have less net

income than before the idea was developed. The savings are passed on to the consumer, and the farmer is powerless to do anything about it. From the standpoint of the economy as a whole, this price drop is very desirable. It enables the consumer to spend less for food and more for other things associated with higher standards of living. It also tends to force farmers out of agriculture into nonagricultural jobs. This was very important during the 1940's and 1950's, because increased numbers of professional people, skilled workers, and laborers were necessary for the economic growth of the nonagricultural sector of our economy.

Stage 3 of this economic chain is the movement of people out of agriculture. The theory is that if farmers move out of agriculture fast enough, the income to those who remain in agriculture will increase. Increasing per capita income is one of the opportunities for agriculture in the years that lie ahead. Reducing the number of people in agriculture is the most economical method to increase per capita income.

People have been moving out of agriculture at a rapid rate. During the 1950's farm population decreased about 6.5 million—from roughly 23 million to about 16.5 million. Getting farmers to leave agriculture will be more difficult in the 1960's and 1970's than it was in the 1950's. Employment opportunities for farmers in non-agricultural jobs have decreased in the past two or three years. They will probably continue to decrease in coming years because of the competition for nonagricultural jobs. The large numbers of young men and women born in the early 1940's are now beginning to enter the labor force. This influx of young workers is also expected to increase faster than jobs.

Another problem is that the average age of all farm operators in the U. S. is now over 50 years. Even though farmers are able to do many things, most of them have no particular skill to compete in nonagricultural industries with the young people now entering the labor force. Since this is the case, the greatest and perhaps the only real opportunity to reduce the number of people in agriculture lies in training farm young people for nonfarm employment and encouraging them to leave agriculture.

The present secondary education system in many agricultural areas is not educating and encouraging enough young people to leave agriculture. In fact, approximately 45 per cent of the funds spent for vocational education in the secondary schools is used exclusively for training in farming skills and home economics. If we are ever to solve the problem of under-employment in agriculture, then this vocational training program needs to be reoriented. At the same time that we train youths for job opportunities available in nonagricultural industries, we must

give serious thought to maintaining and building agriculture's leadership. After all, agriculture in its larger sense represents about 40 per cent of the nation's economy. The most competent leadership is needed in research, teaching, and the many business ramifications of agriculture. There are now, and there will continue to be, excellent and rewarding opportunities for men who are well trained in professions and businesses serving agriculture. Agricultural leaders of tomorrow will need training in more than the arts of farming. They need the broadest kind of basic foundation. They need some understanding of science, business, political science, and economics. We owe it to ourselves and to those who will come after us to encourage bright young minds to go beyond the secondary schools to obtain the best technical and professional training to be had.

Agriculture, represented by organizations such as yours, must assume the responsibility for leadership in agricultural areas for reorienting the education and training programs of the farm youth. The majority have to be trained to leave the farm or ranch. Some, if they obtain the proper technical and professional training, can go into industries associated with agriculture.

A second opportunity for agriculture lies in the area of increasing marketings to both the world and domestic consumers. The value of U. S. agricultural exports in the fiscal year 1962-63 advanced to a new record of \$5.1 billion—up 4 per cent over the previous 1961-62 peak. The 1963-64 export is expected to rise to about \$6 billion.

Increased competition from other countries is going to put pressure on world prices. Many of the countries whose economic development we have aided are just beginning to compete with us in both the world and our own domestic market. We can also expect added competition from the regional trading blocs, such as the European Common Market, the so-called Outer Seven on the fringe of the Common Market, and the proposed Latin American trade groups, as well as other trade groups that may be formed in the future. In the short run, these countries are going to make it difficult for us to increase our export volume. However, as modern agricultural technologies free some of the labor resources of the underdeveloped countries from agricultural work, as has been done in the United States, their industrial capacity will increase. This will mean higher per capita incomes and greater demand for food and fiber products.

If the United States is to meet this competition and increase its share of the food and fiber business in both the world and

the domestic markets, production costs must be continually reduced. This means continual development and adoption of new output-increasing technologies.

Two factors are primarily responsible for the great advances we have made in agriculture during the past few decades. First, millions of farmers, spurred by the incentive and pride of ownership inherent in the American family-farm economy, have applied new discoveries and new methods to their own operation. Second, a tremendous amount of research and development has been carried on, primarily by the land-grant colleges, the United States Department of Agriculture, and private industry.

It is estimated that if agriculture were still using the methods of 20 years ago for producing crops and raising and feeding livestock, it would have cost an extra \$13 billion to produce the nation's food and fiber. To offset this, the average consumer family in the United States would have had to spend approximately \$240 more to obtain the food they purchased last year.

It is agriculture's responsibility, and particularly the responsibility of organizations such as yours, to see that both the family-farm concept and public research are continued. In fact, if it were not for public supported research and the dissemination of its findings to farmers, we probably would not have the family-type agriculture we have today. Without public supported research and the results made available to all farmers, large and small alike, large corporations would have been able to develop and capitalize on private research. This would have put the family farmer at an economic disadvantage and encouraged tremendously huge land holdings.

The third opportunity for agriculture is to free itself from many of the government programs that exist today. This will not be an easy task, nor can it be done overnight. In fact, if agriculture frees itself from federal price support and production control programs by 1970, it will have accomplished a Herculean task.

The major problem in removing government programs is that we have a much larger production base of agricultural lands than is needed to meet the demand of domestic and foreign markets at prices satisfactory to farmers. Many of these lands were put into production as a result of government programs starting back as early as World War I and reemphasized during World War II. During the two wars, food and fiber needs dictated that all effort be made to increase agricultural production. After World War II, government policy has not encouraged withdrawal of farm lands from production.

Competent researchers now estimate that agriculture will be able to meet food and fiber demands 20 years hence with approximately 50 million fewer crop acres than were available in 1959. As long as this great production capacity is available for farming, farmers will have a tendency to grow crops and produce livestock on the land, because there is little other economic opportunity for its use.

A number of attempts have been made to withdraw rather large acreages rather permanently from agriculture but still to maintain the land in a manner that would keep it available in case of emergency or when population growth may need it. However, these attempts have been opposed politically, primarily by nonagricultural industries. They are concerned about the effect such reductions might have upon nonagricultural business.

Agriculture must therefore assume the responsibility of putting forth, or at least going along with, some type of program that will (1) maintain income to agriculture and related business, (2) assure the people of our nation an abundant supply of food and fiber, (3) enable us to sell products in the world market at prices that will compete with those of other countries, and (4) minimize government cost.

A fourth opportunity open to agriculture lies in resource development for urbanization. Here there are two ways in which farmers can improve their income. First, they can join with nonagricultural interests in bringing nonagricultural industries into agricultural areas. This approach will help provide employment for farm people. Second, they can provide services, particularly open-space recreation, for urban people.

The development of agricultural area resources for urban growth is not easy, because farm people and urban people generally do not see eye to eye on what is best for the community. Controversy over land use for urban growth is part of today's daily life in agricultural areas. Most farmers tend to prefer the complete laissez-faire approach, while urban people tend to favor an over-all growth plan of some type.

Regardless of what individuals favor, this is truly a critical time in the history of many communities. In some areas citizens today may well be facing their last chance to choose their own pattern of resource development. Once the concrete has been laid, decisions to put land into subdivisions, shopping areas, freeways, or airports become, for all practical purposes, irreversible. A bulldozer can scrape away houses; but this is rarely, if ever, economically feasible—capital losses are usually too great. Whatever pattern for resource development is chosen by a community, it will affect the growth of the particular community, the growth

of the individual state, and perhaps the long-run status of the community and the state with respect to the nation and the world.

Plans for resource development must include a means of helping those who depend upon farming, ranching and forestry for their livelihood to assess their needs and work out problems they can't solve alone. The plans must also provide both economic opportunity and the amenities of life for the farm people who leave agriculture to become part of the urban sector. There must be provision, too, for the urban people who move into the agricultural areas to live and raise their families. Although development must be planned and orderly, it must not and need not infringe unduly upon our system of private enterprise. Moreover, plans must be flexible enough to provide for changing demands of future generations.

Resource development for urban growth is the responsibility of all leaders in agricultural areas, city and rural people alike. Their challenge and responsibility is to point out the alternative opportunities and to stimulate interest and participation by citizens of every community in creating and regulating their economic growth as the majority of the people desire.

Those of you in the sugar industry have contributed greatly to the growth of American agriculture. You have led the way in plant breeding, in use of fertilizers, in mechanization of both production and harvest and in the development of modern processing methods. You have assisted in making American agriculture world renowned. You are aware of the responsibilities of agriculture to the people of this nation and to the people of the world.

As we look forward to the decades ahead, each of you realizes that all of us in agriculture have a job to do this week and all 52 weeks of this year and for many years to come. It is our job to see that agricultural and urban people alike recognize the opportunities available. Together with community and industry leaders, we must assume the responsibilities involved in educating our young people and developing our resources in a manner that will yield greatest economic opportunity and more of the amenities of life to all the people of this great nation of ours. Failure on our part to do this will be paid for by the sweat and tears of those who will be forced out of agriculture into unemployment and poverty.
