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THE BROAD ROLE OF AGRICULTURE IN ECONOMIC DEVELOPMENT

BY

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Raymond J. Penn*

Thank you for the opportunity to participate in your annual conference. I must admit that my acceptance was based largely on a selfish motive: it gave me an opportunity to visit many of my good friends and former associates, including the Kristjansons, Helgi Austman and many others.

I have travelled by automobile from Kenora to Winnipeg, and at Gimil I have eaten a goodly number of fish freshly caught in Lake Winnipeg. But, unfortunately, these experiences are not what it takes to become acquainted with the agriculture and overall economy of Manitoba and of Canada.

Helgi Austman and Baldur Kristjanson have tried seriously to prepare me for my task here. Helgi loaned me his copy of the COMEF report[1/] and the agricultural summary of that document. Baldur sent me the second annual report of the Manitoba Economic Consultative Board.[2/] These reports illustrate the kind of consideration being given to fundamental evaluations of Manitoba's future economy. Even

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1/ Manitoba 1962-75, Report of the Committee on Manitoba's Economic Future, Government of Manitoba, 1963.

2/ Winnipeg, March 1965.

with all this expert assistance, and some homework, the ideas I express here will still be based on very limited knowledge of Manitoba.

Since the theme today is change--economic development and agriculture's role in it--our subject centers on policy formulation, program development and problem solving. It has always been my belief that people have the power to improve their own lot. The most important development force--and the one often overlooked and practically never understood--is the will of people expressed by them as individuals, by their groups, and in their governments.

Issues of this kind, however, are always related to the situation in which they exist. And specific issues don't repeat themselves. They are unique. So I hope you will not expect me to offer much by way of specific recommendations to resolve issues you are confronted with here in Manitoba. Rather, I will discuss some of my recent concerns with development problems and extension programs in the United States and in Latin America.

We must keep in mind that the role of agriculture in a country's economic development depends a good deal on the level of development already achieved. Those of us who live in a developed country generally take the social and economic system or structure as given. To make changes we shift the allocation of the production factors of land, labor, managerial ability and new technology. In many undeveloped countries the very system itself--the power structure--must be changed if there is to be significant economic development. Professor Peter Dorner, director of the Land Tenure Center of the

University of Wisconsin, illustrates this point in a recent summary of the Land Tenure Center research program in Latin America:[3/]

"The basic assumption or hypothesis underlying our research /about Latin American land tenure systems/ is that the general institutional structures of the Latin American rural economy support a relatively small, privileged class which leaves the mass of rural people on the pariphery of participation in the market economy... Formulating the basic issues in this way places institutional change (economic and social innovation) at the center of any program of economic development." Unfortunately, Professor Dorner continues, our social scientists are not very experienced in these matters. In the U.S. system (and I suspect the same is true in Canada) forms of organization are usually considered adequate and fundamentally sound. Research can concentrate on working out minor defects within the system: freedom, security, stability, progress--these are all firmly established.

In rural Latin America, however, Professor Dorner asserts that basic institutional change is necessary. This change requires a public redefinition of rights, privileges, duties and obligations of the several groups and participants.

The need for basic structural change is clear in an undeveloped country. Division of labor essential for increased production cannot take place unless a person has some security about the future. A

[3/] Land Tenure Center Annual Program Report, 1965, Madison, Wisconsin.

farmer will not invest his own or borrowed money to improve production if he does not receive some of the increased production from that investment, or if he is not reasonably certain of a market and a fair price for the product, or if he is not sure his earnings will be safe from theft or inflation. He must also be assured that the products he wants to buy are available. As a result, unless some major structural changes occur in Latin America, little more than subsistence farming can be expected from most of the rural people.

Professor Dorner points out, however, that even in developed countries like the United States, institutional issues may be critical in some areas. "Institutional reconstruction in poverty areas, racial integration, reformulation of the concept 'work' to provide adequate criteria for sharing in the wealth produced in an increasingly automated economy...," these are all issues. They will require substantial change in the way social and economic institutions are organized.

I would now like to turn to four areas that might be of value for our discussions today. The first two are general areas and are related. First, what is the role of population in economic development, and second, can world agricultural production increase rapidly enough to keep pace with population growth and world food needs? Third, should public investments be made in agriculture? And finally I'd like to give a few illustrations of the role of agriculture in U.S. development.

1) The Role of Population in Economic Development

The rate of population growth has been a major issue at least since Malthus formulated the problem. I give it major attention here not only because such a large number of analysts feel population must be controlled, but also because I have recently changed my mind on this subject. Some checks, I now feel, must be placed on population.

My past position has been that people can organize themselves, find new technologies, and by their very increase in numbers increase their standard of living. The U.S. standard of living increased as population increased. Similarly, rapid economic expansion in the European Common Market countries occurred in part because 300 million consumers lived in the Common Market area, producing and providing purchasing power. Rostow and others have been looking for ways to widen the market of a country as a method of increasing the country's welfare.[4/]

On one side of the argument have been those who believe resources are relatively fixed and that more people will mean each person will get less. On the other side are those who feel science, intelligent people, and adequate organization can increase production and standards of living and resolve any new problems such as transportation or pollution. In the past I have agreed with the second position but have recently modified that stand. I altered my views after observing the

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[4/] W. W. Rostow, "The Concept of a National Market and its Economic Growth Implications," The Department of State Bulletin: 53 (1370), September 27, 1965, p. 518.

problems of our growing metropolitan areas rather than population pressures in so-called underdeveloped areas. Population increases will create the most difficult problems in urban centers. And with unlimited population growth, it may not be possible to maintain an environment of satisfactory quality.

Pollution and transportation seem particularly critical in the United States today. We could spend the rest of this conference describing the problems of water and air pollution. The Saturday Review, in its issue of Oct. 23, 1965, presented an excellent analysis of water problems. At a Wisconsin water conference several months ago Governor Rockefeller noted that the New York fire department allowed a building to burn to the ground because of inadequate supplies of water in New York's reservoirs. The water in the Hudson River running alongside the building was so polluted it would have ruined the fire-fighting equipment. Thus, the decision was made to sacrifice the building rather than the fire-fighting equipment.

2) Can Agricultural Production Keep Pace With Population Growth and World Food Needs?

FAO has estimated that in order to provide adequate diets for people in all parts of the world, food supplies must double by 1980 and triple by 2000. Although agricultural production has been increasing, the U.S. Department of Agriculture reports that in a study of 26 developing countries the people in 11 did not have adequate diets.5/

5/Changes in Agriculture in 26 Developing Nations--1948 to 1963. Foreign Agricultural Economic Report No. 27, Economic Research Service, U. S. Department of Agriculture, November 1965.

A great disparity exists in the potential for food production of different nations and in the amount of food available in different areas of the same country. Increased income will rapidly increase the demand for food. In spite of this heavy demand and assuming major rural structural changes in developing countries and financial assistance from developed countries, producing adequate food need not be an insurmountable obstacle. In 1963 Willard Cochrane said, "There is a strong likelihood that sufficient excess agricultural productive capacity will be in existence in 1980 among the developed countries to meet the expected world food deficit."[6/]

Response in the United States to these kinds of data has been at least twofold. One, many believe we should continue maximum food production because it will be badly needed for at least 15 years. Dairy, hog, beef and wheat needs are now putting increasing pressure on U. S. supplies. Second, government price support policy makers have put into operation a long-time program aimed at supporting prices at world market levels.

To produce adequate food and especially to make it available to hungry people will not be easy. Big changes must be made in the developing countries if agricultural food production is to be increased and used. A large amount of food will have to be distributed free to the recipient nations and individuals. And it will cost some

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6/ Willard W. Cochrane, Arthur B. Mackie and Grover C. Chappell, "Potential Uses of Farm Products as Aid to Developing Countries," Journal of Farm Economics: 45(5), Proceedings Issue, December 1963.

nations substantial amounts to keep their farmers producing to capacity. But productive capacity in countries like the United States and Canada may not be enough. A system of national markets like those described by Rostow, transportation facilities and production incentives were not developed in Canada or anywhere else on the basis of welfare food stocks. For us to produce the food is not enough. The people in developing countries themselves must become a part of the production process--they must be consumers. They must build roads, storage, processing and marketing facilities. And since a relatively large percentage of the population in underdeveloped countries is engaged in agriculture, the people must have proper incentives to meet food supply needs.

3) Should Public Investments Be Made in Agriculture?

Nearly all of us here are agricultural technicians. I suspect we are agreed that agriculture is important to a country's development and merits substantial government expenditures.

Our position is by no means held by everyone. Some like Lauchlin Currie believe no public funds should be spent in agriculture in Colombia. (Currie was a Canadian from, I believe, one of the Maritime Provinces. He went to Harvard and became one of the New Deal brain-trusters working with Professor Jacob Viner. In 1940 he participated in a study of Colombia for the World Bank and is now a citizen of that country.)

Professor Currie agrees that short food supplies in Colombia are a problem. But he believes reducing the rate of population increase

of primary importance in coping with this situation. Beyond this, his solution is almost exclusively investment in industrialization and the urban community to create more jobs or what he calls a "pull" on rural population.[7/]

He suggests giving top priority to finding a solution to the agrarian problem. But he defines the agrarian problem as a low level of income in rural areas. In Colombia half of the people are engaged in agriculture. And the incomes generated in agriculture are the lowest of all sectors in the Colombian economy. Raising the standard of living of those in the farm sector to the level of urban workers would resolve a number of problems. "The solution I propose...is the creation of remunerative jobs producing things the people need, including additional foodstuffs, urban housing, public services and fabricated articles for mass consumption." (He has detailed his industrial investment program in other places.) His main point is that the creation of 700,000 urban jobs in three years would concentrate investment in industrialization.

Such a program, Currie says, would have the following effect: "The increased well being of the countrymen, both those who leave and those who remain in rural regions, and remunerative employment for the natural addition to the labor force, would clearly provide an

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[7/] Lauchlin Currie, Some Unresolved Issues in National Programming, Paper presented to the Third Congress of the Colombian Society of Economists, 1963. (Substantially the same argument was made in a seminar at the University of Wisconsin, November 1965, and is expected in a book to be released January 1966.)

impetus to agricultural mechanization, would augment the real demand for industrial products, would reduce the inequality between urban and rural workers, would mean the abandonment of some marginal lands and uneconomic sized holdings. It would be a contribution to the conservation of natural resources, would, especially in cities give more children better education and health...would dampen down the population explosion."

Currie is concerned that the problem be stated correctly. As stated before, he feels the problem is that rural incomes are too low. If the problem is stated the other way, namely that there is inadequate agricultural production, the entire program changes. Stated this way, he says, the program would call for more agricultural workers, more credit, more irrigation projects, etc. If this program succeeds, he feels too much agricultural production will result, prices and farm income will fall, mechanization will be discouraged, small holdings will increase, soil erosion will increase, problems of education, health, morality and security will become more acute.

From this argument it is clear that Professor Currie does not believe scarce resources should be invested in agriculture. Many persons in responsible decision making positions also hold this general view. The advocacy of this position has been illustrated by the manner in which public funds to implement development plans have been allocated away from agriculture in many parts of the world.

For the other side of the argument--the one that I think more logical and better supported by evidence, let us turn to Gunnar Myrdal.[8/]

Myrdal, like Currie, observes the difficulties posed by the population explosion in undeveloped countries. He points out that science and new technology have not filtered down to the undeveloped countries, but have in fact increased the gap between them and the more developed countries. He sees a need for research aimed directly at solving the problems of undeveloped countries.

In commenting on the implication of high rates of population increase, he says, "A decrease in birth rate will have no effect whatever in the size of the labor force for 15 years and only a very minor effect for three decades...we can safely predict that, until the end of the present century and perhaps longer, the labor force in undeveloped countries will increase by more than two percent a year and in Latin American countries by around three percent..."

Myrdal recognizes that industrialization is an important goal for underdeveloped countries and that it must be encouraged. Yet he claims it would be wrong to expect industrialization to provide significant employment outlets very quickly. Industrialization must start at a low level. And some new industrialization will replace some present, more labor consuming, industries and hence will reduce

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[8/] Gunnar Myrdal, "The United Nations, Agriculture, and the World Economic Revolution," Journal of Farm Economics: 47(4), November 1965, p. 889. Adapted from a speech to the Latin American Conference on Food and Agriculture held in Viña del Mar, March 18, 1965.

employment opportunities

"In an early stage of industrialization," Myrdal says, "there will always be backwash effects, decreasing, obliterating, or, in the extreme case, even reversing any 'employment creating' effects from industrialization."

In one study he found that in spite of a heavily accentuated industrialization effort, the labor force employed in manufacturing decreased for more than two decades.

With the labor force increasing and with the limited possibility of increasing industrial employment soon (though every effort should be made to increase industrialization), Myrdal says "we are forced to conclude that the far greater part of the increase in the labor force must remain outside of industry, mainly in agriculture."

"Therefore, agriculture, which is by far the largest sector in the economy of all undeveloped countries, and agricultural development remain the key issue...the cornerstone of economic development."

Myrdal strongly supports institutional reforms and structural changes in rural areas and hopes political forces will be strong enough to make substantial changes. The situation can result, and in fact has at times resulted, in violence. He particularly warns that persons who build the image that increased industrialization alone can create jobs and be solely responsible for economic development may in fact prevent the necessary emphasis on changing the economic and social order in the villages and in raising the productivity of agricultural labor and land.

Myrdal concludes that "two things are clear. First, most of the increase in agricultural production must take place in undeveloped countries, a fact which would imply a sharp turn of the present curve of development of agricultural production there." (One might add a sharp turn in the agricultural production policies of the more developed countries, too.) "Second, failure to reach this goal will imply a world calamity, the real import and effects of which are terrifying to consider."

I have overemphasized the positions and ideas of Currie and Myrdal partly because they represent extremities in the range of positions held by policy makers, partly because I find much to agree with in Myrdal's presentation and partly because Myrdal gives us in agricultural surplus producing countries a real jolt by saying we cannot solve the major long-run food problem by increasing our production, even though temporarily we may play a critical role.

4) U. S. Development Supports Myrdal's Ideas

Agriculture has played a major role in U.S. economic development. Therefore, few points illustrating the significance of that role might be relevant in this discussion.

a. About 1870 a little mechanization took place in wheat production and good transportation facilities became available in the Corn Belt. Sale of U.S. farm products abroad not only established U.S. credit, but provided foreign capital which helped begin our large industrial establishment.

b. Between 1880 and 1910 agricultural population continued to increase but also furnished people to man the factories. By 1910 our farm population had dropped to one-third of the total population.

c. In 1964 about 6.8 percent of the U. S. population lived on farms. Now one U. S. farm worker feeds nearly 30 others (7 in other countries). And less than 19 cents of the consumer's dollar goes for food.

To close, let me do a little arbitrary preaching. The most important force in getting things done is the will and desires of groups of people. This will built school houses and churches even before our grandfathers built their first homes. This group will and group action accomplishes agrarian reform in Venezuela and stops violence in some parts of Colombia. And it is this group will and group action that must be brought to bear on present problems of vertical integration and automation.

It seems to me the most important idea we have to export or in fact use ourselves is the understanding of the procedures of group action and how group desires can bring about the basic ingredients of economic development--change in the social structure and social innovations. We in agriculture, especially as extension workers and educators, should make our major contribution here.

Remember as an educator:

1. Try out new things.
2. You may not always be right.
3. Change your position if new evidence warrants change.