Our stake in commercial agriculture, rural poverty and world trade

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OUR STAKE IN COMMERCIAL AGRICULTURE, RURAL POVERTY AND WORLD TRADE

Proceedings of the Fifth Annual FARM POLICY REVIEW CONFERENCE

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OUR STAKE IN COMMERCIAL AGRICULTURE, RURAL POVERTY AND WORLD TRADE

Proceedings of the FIFTH ANNUAL FARM POLICY REVIEW CONFERENCE

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January 25-27, 1965

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and the
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North Carolina State
Foreword

The nation is still in the midst of an unprecedented upward trend in prosperity and economic growth. It has already attained a level of national and per capita income which would have seemed unattainable only three decades ago. But the end is not yet in sight and American society has defined substantive future goals accordingly. These are goals in general which suggest opportunity for all individuals and groups to share equitably in participation and gain from this advance. If they are to be attained, these goals also require an appraisal of the nation's policies in respect to their contribution to or restraint on attainment over the next decade.

Agricultural policies are important ones of the set to be examined. The agricultural industry has contributed greatly to the economic advance and income of the nation. Not only has agriculture freed resources to be used on other fronts of economic growth but it supplies food to consumers at the lowest real price over the entire world. But even with these attainments, a major portion of the nation's poverty still resides within agriculture. Farm communities have fewer facilities for and attainment in education and vocational training than the urban society. Large public outlays are still used to restrain supply in an attempt to assure an equitable share in the national economic growth to which the commercial farm sector contributes.

Our farm policies are largely geared to the conditions and needs of the three previous decades. Perhaps some are inconsistent with
our broader national and international goals for the decades ahead. The Fifth Annual Farm Policy Review Conference was organized accordingly. The papers contain an appraisal of the performance of current farm policies in respect to lessening poverty, to an equitable distribution of the gains from economic growth, to prospects and performance in international markets, to further advances and structural adjustments of the farm industry, and to attainment in education and public knowledge. They also suggest instruments and means which would allow farm policies to be better meshed with the nation's broader social and economic goals in the period ahead.

The Fifth Annual Farm Policy Review Conference was held in Washington, D.C. at the request of members of Congress and program administrators. It was attended by many individuals representing these groups and by those representing farm organizations and universities or other research, educational, and service institutions. These conferences have served greatly to stimulate direct communication between government representatives, university scientists and farm leaders. It is hoped that this process can continue.

Earl O. Heady
Executive Director
Center for Agricultural and Economic Development
Iowa State University
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COMMERCIAL AGRICULTURE'S RESPONSE TO NATIONAL FARM POLICIES

by K. L. Robinson

It is appropriate to begin with a review of the present position of commercial farmers and the impact which recent government programs have had on those farms which account for a large proportion of all farm products sold. According to recent USDA figures, there are approximately 3.5 million farms. But less than half of these farms produce the bulk of farm products which move through commercial channels of trade. The top 27 percent of all farms (those with sales in excess of $10,000 annually) now account for nearly 80 percent of the total value of farm products sold (Table 1). Almost a million farms fall in this category. Another 600,000 farms have annual sales which fall between $5,000 and $10,000 annually. Most of these also can be classified as commercial farms, but their numbers are dwindling, and most farms in this category face severe adjustment problems. Finally, there are nearly two million farms with reported sales of $5,000 or less, but they account for less than 10 percent of all farm products sold. On most of these farms, income from nonfarm sources is far more important than income from the sale of farm products. Their prosperity is already influenced much more by developments outside of agriculture than by the level of farm prices or by agricultural support programs.

It is, of course, extremely difficult and frequently misleading to attempt to generalize about farmers today because of the wide diversity that exists in farm sizes and incomes. Despite unfavorable prices for most farm products, high costs and frequently a shortage of skilled and reliable labor, some farmers are doing remarkably well. Others are building up debts and are falling farther behind each year.

Typical labor incomes on dairy farms in the Northeast, for example, have been around $3,000 in recent years. Average incomes for the majority of farmers certainly are low in relation to those of employed workers in nonfarm occupations. But the average figures tell only part of the story. Among a group of 18 above-average dairy farms in New York, all family owned and operated with no more than one or two hired men per farm, the range in labor incomes (after allowing for a 5 percent return on capital) in 1963 was from less than $3,000 for four of the farms to more than $10,000 for six of the farms. One farmer earned a labor income of more than $25,000.

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1 Professor of agricultural economics, Cornell University.
Table 1  Number of Farms and Proportion of Sales by Sales Classes, 1963

<table>
<thead>
<tr>
<th>Farms with sales of:</th>
<th>Number of Farms (million)</th>
<th>Percent of All Farms (percent)</th>
<th>Percent of Total Sales (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000 and up</td>
<td>1.0</td>
<td>27</td>
<td>78</td>
</tr>
<tr>
<td>$ 5,000 to $10,000</td>
<td>.6</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>$ 2,500 to $ 5,000</td>
<td>.5</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Less than $ 2,500</td>
<td>1.5</td>
<td>43</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3.6</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


Similar extremes can be found among any group of commercial farmers at present. Those farmers with superior management ability and the capital to make improvements are doing remarkably well.

At least a part of the present wide range in incomes is associated with farm sizes. Farmers with gross sales of less than $5,000 annually obviously find it extremely difficult to pay production expenses and have enough left to maintain a reasonable level of living unless they can earn income from off-farm work. Even those farms with sales of $5,000 to $10,000 have limited potential earning capacity. It is generally acknowledged that a farmer needs to sell farm products valued at $10,000 or more each year to farm successfully today. Farmers themselves have recognized this. The number of farms with sales in excess of $10,000 annually has, in fact, been rising in recent years, while the number of farms with sales of less than this amount has been declining, especially those with sales of less than $5,000 annually.

Every year since 1935, the total number of farms has been less than in the preceding year. In the decade of the 1940's the average rate of decline fell between 1 and 2 percent per year. During the past decade, including the past five years, the rate of decline has averaged about 3 percent per year. Thus, the decline in farm numbers is clearly a bi-partisan phenomenon. The exodus from agriculture has continued in every administration and under every Secretary of Agriculture that has held office during the past 30 years.
Effects of Recent Federal Farm Programs on Commercial Agriculture

We have at present an extremely diverse and complex assortment of commodity programs. These programs provide price supports at widely varying levels for some commodities but not others. Those commodities which are supported now account for roughly one half the total cash receipts of farmers. Livestock and most livestock products (other than milk and dairy products), fruits and vegetables are not supported although the prices of many of these non-supported commodities are influenced indirectly by support programs on other commodities and, in a few cases, by marketing orders. Present support programs are buttressed by a wide range of activities designed to reduce supplies or to increase consumption, either at home or abroad. These include compulsory acreage allotments for some crops but not others, the school lunch, school milk and food stamp programs, export subsidies, sales of surplus commodities for foreign currencies and gifts for relief. More recently, large-scale land retirement programs have been added. It is obviously very difficult to separate out the effects of these programs from all the other factors which have influenced farm output, prices and incomes over the past decade. Nevertheless, I think it is important to try to do this if one is to provide information on which to base rational policy decisions.

Farm programs probably have influenced prices and incomes much more during the past decade than during the depression years of the 1930's and certainly more than during the decade of the 1940's. During the first 15 years of government price-support and acreage control programs, that is from about 1933 to 1948, recovery from the depression, drought in the mid-1930's and World War II had far more influence on agriculture than did farm programs. The agricultural adjustment programs adopted in the 1930's unquestionably influenced the production of individual commodities such as cotton and tobacco, but they had only a very modest effect on total farm output. Average farm prices were increased as a result of the storage and loan program when commodities moved into storage in the late 1930's, but they were later depressed when the accumulated storage stocks were liquidated. Thus, the net effect was to moderate the price fluctuations rather than to raise by a substantial margin the average level of farm prices.

Government programs also helped to cushion the decline in prices which occurred in the late 1940's. But again, the effect of the support programs during late 1940's and early 1950's was mainly to moderate price fluctuations rather than to add significantly to average farm incomes. Storage holdings acquired in the late 1940's were reduced during the Korean emergency.

Government policies began to have a much greater impact on agriculture during the decade following the Korean War (beginning about 1953). In the late 1950's and early 1960's, net farm incomes probably were increased by
a minimum of 20 percent and perhaps as much as 50 percent by government price-support, acreage diversion and surplus disposal programs.\textsuperscript{2} The greater impact of government programs during the past decade than during earlier periods is due principally to the fact that substantial quantities of farm products were held off the market and stored or diverted to non-commercial outlets, mainly abroad. In addition, beginning in the late 1950's and continuing in the early 1960's, total farm output, and not just the production of individual commodities, was held down by land retirement programs. Substantial export subsidies and transfers of income via direct payments, as under the feed grain, cotton, sugar and wool programs, also have contributed to maintaining or raising farm incomes during recent years.

Increases in cash costs relative to gross receipts in recent years have made net farm incomes more vulnerable to changes in farm prices than was true 20 or 30 years ago. At present, a decline of 10 percent in gross receipts is likely to be accompanied by a reduction of between 30 and 35 percent in net farm income, and an even greater percentage decline in the net cash income available to buy new equipment or to repay debts. Thus, price declines are more serious now than a decade or two ago because of the higher leverage or multiplier effect such changes are likely to have on net farm incomes.

Despite support programs, the average level of farm prices in the United States has been relatively low in recent years when measured against either world prices or historical price relationships in this country. Our prices for feed grains, soybeans, poultry and eggs are among the lowest in the world. The prices which our farmers receive for wheat, cotton, rice and tobacco, although above those prevailing in the lowest-price countries, are well below those which are maintained in many countries. The index of average farm prices in the United States in 1963-64 was 4 percent below the level prevailing a decade earlier, while the index of prices paid was 12 percent higher. During each of the past three years, the parity ration, that is the average relationship between prices received and paid by farmers (with the 1910-14 relationship equal to 100) has fallen below 80. The only other period since World War I that the ratio has remained this low for as long as three years was during the early 1930's. The current ratio is substantially below that which prevailed during the agricultural depression of the 1920's.

\textsuperscript{2}For a review of these estimates see "Farm Program Benefits and Costs in Recent Years," a study prepared for the Senate Committee on Agriculture and Forestry by Walter W. Wilcox of the Legislative Reference Service and published as a Committee Print, 88th Congress, Second Session, October 1964.
Had farm price-support, storage, acreage diversion and export subsidy programs not been in effect during the past decade, there is no question but that farm prices would have declined even further. Various statistical methods have been used in an attempt to estimate how much prices might have fallen in the absence of government programs. All are subject to limitations, particularly with respect to the effect lower prices might have had on subsequent supplies, but they offer convincing evidence of the critical role which support programs have played during the recent years in maintaining farm prices substantially above the levels that would have prevailed under free-market conditions. The effects obviously have been much greater on some commodities, such as wheat, cotton, tobacco and rice than on other commodities such as fruits, vegetables, eggs and poultry. Indirectly, supports and storage or diversion programs have significantly influenced livestock product prices, particularly the prices of beef and pork. Had surplus grain stocks not been held off the market, prices would have been forced down to a level at which it would have been profitable to convert the additional grain into beef, pork and poultry. This, in turn, would have depressed the average prices of all livestock products.

Producers of supported commodities undoubtedly have received a large share of the benefits of federal farm programs, but the producers of such non-supported commodities as pork and beef also have gained, at least in the short run. Benefits have been allocated among producers roughly in proportion to sales. Thus, the top 25 to 30 percent of all farmers (those with sales in excess of $10,000 annually) have probably obtained about 80 per cent of the benefits.

Those leaving agriculture also have benefited indirectly from support programs because of the effect such programs have had on farm values. Over the past three years, prices of farm land have risen at the average rate of about 5 per cent per year. The recent inflation in land prices has been due in part to intense competition among farmers who want to enlarge their farms. But at least a significant part of the gain has been due to government programs. Certainly land values would have risen less if such programs had not been in effect. While higher land values have provided a form of capital gains to farmers who have sold out, it must be recognized that these higher prices also have raised entry costs and thereby created a higher cost structure for those purchasing farms.

Farm price-support and supply adjustment programs clearly have helped to maintain or raise the average level of farm prices, incomes and land values during the past decade. The effect of such programs on output and efficiency is much more difficult to determine. Some of the programs which have been in effect during the past 10 years have had a retarding effect on output and efficiency, while others have stimulated the adoption of new technology and thus have contributed to increases in yields. My own judgement, based on fragmentary and admittedly not very satisfactory data, is that our farm programs had a net positive effect
on output during much of the 1950's, but that they have had a retarding effect on output during the past three to five years. During the most recent period, the withdrawal of land from production under various types of government programs probably has been sufficient to offset a major part of the yield-increasing stimulus of price and income-support programs. This was not true during most of the 1950's. Except in 1957-58, total farm output was not materially influenced by government programs. During the past four years, however, the area planted to crops has been reduced by 40 to 50 million acres which is equivalent to a 13 percent reduction in land inputs. As a result of this large-scale withdrawal of land, production has been held below where it would otherwise have been.

Among the major agricultural nations of the world, the United States is unique in having adopted programs designed to limit production. Mainly because of these programs, per capita supplies of agricultural products in the United States have averaged very little higher during the past three years than in the early 1950's, (table 2). In contrast, per capita supplies of farm products are now much larger than a decade ago in most other industrial nations, and especially in Japan, Australia and Western Europe. Total agricultural output rose even in Eastern Europe, the USSR and Latin America more than in the United States between 1952-4 and 1962-4.

Changes in the use of farm inputs during the past decade are in line with those that probably would have occurred in the absence of government programs. Farmers are now using a third less labor than a decade ago, 10 to 15 per cent less land, about the same quantity of machinery, and much more fertilizer, chemicals and purchased feed (Table 3). It is unlikely that the exodus from agriculture could have been speeded up much more without causing serious problems for rural communities. In the absence of price-support programs, slightly larger numbers of people might have left agriculture, but there is little evidence to suggest that such programs have been a significant factor in the decision to leave or to remain in agriculture. Income differentials have been so wide, particularly for those operating small farms, that there has been ample incentive to move whenever jobs were available. The rate of exodus from agriculture has undoubtedly been influenced much more by nonfarm employment opportunities than by farm programs.

In the absence of government programs, the amount of income available to finance improvements undoubtedly would have been reduced. This in turn would have made creditors less willing to finance the purchase of additional machinery and perhaps other inputs as well. The question of fertilizer purchases is the most critical, since inputs of fertilizer have probably contributed more to increasing output in recent years than any other factor. Over the past 10 years, the total quantity of plant nutrients applied, (nitrogen, phosphorus and potassium combined) has increased more than 75 percent. If one accepts the rule of thumb which has been suggested by some agronomists that a ton of applied plant nutrients will add the
Table 2  Percent Changes in Total and Per Capita Farm Output, Selected Areas and Countries, 1952-54 to 1962-64

<table>
<thead>
<tr>
<th>Country or Area</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Japan</td>
<td>51</td>
</tr>
<tr>
<td>Australia</td>
<td>41</td>
</tr>
<tr>
<td>Eastern Europe and USSR</td>
<td>34</td>
</tr>
<tr>
<td>Latin America</td>
<td>34</td>
</tr>
<tr>
<td>Western Europe</td>
<td>25</td>
</tr>
<tr>
<td>U. S. A.</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: World Agricultural Situation, ERS, USDA, 1965

Table 3  Changes in Major Farm Inputs 1953-54 to 1963-64

<table>
<thead>
<tr>
<th>Farm Inputs</th>
<th>Percent change, 1953-54 to 1963-64*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm labor (man-hours)</td>
<td>-36</td>
</tr>
<tr>
<td>Cropland planted</td>
<td>-13</td>
</tr>
<tr>
<td>Machinery</td>
<td>+2</td>
</tr>
<tr>
<td>Feed, seed and livestock purchased</td>
<td>+54</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>+76</td>
</tr>
</tbody>
</table>

* Partly estimated.

equivalent of 10 tons of grain, then as much as 80 per cent of the increase in total grain production which has occurred during the past decade can be attributed to increased use of fertilizer. Even if farm product prices had been lower, it is doubtful if the use of fertilizer would have been greatly curtailed. Marginal returns from increased use of fertilizer at recent prices have been as high as three dollars for each dollar spent.

Regional shifts in production undoubtedly have been inhibited by acreage allotment programs tied to historical bases. In the absence of allotment programs, production of cotton undoubtedly would have declined in the Southeast and increased in the Southwest. A somewhat larger proportion of the wheat crop also would have been produced in those areas where costs are low and alternatives limited such as the Great Plains and the Pacific Northwest and a smaller proportion in the eastern states. The consolidation of farms would have been encouraged, and, on the average, greater efficiency in the use of both labor and machinery would have been achieved. Farms have grown in size despite these programs, but consolidation probably would have occurred at an even more rapid pace in the absence of such programs. At the same time, one must recognize that increases in labor efficiency have been achieved in part because farmers have had the income (and hence the capital) to buy additional land, machinery, improved seeds, fertilizer, irrigation equipment, etc.

In summary, the effects of farm programs on commercial farmers and their present position is about as follows:

1. Despite government support programs, farm prices are now relatively low by historical standards, but they are probably at least 10 per cent higher than they would be in the absence of government programs.

2. A significant minority of farmers have demonstrated that they can operate profitably under present adverse price relationships. They have been able to do this by enlarging their farm, using higher yielding crop practices and buying additional machinery.

3. The income spread within agriculture is probably widening. Farmers with superior management ability have increased their incomes relative to those who have been unwilling or unable to adopt new production practices.

4. Large numbers of small-scale farms still remain in agriculture despite the rapid adjustments that have occurred in recent years. Only a small fraction of those operating such farms (i.e., farms with current sales of $5,000 or less) will ever be able to earn a satisfactory income solely from agriculture.
5. Farm programs have not seriously impeded resource adjustments in agriculture. The quantity of labor and land employed in agriculture has continued to decline, and the use of capital, and especially fertilizer, has increased. These are changes which probably would have occurred in the absence of government programs, although probably at somewhat different rates.

6. Farm incomes and land values are now higher than they would have been in the absence of government programs. At least a part of these gains have been capitalized into land values, thereby adding to capital requirements for new entrants into agriculture.

7. Some of the agricultural programs which have been in effect during recent years have led to increases in yields and efficiency, while others have had a retarding effect. I find it difficult to make a positive statement about whether gains have exceeded losses or the reverse. The changes in resource use that have been induced by price-support and related programs are probably small relative to those resulting from technological developments and market forces. The major factors contributing to increased output during the past decade have been improved varieties and cultural practices which have been developed in large part with public finds, and cheap fertilizer, improved chemicals and farm machinery, which have been produced mainly by private industry.

Magnitude of the Present Surplus Problem

Experience during recent years strongly suggests that more farm products are likely to be produced by farmers during the next few years at prices averaging between 75 and 80 percent of parity (if production is uncontrolled) than consumers, either at home or abroad, might purchase at these prices. The amount by which prices would have to be reduced in order to achieve equilibrium between commercial demand and supply obviously cannot be forecast with any degree of precision, partly because the effects of future technological developments are unknown. Most economists who have made an attempt to forecast future demand and supply conditions have come to the conclusion that, even under the unfavorable price relationships that have prevailed in recent years, the surplus problem is likely to persist, at least during the next five to ten years. If yields continue to rise at rates which approximate those that have prevailed in the recent past, we will be able to meet anticipated domestic and export demands 10 or 15 years hence with no more land in production that has been planted to crops in recent years, and less land than was farmed in the 1950's.3

3See Earl O. Heady, "Potential Shifts in Commercial Agriculture Relative to Technological Change; Policies for Long-Run Solution to Surplus Problems," this volume.
The size of the surplus is obviously dependent on prices. To maintain the present level of prices, it probably will be necessary over the next five to ten years, either to purchase farm products equivalent in value to between 5 and 8 per cent of annual production if output is not restricted, or to make corresponding adjustments in production. This is merely an informed guess, and for this reason should not be considered as a precise forecast. A period of adverse weather or a new international crisis might temporarily eliminate the surplus problem. Nevertheless, it would appear prudent for the United States to be prepared to deal with a continuing adjustment problem in agriculture over the next decade of about the same dimensions as in the recent past. 4 This suggests that we should be prepared to consider something more than one or two-year "emergency" programs.

**Alternative Courses of Action**

American agriculture has achieved a tolerable degree of adjustment with the assistance of the federal government during the past few years. Physical surpluses of most commodities have been reduced. Except for cotton and tobacco, average annual disappearance of every major farm commodity has equalled or exceeded production during the past three years. Our experience has demonstrated that the surplus problem is by no means insoluble. Nevertheless, I think it fair to say that no one is entirely satisfied with the present combination of farm programs. Many farmers are dissatisfied with the incomes they now receive; others complain about the controls and the bureaucracy necessary to implement the programs which have been adopted; nonfarm residents object to the costs associated with supporting agriculture; our competitors abroad complain about our export policies; and economists frequently assert that too little attention has been given to policies which will facilitate long-run resource adjustments. While criticisms abound, one must not lose sight of the fact that the present combination of programs does represent an acceptable compromise. There is probably less opposition among commercial farmers to present programs, complicated though they are, than to most of the alternatives that have been proposed.

In view of the support that exists for the current mixture of programs, it is probably unrealistic to think in terms of eliminating all supports or of relying on a single proposal such as comprehensive supply controls to achieve a balance between consumption and production. The important policy issue at present is to decide what combination of programs appears to be reasonable. My assignment is not to attempt to prescribe the optimum mix of programs (even if I were capable of doing so to the satisfaction

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of all interested groups), but merely to suggest possible modifications of
present programs or changes in emphasis that might be considered, and
to point out some of the consequences of such changes.

Since government costs are a focal point of opposition to present pro-
grams, I shall begin by listing the alternatives in ascending order of costs. They are as follows:

1. Lower support prices

2. Limit production or sales through the use of effective,
   compulsory controls

3. Programs involving multiple pricing

4. Voluntary land retirement

5. Purchase, store and dispose of surplus commodities

6. Make direct payments to increase total returns to producers
   above the amounts that might be obtained from the sale
   of farm products

The problems associated with each of these alternatives will be discussed
in turn.

**Lower Supports**

The direct and indirect costs of agricultural support programs now
account for more than one half the total agricultural budget. Eventually,
savings of perhaps $3 billion in government costs might be achieved if all
support programs were eliminated, but the short-run effects on the budget
of reducing support prices would be much less since a significant part of
present costs are associated with storing, handling and disposing of sur-
plus commodities that have been accumulated in prior years.

The conflict over high vs. low supports which dominated farm policy
discussions in the 1950's has diminished in intensity during recent years.
Secretary Benson achieved at least a partial victory in his efforts to use
the price mechanism to reduce agricultural surpluses and cut government
costs. Few people are now advocating a return to high supports unless
they are accompanied by effective supply controls. The major issue at
present is whether support prices should be lowered still further.

Most economists concede that lower support prices would tend to slow
down the rate at which farm production might increase in the future by re-
ducing incomes and hence the amount of capital available for investment.
Moderate price reductions, however, could not be expected to bring about
an immediate decrease in farm production or a significant increase in
consumption. Prices would have to be reduced very substantially to have an immediate effect on production. The costs to society of eliminating surpluses through price reductions alone would indeed be very great. Creditors, merchants in rural areas, and local schools would be among those adversely affected as well as farmers. Lower support prices for some commodities, however, would help to reduce costs associated with export subsidies and, through their influence on land values, would make it less expensive to retire cropland under a voluntary land retirement program. Over a period of years, lower support prices also might help restore or improve the competitive position of such commodities as cotton and tobacco.

Compulsory Controls

The least-cost method of eliminating agricultural surpluses, if one assumes that dropping supports is not a feasible alternative, is to make production controls or sales quotas effective without compensating producers for resources withheld from production. To be effective, present minimum acreage restrictions would have to be abolished, and further cuts in allotments would have to be made in order to offset the effects of higher yields. Some method also would have to be adopted to prevent the acres withdrawn from allotment crops from being planted to non-allotment crops. Alternatively, sales quotas might be employed. However, thus far both Congress and producers have been reluctant to accept this alternative. Unless controls were comprehensive and included most commodities, resources formerly used to produce commodities subject to control would be diverted to other commodities, thereby creating new surplus problems. Potential gains in efficiency also would be sacrificed unless some provision were made to transfer sales quotas between producers. Many farm operators have far more to gain from increasing output and reducing costs than from moderate increases in prices. The individual farmer looks at these programs from the standpoint of the effect they might have on his farm business, not the aggregate effects. This is why it is difficult to get producer acceptance for such programs even though one can argue convincingly that total returns to farmers could be increased if sales of farm products were restricted.

Multiple Pricing

For some commodities, it is possible to raise or maintain returns to producers above the level that would prevail under free-market conditions by charging buyers different prices for the same product, depending on use. For a number of years, this principle has been used to improve returns to producers operating under federal marketing orders. A high proportion of the fluid milk sold in urban areas is now priced in this manner. All costs of marketing order programs are assessed against producers or handlers.
More recently the principles of multiple pricing have been applied to wheat. Under the present wheat certificate program, the average market price of wheat is maintained at a relatively low level. Those who agree to restrict their acreage are given certificates for a part of their crop which can be converted into cash. The payments made to participating farmers are financed largely by the sale of certificates to wheat processors or exporters. Thus, government costs are relatively low. Any farmer who wants to increase wheat production is free to do so, although he receives lower average returns per bushel of wheat than those farmers who elect to participate in the program and agree to restrict production.

In practice, multiple price programs probably can be applied successfully to only a few of our present surplus commodities such as wheat, milk and possibly rice. Government costs can be reduced and returns to producers maintained or increased only if the higher prices charged buyers for a part of the total volume, or the cost of certificates, can be passed on to consumers without greatly influencing sales. It is also essential to have a secondary outlet, such as the export of feed market for wheat, which can absorb the quantities not sold in the primary or high-priced market.

**Voluntary Land Retirement Programs**

Recent experience suggests that we can continue to avoid any serious build-up of farm surpluses (assuming the present level of support prices is maintained) if we are willing to spend between one and two billion dollars per year to induce farmers to keep land idle. In general, it is cheaper to pay farmers not to plant crops than to purchase, store and try to dispose of surplus commodities once they are produced. A land retirement program can probably be operated at about one half the cost or less of a purchase, storage and disposal program, provided the program is operated efficiently.

The present voluntary feed grain program is expensive mainly because it has been directed towards retiring part of the acreage on each participating farm. To get farmers to cut back their acreage, it is necessary to compensate them, not only for the idle land, but also for their labor, management and capital on which they would have earned a return if the additional acreage had been planted. Marginal returns from planting additional acreage are usually very high. For this reason, compensation rates must be high if farmers are to be induced to participate. The costs of retiring land under the present feed grain program have exceeded 50 percent of the gross value of production per acre.

Government costs could be reduced to as low as 20 to 30 percent of the gross value of output per acre if the program were concentrated in certain areas, and whole farms rather than part of the acreage on each participating farm were retired. Average annual costs might be lowered still further if farm land in marginal areas were purchased by the government. The rule to be followed, if cost minimization is the objective, is to concentrate land
retirement (or purchases) in those areas where land values and hence rental rates are lowest in relation to the value of output per acre. A selective farm rental or purchase program obviously would have a much greater impact on certain areas than the present program under which payments are distributed widely. Merchants and suppliers of farm services in such areas would be adversely affected.

**Purchase, Storage and Surplus Disposal**

At a cost of between two and four billion dollars annually, the United States probably could continue to maintain a balance between production and use of farm products without supply controls, provided sufficient outlets for surplus commodities could be found. It is difficult at present to find additional outlets for farm products within the United States that do not substitute wholly or in part for normal commercial sales. The net addition to the total demand for farm products of present internal food subsidy programs such as the school lunch, school milk and food stamp programs is less than 1 percent of total production. There is little prospect of increasing internal consumption of farm products by much more than one percent.

The greatest potential for increased use of farm products clearly lies in the developing countries, not in the United States or in countries which can afford to buy our farm products such as those in Western Europe. At present, under the Food for Peace program, we are disposing of commodities valued at about $1.6 billion per year. It may be unrealistic, however, to count on an expansion of disposal activities to solve our farm surplus problem. Countries which might offer potential outlets may be unwilling to enter into contracts with the United States because of the fear of becoming too dependent on us for food, or because they fear additional imports might depress their own agricultural prices and hence retard internal development. The United States also may be reluctant, for political reasons, to sign agreements with some countries such as Indonesia, the United Arab Republic or Mainland China which might be able to make use of additional quantities of food. For these very practical reasons, we may find it difficult to increase the scope of our present surplus disposal programs even if we desire to do so and are willing to pay for the commodities exported as well as the costs associated with handling and transportation.

**Payments to Producers**

The United States has made use of selective payment programs to maintain or increase returns to producers of wool, sugar and cotton. In the case of wool and sugar, the programs have been relatively easy to finance since both commodities are imported in large volume and tariffs are collected on all imports. A part of the revenue from import duties has been used to finance payments to producers. In the case of cotton, payments are now made to handlers or producers to make cotton prices more competitive and, at the same time, maintain farm incomes. These payments are financed directly from the treasury.
A direct payment program, such as the present one on cotton, is likely to be expensive unless the program is confined to a few commodities with a small volume of production. Costs can be held down by lowering the guaranteed or support price, by limiting payments to a specified volume, or by divorcing payments from production entirely. It is generally acknowledged than an unlimited direct payments program without production controls, under which the government would make up the difference between prices that would clear the market and present support prices, would cost considerably more than the present combination of acreage allotment, land retirement and surplus disposal programs.

Conclusions

While agricultural support programs can continue to make a contribution to the incomes of commercial farmers, as they have in the recent past, it is well to keep in mind that the major determinant of the long-run level of incomes in agriculture is the availability of alternatives. Added incomes from support programs will simply contribute to higher land values unless sufficient numbers of farmers cease to bid for the privilege of farming. In the long run, programs which contribute to general economic expansion and make it possible for those in rural areas to obtain the education needed to complete for nonfarm jobs will probably add more to the welfare of commercial farmers than will support programs.

The present combination of agricultural support measures is broadly acceptable to farmers, but the package is costly to the treasury. There are a number of ways in which costs might be reduced, but not without encountering opposition from producers and those in rural areas who might be adversely affected by attempts to limit production. Any realistic discussion of farm policy issues must take account of these restrictions. Furthermore, in considering future changes in farm programs, one must recognize that the trend in recent years has been away from general legislation towards particular programs for each of our major surplus commodities: wheat, feed grains, cotton, tobacco and dairy products. Greater differentiation among commodity programs probably is inevitable since programs that will be appropriate and acceptable for one commodity such as cotton may not be for another such as wheat or feed grains.
POTENTIAL SHIFTS IN COMMERCIAL AGRICULTURE
RELATIVE TO TECHNOLOGICAL CHANGE;
POLICIES FOR LONG-RUN SOLUTION
TO SURPLUS PROBLEMS

by Earl O. Heady

We have now completed a 30-year attempt to restrain commercial agriculture within a market framework wherein supply has increased faster than demand. The task has not been an easy one, and it has been aided powerfully in recent years by our ability to use part of our farm output as international gifts, low cost aids to development and for similar purposes.

Fundamentally, our policy today, as it has been under both Democratic and Republican administrations in postwar years, is a simple variation of the short-run emergency program which we initiated in 1933. Then, as part of a depression mix, and given the knowledge of the time, it was perhaps an appropriate short-run emergency program. It supposed that if we could only "live out" a few years normalcy would be returned, with acceptable prices and incomes generated more through the market and less through public subsidy. This hope is still implicit in our sequence of variations of the same program; otherwise we would have turned from emphasis on short-run orientations aimed at "getting by" the next few years and more towards longer-run permanent solutions. As we will show later, the prospects over the next 20 years are simply a mirror of those over the last 20 years; the supply of basic farm products which could be produced is so large in comparison to the expected future domestic demand that prices and income generated in a completely free market would be unacceptable to the majority of farmers.

The important question is: Are we going to continue, over the next 20 years, with a sequence of short-run policies still aimed at "getting by over the next year," with the basic problem still remaining at that time -- even though we may have invested enough to solve it? The net cost of production control and price support programs over the 30 years since their initiation has been roundly $50 billion. This does not include foreign disposal, part of the cost of which should be added to domestic farm program costs. This $50 billion was enough to have purchased about 700 million acres of cropland at the average price prevailing over the period. It

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would have purchased 225 million acres at $200 per acre. In other words, the same funds could have been used to attain a permanent solution or containment of surplus capacity. But with the strategy used the funds were spent and the capacity and surplus problem remains more real and intense than 30 years ago.

The broad, aggregative physical and fiscal features of programs providing a long-run solution, actually or permanently containing or eliminating surplus capacity once the funds have been spent, can be outlined easily. It is more difficult to specify the details from the standpoint of the farm firm which allow such programs to be economically (and, therefore, politically) acceptable in the sense that they guarantee positive-sum gains particularly among farm families and rural communities, but also over the entire population. We have mentioned the negative side of our historic farm policies (namely, spending enough funds to solve the surplus problem while still having it with us in full scale). But we also need to mention the positive side. Farm policies of the last 30 years can be interpreted as instruments to help guarantee positive-sum gains from agricultural and economic development. Positive-sum gains refer simply, in a very broad sense, to providing conditions or supplementing income so that some people will not be made "worse off" in income or welfare as other persons gain. If some persons or communities sacrifice while others gain, we have no means to be sure that the negative outcomes for some can be added to the positive outcomes for others to provide a sum or net outcome which is either negative or zero. Without the farm programs of the last three decades we certainly would have had uncompensated losses to families of farms and rural communities for the benefit of the nation's consuming society generally. The great upsurge in farm productivity, catalyzed and implemented by public and private research and education for agriculture, has brought great gains to the consuming society in two ways. It has (a) reduced the real price of farm-produced foods and (b) released resources to produce other goods and services which consumers in a high income society desire more than additional food. But without the offsetting compensation provided through farm programs, the highly inelastic demand for farm products and the large and inflexible short-run supply would have brought income losses to farm and related families which cancel, or more, the immediate gains to the general society. In other words, the outcome promised to be negative sum, with the losses in rural communities being greater than the gains to general society. In this vein, policies of the last three decades have been based on sound economic logic. The important question, however, is whether this positive-sum outcome could have been attained with the same or smaller public outlay, while actually bringing more permanent solutions to the problems stemming from rapid technical advance and an oversupply of resources in agriculture. We have invested enough to have solved the problem, but it remains with us and as highly unsolved as three decades back. Shall we make equally large investments over the next two decades, only to have the problem as much unsolved as now?
Certainly we can set up a long-term goal, to provide appropriate and acceptable compensation programs and the conditions of positive-sum outcomes along the way. We can do this while still arriving at a permanent solution—cutting our agricultural plant down to a size consistent with modern technology and prospective demand—by means of public expenditures over (say) 15 years. We select a period of 15-20 years so that the rate of change will not exceed the ability of rural communities to absorb it and so that the annual public outlay to attain it is acceptable to the general public. We can attain this goal, however, only if we do now, in fact, institute a long-run plan to accomplish it. To attain it, and to provide the appropriate mix of policy instruments, we must face up with the extent, location and nature of implied changes in production. In the following sections of this paper some of the changes in prospect for the future are outlined. They could be brought about either through public policy fashioned to attain the particular goals, or through more dependence on market mechanisms. While both means could attain the same goal in the long run, they differ greatly in their distribution of gains and sacrifices over the farm and nonfarm populations.

Empirical Study of Extent and Location of Surplus Capacity

As a basis for long-range planning and programs, we have estimated the extent and location of surplus land, both as of the present and with projections to 1975. These projections have to be made, of course, against some level of prices. The levels of prices used in the analysis assumes a real price equal to that of the last 5 years. For projections to 1975, a population of 230 million and a 50-percent increase in per capita real income are used. Exports for 1975 were assumed to be 25 percent above the 1956-62 level for grains and soybeans. We estimated the amount and location of land needed to meet domestic and export demand, if real prices of the above level were attained. The estimates suppose that the above price levels would be attained in the market if the specified amounts of land were shifted from crop production to noncompetitive uses; or, they would allow a price support level which would cause no loss in treasury funds.

The figures presented are directed at the most efficient national pattern of crop production. In other words, acreage for various crops is distributed among regions in a manner to provide the lowest national costs of production and transportation, considering the location of demand. We do not suppose, however, that every farm in each region is "most efficient." The estimates for 1965 assume average costs of production within each region, while those for 1975 are based on the input-output relationships and cost estimates outlined later. The acreage and patterns specified are for the major crops—wheat, cotton, soybeans and feed grains (corn, oats, barley and grain sorghum). While some surplus capacity also exists for other crops, it is small as compared to that for the basic crops.
The most efficient production pattern estimated assumes that production would not be held in one region, by programs or institutional restraints, when it could be achieved at lower national costs in another region. For this analysis, 150 producing regions and 31 consuming regions are used. Considering the number of crops concerned, this is about the maximum that we could handle under the linear programming models used. (More recent models are somewhat larger.) If the nation were detailed into more regions and soil groups, even somewhat fewer acres would be needed to meet the domestic and export requirements; under lower prices, somewhat more land would be used.

First, we determined the amount and location of land needed to meet domestic and export needs in 1965 if crop supply were to balance demand at the specified levels. Next, we estimated the amount and location of land needed to meet domestic and export needs in 1975 if supply and demand were again balanced to give the real prices mentioned earlier, and if improvements in farming for each region were to follow the trend of the past two decades. Finally, we made the same projections, but assumed that farming in the Southeast would be as efficient as the rest of the country in crop production by 1975. Historically, Southern agriculture has made some improvements, but it has been restrained by small, low-income farms depending mostly on labor and handicapped in mechanization and new practices by lack of capital. Our suppositions for the South are modest; namely, that it only catches up to the current status of the rest of the country in mechanization and that it uses fertilizer (and corresponding crop varieties) in modestly profitable amounts. The region could, of course, forge much further ahead in light of its climatic advantages and potential in other farm practices.

To simplify the discussion, we will call the first set of figures "1965 estimates," the second set (assuming current trends in technical improvement for all regions) "1975 projected technology." Since the third set assumes that the Southeast will "catch up" on some practices, it will be called the "1975 potential technology."

Our estimates show roundly 50 million acres of surplus land, for the crops mentioned, in 1965. The surplus land, of course, includes land which is under conservation reserve contracts, the feed grain program and other acreage diversion programs. To meet requirements, the following acreages are required under the efficient production pattern: 45.8 million for wheat, 96.7 million for feed grains, 21.3 million for soybeans and 11.5 million for cotton. The distribution of this efficient production pattern, by areas of land which would be devoted to these crops, is shown in figure 1. The distribution of surplus land, which is now in these crops or under acreage diversion programs which could be shifted to other uses, is indicated in figure 2. Under the most efficient distribution of production among regions, the central producing regions (figure 1) for each commodity would become more specialized in their major crops than currently
holds true.

For example, the central Corn Belt would concentrate more intensely on production of corn, although fringe corn areas around the edge of the Corn Belt and elsewhere would recede from feed grain production. Wheat would be more intensely concentrated in the central winter and spring wheat areas but large areas of land would be shifted from this crop in the Great Plains and other areas. Cotton, under the existing technologies of the two regions, would continue to shift from the Southeast to the Southwest under a production pattern not restrained by acreage quotas and allowing national needs to be produced in the most efficient or competitive manner. The patterns outlined above are those which we would expect to be approached in the long run under allocations of a competitive market which reflect the modern state of technology, the magnitude and location of demand and without restraints which continue the distribution of production in line with the historic mold.

This 1965 "efficient pattern" would require the shift of a large acreage to other uses in the entire South, although the concentration would be especially in the Southeast. Similarly, a large acreage would be shifted permanently from field crops, mainly wheat, over the entire reaches of the Great Plains stretching from Montana and North Dakota to Texas and New Mexico. Not needed for crops, this land would be a candidate for such uses as grazing, forestry and recreation.

In 1975, under projected technology, we estimate that the surplus capacity, as compared to national needs under the most efficient production pattern described previously, would increase to 66 million acres. As figure 3 illustrates, the distribution of surplus land over the nation would largely parallel that already outlined for 1965. However, even more land could be shifted from the crops to other uses in the Northern Plains, the Southeast and the Southern Plains. A larger acreage also could be shifted in the southern Corn Belt and Lake States regions. The central Corn Belt, the Pacific West and the most highly specialized wheat areas would concentrate fully on crop production.

The surplus acreage, in the absence of some unexpected or enlarged foreign demand, is projected to grow over 10 years. This is because technological improvement (with the trends in each region extended to the future) has been increasing more rapidly than demand. The rate of improvement is more rapid in such regions as the central Corn Belt and parts of the winter wheat regions such as western Nebraska and Kansas, northeastern Colorado, the Pacific Coast, etc. Thus the relative amount of surplus land is projected to increase in such geographic regions as the Southeast, the northern Great Plains, north and east Oklahoma, eastern Wyoming, etc. The term "surplus acreage" refers, as previously, to land not needed for field crop production and which could be shifted to grazing, forestry or recreation.
Under the potential technology for 1975, supposing simply that the Southeast catches up with the rest of the country in the vein mentioned above, (1) the amount of surplus land would be increased and (2) the location or distribution of surplus land among regions would be changed (figure 4). Under this simple change in technology, one easily attainable even if over a slightly longer period of time, the surplus acreage to be shifted from wheat, cotton, feed grains and soybeans would increase to 73 million acres.

Under the potential technology for 1975, the amount of surplus land to be shifted in the Southeast would decrease importantly and the region would become more highly competitive in cotton, feed grains and soybeans. The increased acreage of these crops and a corresponding decrease in surplus land (figure 4) to be shifted in the South, would cause the amount of surplus land in the latter region to decline. The total or national acreage of surplus land for the specified crops in 1975 would increase from 66 million to 73 million acres under the potential technology as compared to the projected technology. However, the surplus acreage in the South would actually decline, thus causing a greater surplus in many other regions because of (a) the better competitive position of the South and (b) the greater total surplus land under the potential technology.

Under the potential technology, feed grain production would be added to the Delta and Southeast states and would expand in the Pacific Coast states. Soybean production also would increase in the Southeast and Delta states. Feed grain production in the Corn Belt would decline by 7 million acres under the potential technology as compared to the projected technology, with much of the land shifted to soybeans. Soybean output in the Lake States and Northern Plains would contract with the improved competitive position of the South in soybeans and feed grains and the consequent shift between feed grains and soybeans in the Corn Belt. Perhaps the most striking change would be the increase in cotton acreage in the Southeast and Delta states at the expense of the Southwest. As compared with the projected technology wheat acreage and production under the potential technology would increase in regions of Montana, Colorado, New Mexico, the Dakotas and in similar locations. Such a decrease would be caused by the improved competitive position of the South in feed grains, its "second round effects" on land use in the Corn Belt and the shift of cotton east from the Southwest, with feed grains moving in as a replacement in the latter regions.

The improved technology for the South assumed under the potential technology model does not represent practices which are impractical or unreasonable. The practices are already well known and are widely adopted in other regions. Generally, they require only more capital and larger farms—and perhaps a step up in education. They would place the South not only in an improved competitive position but also would bring it a larger income.
Figure 1. Regional location and acreage of crop production with balanced demand and efficient production, 1955.
Figure 2. Amount and location of surplus land under efficient allocation and distribution of crops among regions, 1965.

- 250 thousand acres
- Less than 250 thousand acres

Total land to be shifted = 40.5 million acres
Figure 3. Amount and location of surplus land under projected technology, 1975.
Figure 4. Amount and location of surplus land under potential technology, 1975.
Demand for food is projected to increase under an expected increase in population and per capita income. Despite this, however, a growing surplus capacity for American agriculture is foreseen, either under the projected or potential technology. Perhaps even the estimates for potential technology are conservative (since technology may increase more rapidly in the future, although large increments in foreign demand could offset this).

The results, which would show a similar outcome if they were extended even another 10 years, suggest the futility of our historic policy in attempting to solve the surplus capacity problem of commercial agriculture. In year-to-year programs designed to "stall for time," we only postpone facing up to reality. We could have solved the problem permanently with the $50 billion spent on control and price supports over 30 years (excluding any charge for surplus disposal programs). At the rate of $4.5 billion per year, we can spend $45 billion over the next 10 years, or $90 billion over the next 20 and still have the very same problem with us as today unless we change the nature of our programs. At the end of one or two decades, the money will have been paid out but the problem still won't be solved. This procedure was acceptable at the outset of surplus control programs, or even desirable as a short-run emergency measure during depression and postwar readjustments. Likewise it was acceptable in an earlier period when we lacked sufficient knowledge of the persistence over time and the geographic magnitude of the problem. But it can no longer be so justified.

The long-run or permanent solution of the problem would involve a shift of marginal production areas from field crops to grass, forestry or recreational uses in the manner outlined previously. The surplus land would be concentrated in particular regions and communities as suggested in figures 2, 3 and 4. Of course, this is the general pattern of long-run adjustment which the free market would bring, as painful as it might be on particular communities or for agriculture in aggregate at the outset.

The same long-run solutions and shifts could be aided by programs designed for this purpose, but they also would require concentrated adjustments and land use shifts in the same particular regions and communities. The major problem in achieving a long-run solution through the free market is how to distribute the costs or sacrifices among different groups of farmers. While the immediate impact would be lower returns for most all producers, incomes would be depressed most in marginal areas where high costs relative to yields and income cause low margins. Businesses and other sectors which serve agriculture in these communities also would be hit hard.
Programs could be designed to cause all participating farmers to be as well or better off after the long-run interregional shifts, and solve the long-run problem in the manner illustrated by the regional production patterns in figures 2, 3 and 4. The program could be voluntary and of delayed nature over an adjustment period of (say) 15 years. As a voluntary program, farmers would not need to participate unless they judged themselves to be bettered economically in doing so. With the $4.5 billion annually now spent on farm programs, we could buy up 45 million acres per year at $100 per acre (or 22.5 million acres at $200 per acre), although the rate would not need to be this rapid. Quite obviously, annual expenditures of the magnitude now being used for farm programs would provide funds for permanent retirement of sufficient land, even in a 10-year period, to provide long-run solutions which would shift land which is marginal in field crop uses. Such land could be retired in a manner consistent with the demand, technology and efficient resource use of the current and future economy. Even in 10 years, using our funds accordingly, and on the basis of voluntary participation and appropriate compensation rates, practically all of the land in marginal areas or regions of low advantage in location and technical conditions could be shifted. Older families lacking alternative skills may prefer not to participate at the outset. But a system of retirement benefits and compensation payments could gradually remove even this block.

Thus, we have an important choice before us, given the annual outlay we make for controlling surpluses and supporting farm income: Should we continue the present mold for another 10 or 15 years, with the problem being as bad or worse at the end of the period, or should we shift to a method which does provide a solution by investing over this time span? At the rate of $4.5 billion over 10 years, or certainly over 15 years, we could provide a framework in which participating farmers and landlords in the marginal areas, those regions which would shift under market directives and nationally efficient production patterns, would be equally well or better off. On the other hand, farmers and land owners in regions not required to shift could similarly approach equality with present income and welfare under the existing structure of programs. Thus, over all major farm groups and the taxpaying public in general we could approach a positive-sum change in income or welfare -- positive in the sense that no major one of these groups need to be made worse off and some could be made better off, with the result that the sum is positive.

However, while this possibility exists, the problem is more than one of farm groups and the general taxpaying public. In the context of the long-run solution pointed out above, it is more one of the numerous other groups oriented economically to the rural community. In regions which would have to make major or complete shifts for the long-run solution, merchants and others would suffer a decline in income with a thinning of the population under an extensification of farming.
Hence, while payments to farmers for permanent shifts in land use could leave them better off, the result would be negative for the rural community sectors which provide services to farm families. Although we cannot measure the "subjective magnitude" of (1) the positive gains to farmers and (2) the negative outcomes for merchants of "shifting regions," the sum of outcomes could well be negative. (This is potentially more so with the free market as the adjusting instrument, since it also would leave broad groups of farmers with a decline in both income and capital assets.)

The major task in farm policy is to find a collection of instruments or program elements which provides a reasonable approach to a positive-sum outcome over all groups under a long-run solution. Various groups oriented to the rural region, including congressmen who do not want to see their districts eliminated, resist regional adjustments of the type posed because they imply a smaller population and reduced support for business and institutional sectors of the agricultural community. The nonfarm population of agricultural regions is no less important than the farm population. Hence, we need to consider compensation means which makes long-run regional adjustments just as acceptable to the former as to farmers and land owners. Perhaps this is the most important single need or restraint to be overcome in devising programs which will in fact provide permanent solutions, in the vein suggested above, to the surplus capacity problem of commercial agriculture.

The task is more complex than in finding equitable means for compensating farmers and land owners, however. In farming, the capital or rental value of land can serve as the basis for payments which permanently retire land from crop production (through means such as outright public purchase of land, the purchase of "rights" to produce specific crops or other means), and prevention of capital losses. Comparable "handles" do not exist for compensating rural merchants and similar groups. However, we certainly have numerous means which could serve

\[2\] Perhaps a means to make congressmen "as well or better off" after adjustment, is to create a "House of Lords" made up only of those whose district is eliminated by population shifts. It would be a self-liquidating House, since while members would have life tenure, thinning of population in rural regions would eventually cease.

\[3\] Under the public purchase of "rights" to produce specified crops, farmers would still own the land and be allowed to devote their land to other particular uses. Should the need arise later, the "rights" held by the public could be relaxed or released, thus allowing the land to shift back into crop production.
as a substitute. These include long-term income tax averaging, extended state and federal assistance for schools, public subsidies for retraining, transportation subsidies and even a lowering of the age at which social security payments begin -- a type of "muster ing out" pay for those who cease farming.\footnote{As an example, for those too old for retraining who might stay in a qualified adjusting area, the age might be shifted back 5 or 10 years. However, with the rescheduling for this group only, all persons would eventually "graduate". The eligible age then would be the same for all persons in the nation. (See Earl O. Heady, "Agricultural Policy Under Economic Development," Iowa State University Press, Ames, 1962, pp. 467-478; and Earl O. Heady, "Adaptation of Extension Education and Auxiliary Aids to the Basic Problem of Agriculture," Journal of Farm Economics, Vol. 39, 1957). etc. In the Netherlands where a similar method is used, persons accepting the option of the earlier age receive a lower payment rate up to the usual age for retirement.} Using our present annual outlay for production control and farm income support over the next 15 years, we could undoubtedly go far in devising a mix of policy instruments to attain these conditions for the nonfarm population while guaranteeing assurance of positive-sum outcomes for farm families.

We are less imaginative and bold in these respects than a small nation such as the Netherlands, where a combination of public land purchase, subsidized retraining and a lower qualifying age for old age benefits is being used to retire farm units which are marginal in size and income and to syphon surplus labor from agriculture. When we face up to the fact that (1) programs of the current nature, or of the last 15 years, only provide year-to-year relief and provide no promise of long-run solution and (2) the over-all need is to provide positive-sum programs across both the nonfarm and farm populations of rural regions, we can be just as imaginative.
WHAT FARM POLICY IS IN THE NATIONAL INTEREST?

By Lauren Soth

The farm policy of the United States has been a brilliant success in all things except for the level and stability of the farmer's income.

Throughout our national history, the public has been abundantly supplied with food and agricultural raw materials for manufacturing, and prices of these farm supplied goods have been low. Even in times of war, pestilence or drought this country has not been faced with a serious food problem like that of so many parts of the world today.

The U.S. farming industry has been progressive in lowering costs and improving techniques. Our public policy has been exceedingly wise in this regard. Federal and state governments have cooperated in scientific research and education programs which have fostered a continuous advance in productivity. Our agriculture is a dynamic industry which in the last 25 years has been increasing output per man-year at a faster rate than the economy as a whole. In this last quarter century agriculture has released more than one-third of its manpower for use by the society in production of other goods and services.

Our agriculture has been able to respond dramatically to a national call for more production to meet the requirements of two major world wars. It has served the national interest by furnishing large quantities of food beyond domestic needs for the relief of hunger in other countries.

The U.S. farming industry also has been able to furnish several thousand technical experts for the development of agriculture in the less developed countries. Surplus capacity in American agriculture enables this country to carry out its objectives in foreign policy more competently than it could otherwise. Capacity to extend modern agricultural knowledge and to supply food directly where needed in support of national foreign objectives gives us a powerful advantage over our Russian and Chinese rivals for influence in the world.

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In discussing agricultural policy, it is well for us to consider these successes along with the failures which usually seem to get the most attention. It is well for us to look at the nation's agricultural policy in its entirety and in historical perspective and not to think of agricultural policy only in terms of the restrictions on production, price supports and subsidies of recent years.

The major thrust of American's public programs in agriculture has been and still is toward increasing production. This expansionist policy has greatly facilitated national economic development. It may well have been the single most important factor enabling this country to achieve and hold higher rates of output per person than any other part of the world.

This pervasive public effort in agricultural research and development has had cumulative effects. Scientific knowledge builds on itself in geometric progression. Public expenditures in agricultural research and education have continued to mount year by year. The financial rewards from new technology also have attracted increasing private investments in agricultural research and development. Since the end of World War II there has been a fantastic outpouring of new technology and the investments in fertilizer, chemicals, machinery and other production goods necessary to make the new ideas effective.

This surge of forces pushing agricultural production upward has hit the farm economy at the same time as a sudden change in the character of the demand for food. As the nation has grown richer, and better fed, demand for food has become more inelastic. The American consumer cannot be induced to buy larger amounts of food today even at sharply reduced prices. In the old economic textbooks, the demand for bread and potatoes was called inelastic, but demand for meat and dairy products was considered to be elastic. Today even the high quality protein foods face inelastic demand in the American market.

The combination of these supply and demand forces delivers a crushing blow to prices of farm products and to incomes of farmers. Without government farm programs to hold supplies somewhat in check, without price supports and subsidies, net farm income clearly would have fallen to disaster levels.

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Any realistic farm policy must reckon with this conjunction of dynamic forces which is pushing production upward faster than commercial markets are expanding. Persistent growth of supply, in the face of inelastic demand, results in chronic overproduction. It is no good to talk about eliminating the surpluses in government stockpiles as though that were a solution. This is a continuing problem of supply-demand dynamics. Elimination of the stored surpluses would leave the underlying disequilibrium unchanged.

Now it should not be surprising if, after more than half a century of intensive farm subsidies to increase production, we should be confronted with an imbalance in the rates of growth of supply and demand. If the subsidies which have generated this growth in agricultural supply should now require compensating subsidies to farmers to offset the depressing effect on their income, that, too, should not be surprising.

The subsidies to protect farmers from their own excess production, to a large extent, caused by public action should not be looked upon as sinful while government spending for expanding production is regarded as sacrosanct.

It is true that some of the methods we use to support farm income provide incentives to farmers to increase production further. But it is also true that the continuing subsidies being paid for research and education in agriculture, for land development, for irrigation, for soil conservation, stimulate production. Those critics who are outraged by price supports as making the surplus problem worse never seem to be outraged by the other aspects of our farm policy which also stimulate production. If we aim to adjust our farm policy to reduce the pressure of over-production, we ought to look at the whole farm policy and not just one part of it.

If we decide to do nothing to curb the injection of new technology and new capital into agriculture, we should not object to compensating public expenditures to enable farmers to maintain reasonable income opportunity in comparison with workers in non-farm occupations.

III

Considering the benefits the nation receives from abundant, efficient production of food and fiber, the cost of farm subsidy and control programs in recent years does not seem exorbitant. Studies by research economists in the federal Department of Agriculture, at Iowa State University, Cornell University, Pennsylvania State University and Oklahoma State University indicate that crop acreage control, price support and commodity storage programs have increased net farm income by something like $6 billion per year or about 80 to 100 per cent in the last
several years. This increase in farm income has been accomplished at a public expenditure approximating $3 billion per year. Because of the inelastic demand for farm products, a relatively small public expenditure for production restraints and administered prices in agriculture has made possible a doubling of net farm income over what it would have been otherwise.

If this seems unjustified on grounds of equity, it should be remembered that income per person living on farms has barely maintained its ratio to income per person in the rest of the country in the last 15 years despite a sharp reduction in farm population. The farm programs have enabled farmers to hold their own in relative income instead of suffering what surely would have been a drastic decline as a result of the increase in production.

If it could be shown, nevertheless, that the intervention of the federal government into management and pricing in the agricultural industry had slowed down technical progress, we would be justified in doubting whether this intervention was in the public interest. The original acreage control and price support programs were strongly objected to on these grounds and still are by those who have not read the record. The experience of the last 30 years has shown that these interferences by government into the free market did not slow technical change; they speeded it up.

The historical bases for acreage allotments were expected to prevent inter-regional changes of acreage in pursuit of least-cost production. This has not happened in significant degree. Between 1937 and 1960 total corn acreage dropped from 94 million to 82 million. Corn acreage declined by 12 million in the South Central states and 4 million in the South Atlantic states, areas of low yield. In the Corn Belt, however, there was an increase of 3 million acres. Cotton production has moved westward and away from the less efficient areas of the Southeast, despite the acreage control program.

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3"Farm Program Benefits and Costs in Recent Years," Committee Print of the U.S. Senate Committee on Agriculture, prepared by Walter W. Wilcox, senior specialist in agriculture of the Legislative Reference Service, Library of Congress.

4Per Capita Farm Income from All Sources as a Percentage of Nonfarm Income from All Sources:

<table>
<thead>
<tr>
<th>Year</th>
<th>Farm Income</th>
<th>Nonfarm Income</th>
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<tbody>
<tr>
<td>1948</td>
<td>65.7</td>
<td></td>
</tr>
<tr>
<td>1949</td>
<td>53.9</td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>57.4</td>
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<td>1951</td>
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<td>1952</td>
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<td>1953</td>
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<td>1954</td>
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<td>1955</td>
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<td>1963</td>
<td>63.1</td>
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It also should be remembered that during these 15 years the reduction in farms occurred largely among the lowest-income farms; presumably, the lowest-income people were leaving agriculture.
James O. Bray and Patricia Watkins, of Stanford University, show in a recent study on technical change in corn production that price supports, rather than being detrimental to economic growth, caused new techniques to be adopted more rapidly and high-cost producers to be retired sooner than otherwise would have been the case. The most rapid rate of technical change ever experienced in the United States in corn production occurred during a period when price supports for corn were in full effect. The Bray-Watkins study is an illuminating contribution to the subject of agricultural development.

Bray and Watkins make a distinction between growth in agricultural production caused by improvement of extractive techniques or fertility-depleting operations and that caused by soil-restorative techniques. Among the extractive techniques are replacement of animal and human power by mechanical power and biological improvements such as hybrid corn. The limit of improvement from extractive techniques is the natural fertility barrier. Such traditional restorative techniques as crop rotation may lift the fertility barrier slightly. But the real breakthrough in corn production came during the early 1940s from the introduction of artificially-manufactured, cheap nitrogen. The yield potential in hybrid corn could not have been realized without this innovation in fertilization that has lifted the fertility barrier. We do not know yet how high this barrier can be raised.

Our national farm policy of shielding agriculture from the dynamic forces of supply and demand was not adopted with the idea that it would facilitate economic development. But the programs proved to be an important force for modernization of agriculture. They provided the assurance of future prices farmers needed to make the investment in fertilizer.

IV

Whatever else our national farm policy may have done, it has provided both abundance and rapid technical progress, which are of great value to the nation. The nation should not expect agriculture, with 10 percent of the population, to bear a major share of the cost of these contributions to the nation. To turn agriculture over to the free market would be like expecting General Dynamics, General Motors or General Electric to produce jet airplanes and missiles at less than cost--and their workers to accept a 50 percent cut in wages for defense production.

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The weakness of our farm policy is precisely in this area. The rewards for hard work, managerial competence, initiative and enterprise in farming are not high enough, in comparison with the rest of the economy. This is true by the standard of equality of opportunity and the standard of welfare equity. It is also true from the viewpoint of the national interest in maintaining a high quality of brains in the agricultural industry. As farming becomes increasingly complex, highly capitalized, more scientific and less traditional, we shall have to attract and keep able people in the business. The country will have to pay for this. Economic incentive in agriculture must be raised if the magnificent progress of this industry is to be maintained. The free market, unassisted by government, is incapable of providing this incentive.

A policy of moderately higher incomes in commercial agriculture will not stop the migration of high-cost producers out of the industry. Migration from agriculture in recent years has been mostly from the lower end of the scale in size of farm, level of income, level of education and level of production. This migration should continue. The nation can no longer expect agriculture to serve as a welfare industry, harboring the poor and incompetent who cannot be employed in an industrial society.

This is a national problem and should be met by the nation in the same way as it meets the poverty problem in the cities— that is, by education, health services, job counseling and the creation of new job openings through a policy of economic expansion. It is not closely related to the commercial farm problem. If the least productive third of farmers were to leave farming, this would have little effect on the total market supply of farm products.

If the nation should decide to redirect farm policy with the objective of raising farm income, what are the choices?

The intellectual foundation for making such decisions has been enormously enhanced in the last dozen years or so. The land-grant agricultural colleges, the federal Department of Agriculture and some of the private universities have been increasing our stockpile of imaginative research and original thinking on agricultural policy. The two institutions sponsoring this meeting, Iowa State University and North Carolina State, deserve special commendation for their leadership in this field. It is no longer accurate to accuse the agricultural colleges of ignoring the economic adjustment problems of agriculture in their studies. All of these institutions have gone far toward lifting us out of the realm of faith and traditionalism in our policy thinking.
We may obtain from recent studies dependable projections of the consequences to farm income and to the federal budget of various changes in farm policy. If we set a certain target of farm income, these scholars can tell us with considerable precision how much the cost will be for various types of programs, in terms of consumer expenditures in the market and federal taxes.

Fortunately, this country is rich enough that it can choose over a wide range of farm policy. We can afford to pay for a high degree of voluntariness and few regulations, if that is what the people want, and still maintain high farm income.

There can be no question but that the way to achieve a given level of farm income at the least governmental cost is through production control. The most expensive way to reach a given income target in terms of government cost is through direct subsidies.6

Our farm income support programs have been compromises between these extremes. Farm income has been raised partly by production restraints and supply management, which increased the prices to consumers in the market, and partly by direct subsidies from government.

These compromises do not please the absolutists who want to go all the way to supply management or the reverse. But they are quite practical in our democratic political system. In practical operation of the farm programs, it has been found that limited production controls and voluntary programs, even if that means a lower level of price support, are preferable to high price supports and strict controls.

If we seek a higher farm income goal, we can (1) increase the government's budget for direct subsidies to farmers or (2) tighten up production controls to increase returns in the market or (3) elevate price supports without tightening production controls and run heavier government costs in management and disposal of surpluses.

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The extent to which one or a combination of these methods must be used to reach a given income target depends partly on (1) how much expansion in foreign commercial sales of farm products can be achieved and (2) how large a quantity of these products is used in foreign aid (Food for Peace) programs.

The need for government programs also depends on whether effective supply management can be accomplished by private farm organizations. If farmer bargaining power can be strengthened through private organizational arrangements, less government control will be needed. Marketing orders and agreements supervised by the federal government work well in balancing market supplies of some commodities -- so long as total grain output is held in check by government programs, providing a general shelter for all agriculture. 7

An argument for tightening government production controls is often made on the ground that the public is likely to object less to a rise of food costs in the market than to a highly visible increase in the government budget. Returning to a higher level of price supports without controls would bring back the complications in surplus management that were regarded as scandalous a few years ago. High price supports with unrestrained production tend to bring on "dumping" practices in foreign trade which run counter to U. S. trade policy.

Is a policy of increasing the effectiveness of production controls and raising market prices to consumers politically feasible? If the question refers to acceptance by the general public, it seems to me the answer clearly is "Yes." There has been a great deal of talk in farming circles in recent years about "poor public relations," "bad press for agriculture" and the like. But I have found little evidence of this. In preparation for this paper, a search of recent (last 10 years) published materials of labor unions, consumer groups and urban groups failed to produce significant examples of protest against farmers because of high food costs. 8

7 About 90 per cent of all U. S. farm land in crops and pasture is devoted to food grain or feed for livestock. Over-supply and low prices of grain quickly spill over into livestock and other farm production.

8 Prof. Don Hadwiger of the Political Science Department of Iowa State University helped make this review of the literature. I am grateful to him for this assistance, but he bears no responsibility for the conclusions reached here.
As a matter of fact, the AFL-CIO usually has backed farm income support legislation in Congress. Consumer and urban groups, to the extent that they have taken an interest in agriculture at all, have been more concerned with the problem of poverty in agriculture, migratory farm labor, the absence of welfare legislation for farm workers and that sort of thing than in food prices. The National Consumers League, for example, testifying in Congress on farm labor and rural poverty in 1964, argued that the consumer could well afford the slight increase in cost of food that might accrue through providing a minimum wage and better living conditions for farm laborers.

The truth is that practically all the objection to farm production controls comes from certain farm organizations and agriculture-related industries, which have a stake in large volume farm production, and from theorists who see such regulations as beyond the pale of prescribed doctrine of free enterprise. Farm organizations in some cases have argued that consumer antagonism required a reduction in farm controls. There has been talk of farm price support legislation being a "bread tax" on consumers. So far as I have been able to find, this protest does not come from consumers.

Urban congressmen, however, may well object to large government expenditures for agriculture in the budget. They may insist on a higher blend of production control in the farm program "mix." Their complaints on farm legislation are not that farm income is being raised beyond a reasonable level but about the method used to raise farm income. They may argue more and more in the future that if farmers are to be guaranteed a certain level of prices, there must be a limit to how much farmers can produce at that price. "Open end" price support is costly.

From an economic standpoint, given the high rate of income in this country, it makes little difference whether higher farm income is achieved through more government expenditures or more controls over production. From a political standpoint, however, it may make a lot of difference. It may become increasingly difficult to maintain a high level of farm income through government subsidies, either direct payments or high price supports and disposal programs. The limiting factor seems likely to be the federal budget rather than consumer protests.

VI

Very likely we will continue to employ a blend of methods of supporting farm income, either adding more control and cutting subsidies or adding more subsidies while reducing restrictions if the budgetary hurdle can be surmounted. This pragmatic approach is the best one, since we are still feeling our way along in this business.
In making our decisions on future directions of farm policy, it would be well to avoid excessive attention to doctrine and moral philosophy, which leads to absolutist policies. We Americans, in our practical wisdom, frequently make fun of the Russians for their obsession with doctrinal considerations—and rightly so. The lopsided development of the Soviet economy, especially the dismal results in agriculture, plainly are a consequence, in part, of adherence to the various Marxist dogmas about economic organization, ownership of resources and pricing. We should be wary that we don't get trapped in the same way by doctrine.

Let me summarize the reasoning presented in this paper:

First, the nation has benefited enormously from the rapid application of new technology in agriculture.

Second, this technological advance has been generated and prosecuted in large measure by government action.

Third, the advance of technology has created surpluses and low prices, from the viewpoint of the farmer, or abundance and cheap food from the viewpoint of the public.

Fourth, equity considerations require that the nation support farm income, since it obliges farmers to adjust to new technology, placing them at a severe income disadvantage in the free market.

Fifth, price-support and other government programs used so far to support farm income have not slowed technological advance but on the contrary have facilitated it.

Sixth, strict production control is the best way to maintain farm income if the objective is least government cost. Price support, storage and disposal of commodities, along with voluntary production restraints, cost more in taxes but preserve valued elements of individual freedom. Direct payments are the most costly, in terms of government expenditures.

Seventh, no one method of protecting farm income is intrinsically right in all circumstances. The best combination of methods depends on how much control is deemed advisable; the level of exports, commercial and concessional, and on other special factors affecting each major commodity.
REMARKS OF A CONGRESSMAN

by Hon. Albert H. Quie

Before we talk about the problems of agriculture and discuss the papers of Dr. Robinson, Dr. Heady, and Mr. Soth, I think I ought to point out the importance of agriculture. Agriculture is still our most basic economy. Without food to eat, people cannot survive. Without the fiber for our garb, there surely would be a shortage of warm clothing, and even from the land comes a great deal of the materials for the construction of our dwellings.

Also, we should look at agribusiness; that is, all the industry which is dependent on agriculture. This gives us an indication of the true and total impact of agriculture within our economy.

I'm glad these Farm Policy Review Conferences are held. I've attended a number of them. I think it would be good if all members of Congress were able to attend these meetings so that they could have a better understanding of the economic implications of the happenings in agriculture as well as the effects of the legislation which we enact, not only on the farmers of the rural community but on our entire country.

President Johnson, in his inaugural address, spoke of the rapid changes that are occurring, yes, the fantastic changes that are occurring.

We see this happening in the world with the dramatic changes in medicine—progress which is broadening the base of life so that many men are wondering what will be done about the doubling population in just a few years.

People now look back on the trip of Lindbergh across the Atlantic Ocean just as young people of today are sure to look back on our first space travel . . . and the first episode of a man on the moon . . . with the same common-place attitude toward that travel as we now have toward air travel over long distances.

We look at the communications satellite, remembering that in 1956 the first cable was laid across the ocean and that we could talk on a telephone anywhere around the earth. Tomorrow, with the space satellites, we will

1Mr. Quie, a Republican, is U. S. Representative of the Minnesota First Congressional District.
be able to talk with anyone any place in the world and never have to worry about cables being cut or towers being toppled. Through the development of these communications systems we see the problems of other places in the world, and these problems become our problems.

We see that the same thing has happened in agriculture. Production in agriculture and output per man hour have increased greater here than in any part of our economy.

When I look back to 1940--when I started farming--all of my hay equipment and team of horses, too, all cost me less money than a hay conditioner does today. At that time, I didn't even know what a hay conditioner was.

So we are involved in a rapid and dramatic change.

It is best that we understand the economic implications; that is, that which is happening now and will happen in the future.

For a good period of time farmers expected that there were some panaceas in the form of legislation to the farm problems.

Many people declared that had the McNary-Haugen bills been passed the farm problems would have been solved. Efforts were made during the 1930's to solve the farm problems, but they were not solved. World War II and a post war economy did provide a reprieve for a number of years. Attempts at panaceas after World War II have not been successful. Those who thought a Republican Administration would bring an answer to all of our problems were disappointed during the Eisenhower Administration. Those who thought we only would have to go back to a Democratic Administration to solve our problems are now disappointed. They see that many farms are worse off now than before, and the exodus continues.

As more and more people live in urban areas--in fact, it is estimated that now only 7.1 per cent of the American population lives in the rural area--we can see that the non-farm Congressman will have a great effect on agricultural legislation. Only 53 out of the 435 Congressmen are from rural districts. I am one of those, one of the 53. But only 20.31 per cent of the people in my district are rural. So you see after the next census, undoubtedly I will be shifted to a rural-urban district, rather than a rural district which, according to the Census Bureau, requires a farm population of 20 per cent or more.

When a rural Congressman looks at farm legislation he is not a free agent. He is dependent on his farm voters, and the fact that politicians have made promises in the past that cannot be fulfilled gives the rural Congressman a difficult problem, trying to balance political expediency with economic feasibility. There has been a lack of economic understanding in the past that has caused many of our political difficulties.
Again I say that meetings such as these are extremely important. They bring into focus the impact of science of economics as it is brought to bear on the agricultural situation.

We also see some basic philosophical differences between farm organizations, and it is impossible to satisfy them all. As we work on legislation we realize that a bill is more in conformity with a view of one farm organization than any other. In making efforts to amend the legislation to make the farm organization approve it—which previously did not approve it—we find that invariably we lose the approval of the former organization and, sometimes, all of the farm organizations.

Many of the old arguments of the past, however, do not exist any more. We fought many a verbal battle over high rigid price supports versus flexible price supports. Nobody argues these any more, because it is accepted that the price support level must be close to the market price or else it will build up a surplus which is unacceptable to the non-farm taxpayer. We have had some heated verbal battles over mandatory controls versus voluntary programs; however, by and large now this struggle is over. There may be some controversy yet in the southern crops of tobacco, rice, peanuts and cotton; however, in the remaining commodities it is very doubtful that the mandatory programs would be acceptable to the farmers or the Congress. As we consider farm legislation in the future, however, the budgetary considerations will be paramount.

There are many individuals in Washington whose names are unknown in the country; however, the name of Gordon—the Director of the Budget—is well known among farmers now. When I was home just recently, many farmers talked to me about Gordon and his speech, which has recently been reprinted in the Saturday Review of Literature.

It is interesting to recall that the then Senator Humphrey, in a speech on August 18 of last year, indicated that perhaps the time had now arrived when we must determine what would be spent on agricultural programs and then administer them within that figure, rather than continually increasing the cost of programs as is presently occurring.

Dr. Robinson gave the impression in his paper that long-range land retirement was the least controversial of the farm programs. I think it is true that this is the most economical program that we could have. It has done more for the least amount of money; however, it is an extremely controversial program.

Mistakes when the Soil Bank was first tried have given it a black eye, a black eye caused by acreage greater than 50 per cent of the land of some counties being idled by the conservation reserve. This was strenuously objected to. Also, stories of non-farmers who paid for farms with Soil Bank payments have been decried. Both of these faults were remedied by
administrative action later, but the criticisms remain.

The program is still objected to by individuals from small towns; that is, by merchants from small towns who admittedly are in difficulty as the numbers of farmers decrease. Moreover, when they see a farm lying idle, with the person who was on a farm or could have been on a farm not purchasing from the small town in the manner he used to, then these merchants lay the blame on the Soil Bank Program for the difficulty of this part of our economy. Also, there are a number of young men who would like to farm, but if there is no land available they then will look for opportunity elsewhere. Too, where neighboring land is lying idle in the Soil Bank--and a person would like to rent it--then that person raises great objection to the Soil Bank Program.

The last and most recent criticism stems from the Administration's crop land conversion program, which is very similar to the old conservation reserve aspect of the Soil Bank, except that grazing is permitted. When beef numbers were increasing and beef prices were down, expansion of that type of program did not meet with approval. And, undoubtedly, any attempt for long-range retirement programs permitting grazing would meet with great objection at this time.

I also get the impression from Dr. Heady's remarks that if we had balanced supply with demand, the problems of agriculture would then have been solved. I surely question that, since a balance of supply and demand through either short range--and therefore expensive programs--or long range retirement programs would have required a determination by the Department of Agriculture of what production is necessary. Any mistake that had been made in the estimates of need or production would surely have dramatic economic implications. Not only would there be fluctuation of prices due to even a slight shortage, but if the normal carryover was dipped into with any great amount in a year because the supply was not sufficient, then there could be a market disruption which would depend on the location of the carryover. If the carryover had moved toward terminal markets, and perhaps the seaports, or was stored in a part of the country which had the most economical storage rates due to weather conditions, the line of supply would be greatly different from the normal situation when it comes from the farm. The only way a normal carryover could be used without market disruption would be to have the storage held on the farm and released from the farm. Then the channels of trade from the farm to the final user would be kept intact.

With Public Law 480 for Peace Program, foreign disposal, the one controversy that we will have this year--and a policy decision that will have to be resolved--is whether the program shall continue to be used as a surplus disposal program (and therefore its use greatly curtailed as supply is brought close to demand) or whether it will become a part of our foreign policy in which we will make commitments and keep our commitments for supplying
food whether food is in surplus or not. There will be great support, I know, this year for a change in the program which will permit the Department of Agriculture to go out into the market and purchase non-surplus food for Public Law 480. I would suggest that we give it a trial with dried skimmed milk, which is one of the most acceptable products overseas.

The biggest controversy in domestic agricultural legislation will be over direct payments. The great controversy that began with the Brannan Plan is still raging today between the farm organizations. I think I should point out that one of the faults of the old price support programs of mandatory controls on some commodities had the effect of capitalizing the quotas into the value of the land. This has brought about increased holdings. We all know that the value of the tobacco allotment or a cotton allotment on southern farms act to increase the land value of those farms. However, direct payments also can be capitalized to the land. I have already talked to individuals who are in the market for farms and the purchase of farms in my Congressional District, and they speak of the feed grain base and the historical production within that base—the greater the number of acres of corn and the higher production history on corn, the greater the amount of direct payments the farmer can expect to receive.

We also see the problem with direct payments where a farmer is penalized for not producing on all the acres which he contracted for under the feed grain program. The farmer contracts, for instance, to reduce 20 per cent of his acres, but actually does not plant corn on all the remaining 80 per cent of his acreage. He loses his direct payments on that land, which he would have received had he produced on them; hence, there is an incentive to produce while, at the same time, the farmer has an incentive to reduce production through the diversion payment... this is a confusing set of rewards and penalties.

Another problem of our present farm programs is the low resale formula. The resale formula of 105 per cent of support price plus carrying charge was not too bad when price supports were high and the market price was usually below the support level. It gave an area in which the market could function during the year; however, now when the loan level is below the market price, usually the resale formula holds down the market price. This makes the government the greatest competitor in the market. The government handles the greatest volume of the grain and tends to fix prices more than has been the case in the past. The concern for this is evidenced by the number of farm organizations which have advocated increases in the resale formula from 105 per cent of price support up to 115, 120 and 125 per cent of the support level plus carrying charges. I have a feeling these papers which were read to us give neither enough emphasis in their study to direct payments or the resale formula and the implications these have on the economic situation in agriculture.
I am glad to see that there is more and more emphasis being placed on commercial agriculture versus the small farmer who would never, even with 200 per cent of parity, be able to make an adequate living on the farm.

To look at the one million farmers who produce 80 per cent of the goods is a different problem from the two and one half million farmers who produce less than 20 per cent of the goods---it is a wise decision! But the question the Congress, the Administration and the land-grant colleges must ask themselves today is "what is our policy toward the two million farmers who sell less than $5,000 worth of farm commodities?" Should we actually move people out of agriculture, giving them a mustering-out pay, as was suggested by Dr. Heady?

I believe our past farm programs have actually encouraged the movement of people out of agriculture, because they have been the greatest incentive to the large producer through a guarantee of income, which enables the person with adequate capital to increase his holdings. The question is whether we should pay to keep them in, or pay them to get out--or strike some middle ground. Or should the policy be to keep people in agriculture and on the farm, no matter how small, as long as possible? Or should we have a policy that controls their flow from the farm to the urban community?

If the direct payments were held to a limited amount, say $3,000 per farm, this then would make the program beneficial to the small farmer. But the larger farmer would depend upon the market for his production over and above that which he would receive in $3,000 in direct payments.

If the policy were to encourage young people to go to occupations other than agriculture, then an individual who was on a farm at the time the program was adopted could receive the funds. Any new individual, however, would not receive the direct payments and, therefore, he would not be encouraged to begin farming based on the payments. This is really the biggest policy decision, and it has never actually been tackled in Congress.

In closing, I just want to echo the thought that I've heard often and eloquently from Dr. Ted Schultz, who is with us here today: "Education and training are still the most important single factor in agriculture."

By education I do not mean that we should only train people for occupations other than agriculture. Anybody who is to remain in agriculture, and not only survive but prosper, must be the best educated individual in all the various facets in farming we possibly can find. The best educated and sharpest individuals should not be finding employment elsewhere. Rather, the people in agriculture should have the best of education and training, though we realize, as the Secretary of Agriculture said before the Committee on Education and Labor last year, that only one boy out of 10 will remain on the farm. And in the light of statistics I have seen lately, it appears that there probably will be even less than one out of 10 remaining on the farm.
We can see the necessity for the best possible education to enable rural boys to receive the education and training they can utilize for our technological age.

It is unfortunate that children from farm families do not go as far in education as non-farm children do. There is something about agriculture that gives a training which cannot be assimilated in an urban community. This is evidenced by the fact that many schools speak so highly of farm youth. Many industries, too, such as IBM in Rochester, Minnesota, employ many individuals who live on farms, and they speak glowingly of the quality of these individuals. Today, however, this is not enough. Formal education is needed in the future as never before.

We must remember that the best tools we can give any of the young people who are growing up in our rural communities is the best education and training that money can buy. There will be a reward to the rural community in the form of the young people who remain on the farm, and there will be a reward to our entire society when rural youth with good education and training have the skills to cope with our highly technological age and the fantastic changes it is bringing about today.
ECONOMIC BASIS FOR A NEW AGRICULTURAL POLICY CONSENSUS

by Theodore W. Schultz

1. The economic crisis of the thirties is now history; the details have had time to settle and we now see more clearly than we could then what had gone wrong and what should have been done. At that juncture we were overwhelmed by the disintegration of finance, trade and production and the resulting mass unemployment. Agriculture stayed on the job but farm prices collapsed, causing a flood of farm bankruptcies. The political response took numerous forms. In retrospect, the inadequacy of this response was predominantly in the area of fiscal-monetary policy, and understandably so, because these policies were not understood at that juncture. They have come into their own only recently.

2. The agricultural adversity of the late forties and fifties has not become history, and we lack perspective. As yet the details of that period keep us from seeing clearly what U. S. agriculture was and still is up against. Although the basic economic circumstances had altered radically from that of the thirties, the political response to aid agriculture did not change accordingly; instead the same treatments were continued that had been used during the thirties. In the early thirties the rate of unemployment exceeded 20 percent; in sharp contrast, even with the slack that set in after 1957, unemployment in the two worst years, 1958 and 1961, was less than 7 percent. Meanwhile, markets for farm products have been stable and strong and trade has in general flourished. I am sure the verdict of history will be that the sources of agricultural adversity under consideration have been altogether different from those underlying the economic crisis of the thirties. The real sources are the economic forces that have brought about the massive decline in the U. S. farm population. There has never been to my knowledge such a massive internal migration. Over 23 million farm people have been involved in changes in residence and net migration since 1940. Another way of seeing what has happened is in the fact that the U. S. farm population, which had already declined by one half by 1959, has declined by another fifth since then.

What about the political response to the adversity inherent in this picture of what has been happening to farm people? The answer is that it has been far off the mark. If anything, the net effect of farm policy has been to push people out of agriculture. Surely, it is true, not a single agricultural program has been developed to assist farm people leaving agriculture and to compensate them for the losses they bear as a consequence

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1 Charles L. Hutchinson Distinguished Service Professor of economics at the University of Chicago.
of the rapid gains in agricultural productivity. Whereas the role of fiscal-monetary policies in attaining economic stability at full employment is ever clearer and is acceptable politically, the role of policy to redistribute the gains and losses inherent in economic progress is not as yet understood and policy-wise it is not on the agenda.

The Present Policy Juncture

3. We are now at another juncture with respect to agricultural policy. It has come upon us not because of another and different economic crisis or adversity. It arises predominantly out of the inadequacies of existing agricultural policy. There are those who attribute it to the costs of existing programs, which presently entail appropriations to the USDA of a magnitude, when divided by the number of farm operator families, equal to about $2,000 per family. But the size of these appropriations is not a matter of great concern of the respective agricultural committees of Congress, provided Congress will concur in them. The growing concern politically is with respect to the economic consequences of these programs upon the lot of farm people. The financial benefits go predominantly to the big tractor farmers, to those at the top of the farm ladder. Those at the bottom are all but forgotten people. For example, in 1963 farms with sales of less than $2,500 accounted for 43 percent of all U. S. farm families; they, however, received only $51 of government payments per farm, not even enough to buy a washing machine.

The Farm Income - Farm Wealth Paradox

4. The public concern about agricultural policy is not so much a concern with respect to the effects of farm programs upon the economic efficiency of agriculture as it is a concern with regard to the welfare implications of these programs. The latter is confounded by the income-wealth paradox within agriculture. When we look at income, we find much more poverty in agriculture relative to that in the rest of the economy. But when we look at the net worth of the wealth of farm families they are much richer than nonfarm families. Two statistical pictures will reveal the basis of this paradox.

Income poverty picture. "The Economic Report of the President," January 1964, classifies families with less than $3,000 income as falling below the poverty line. It shows, using 1962 data, that 18 percent of the nonfarm and 43 percent of the farm families fall below this poverty line. Thus, by this measure, there is two and one-half times as much poverty among farm\(^2\) as among nonfarm families.

\(^2\)Half of this farm poverty is in the South and two-fifths of it is in the North Central region. The numbers of rural farm families with less than $3,000 income according to the 1960 Census are as follows:

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>830,000</td>
</tr>
<tr>
<td>North Central</td>
<td>581,000</td>
</tr>
<tr>
<td>West</td>
<td>87,000</td>
</tr>
<tr>
<td>Northeast</td>
<td>72,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,570,000</td>
</tr>
</tbody>
</table>
Wealth picture. It tells a wholly different story: The net worth of farm operator families is twice as large as that of nonfarm families, in round figures $44,000 and $21,700 respectively. The Federal Reserve Bulletin, March 1964 reports important new data showing assets, debts and net worth of all U. S. families and of farm operator families. The figures that follow are the average amounts as of December 31, 1962.

<table>
<thead>
<tr>
<th>Category</th>
<th>All U.S. families</th>
<th>Farm Operator families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own home</td>
<td>$5,975</td>
<td>$5,501</td>
</tr>
<tr>
<td>Automobile</td>
<td>637</td>
<td>681</td>
</tr>
<tr>
<td>Business, professions</td>
<td>3,913</td>
<td>25,767</td>
</tr>
<tr>
<td>Life insurance, annuities, retirement plans</td>
<td>1,376</td>
<td>1,278</td>
</tr>
<tr>
<td>Liquid assets</td>
<td>2,579</td>
<td>2,309</td>
</tr>
<tr>
<td>Stocks</td>
<td>4,072</td>
<td>1,354</td>
</tr>
<tr>
<td>Bonds</td>
<td>456</td>
<td>535</td>
</tr>
<tr>
<td>Other</td>
<td>2,535</td>
<td>5,940</td>
</tr>
<tr>
<td>Misc.</td>
<td>1,528</td>
<td>1,095</td>
</tr>
<tr>
<td>Personal debt (excl. auto)</td>
<td>483</td>
<td>486</td>
</tr>
</tbody>
</table>

Total net worth

(1) Mean $22,588 $43,973
(2) Median 7,550 26,250

Could it be true that our farm programs have been strongly biased in favor of farm wealth (income from property) and against income from farm work and entrepreneurship?

Political and Economic Considerations

5. They are yoked together by policy but it is easier for a donkey and a camel to work together than for economists and legislators. Nowhere is it more true than in agricultural policy. At this juncture, economists are generally agreed that major parts of U. S. agricultural policy fail to meet the test of economic efficiency or the test of an acceptable welfare standard.
It is also clear that the political consensus supporting our agricultural policy is waning like the moon wanes after it has been full. Yet it would be absurd to say that politics has undermined what once was a strong political consensus. I hasten to add that it would also be absurd to blame economists. What has happened, as I have already pointed out, is that the U. S. economy has changed greatly from what it was when the grand design of our present agricultural policy was cast.

The public obviously has a stake in the economic performance of all sectors and in the welfare of all people. Economic analysis and political decisions seek to serve the public in these matters. We do well to banish the thought that economists wish to exploit agriculture by having it supply cheap food for consumers or by making it a reserve of cheap labor for industry. I know of no economist who is not aware of the gains in agricultural productivity and the impressive contributions that agriculture has made and continues to make to our economic growth. Nor does anyone doubt the technical progress of agriculture and the large role that the high skills of farmers and the advance in science and technology play in this progress. It also is noteworthy that the disapproval of economists is not dependent primarily upon whether they favor laissez faire or a modern welfare state.

6. In spite of the trouble we are in, we have much to our credit. Despite our policy mistakes, ours is a modern agriculture which has no peer. As builders of agriculture we began early to complement private endeavor with public endeavor in ways that have made our long standing private-public approach a model that others are trying to adopt. Our agricultural castle is a place to live, a place to work and an economic fortress. But like the castles on the Rhine, it is also subject to obsolescence. My concern is the source of this obsolescence and its implications for policy.

7. My approach rests on three propositions. (1) A public policy is dependent upon a political consensus. So it is with agricultural policy. To show that there is a decline in the consensus for agricultural policy, would be belaboring the obvious. My aim here is limited to a consideration of why the once large and strong political consensus has eroded. (2) A good economic basis is also good in the long run for a political consensus. This proposition so stated may seem presumptuous coming from an economist. It implies of course that the economic basis is both relevant and important in this connection. I hope I can convince you that it is true. (3) A new, strong political consensus to serve agriculture and to promote the general welfare and the welfare of farm people requires a new economic basis. This proposition rests on the judgment with which I began of the substantial interdependence between economics and political consensus. Here my aim is to show that the old basis is inadequate and that the requisite economic basis is in principle at hand.
I am sure you will agree that economists find it all too convenient to take political consensus for granted. They are not inclined to heed the warnings of political scientists. They seldom see the difficulties that beset the political process as it seeks to develop a workable consensus. No doubt we have much to learn here in what it is that makes for such a consensus and how fundamental it is in our form of government. It should be said that our political process has done well indeed in recent years in resolving very difficult basic policy issues in areas other than agriculture. With respect to these matters, political consensus has not come easily. Nor are all policy issues primarily dependent upon economic considerations. Social values deeply held are sometimes at stake. Ideas and theories with respect to the proper role of government are also important. The style of the American economy is that of a "welfare state". There are some who dislike this phrase, but let me explain what it means in this context. Our welfare state is neither "liberal" in the nineteenth-century sense nor authoritarian in the form that calls itself "People's Democracy." Our welfare state represents a partial rejection of laissez faire as it once prevailed fairly widely in the Western World, in which the "emphasis was on freedom for the individual from government, not on services to him by government." It also rejects the modern form of the authoritarian state, in which the emphasis is placed on service to the individual, service determined from above and enforced by abandoning political and civil freedom. Between these two systems there has emerged our type of welfare state which "tries to find a middle path between service without freedom and freedom without service. Because it is a tortuous path, political consensus does not come easily. I shall not take it for granted.

Erosion of the Old Basis

8. It is self-evident that the potent consensus of three decades ago with respect to agricultural policy, is gone. Let me repeat, however, it is gone not because of any perversity on the part of Congress, the executive branch or the courts. Nor are the farm organizations to blame in spite of the increasing divergency in their policy views. Nor is labor or business at fault, nor urban people generally albeit they have been gaining rapidly in political representation. Surely, too, it would be most superficial


5 Viner, op. cit.
to attribute it to agriculture's bad press. This political consensus is gone because of the erosion of its old economic basis. Let me identify some aspects of the erosion of which I speak.

One basis was to counteract the adverse effects upon farm people of the mass unemployment and of the drastic decline in international trade that occurred in the thirties. Differences between small and large farms, or between the poor and not so poor were swamped by the disintegration of the economy. But the war changed all that. The economy staged a robust performance and trade revived with a strong export demand for U.S. farm products. Business recessions and recoveries, however, one again became clearly evident. To cope with the adverse effects of such recessions upon agriculture, I advanced in 1945 the economic logic for compensatory income payments to farmers. In my judgment, such payments should be linked to the state of unemployment and they should be designed to complement compensatory fiscal policy and to free farm product markets. But this proposal has been to no avail. We stayed with the economic basis befitting the Great Depression despite the erosion it engendered.

Another basis was to reduce the price uncertainty confronting farmers. The attainment of this aim has meant much to farmers and it continues to be important. The trouble here arises out of the fact that it has been much overdone. But to go back, no one can deny that large fluctuations in the prices of major farm products seriously burdened farmers. Price uncertainty of the magnitude that then prevailed caused much capital rationing. Even fairly small annual variations in yield led to large fluctuations in farm product prices. Overly high price supports became the remedy which, however, soon disturbed the real value of particular major farm commodities. A system of forward prices for agriculture (assuring producers of price stability in the future) could have averted and still can avert these price distortions.

Meanwhile, our government has done much to maintain economic stability. We now have a number of built-in economic stabilizers. In addition we appear to be learning how to use discretionary fiscal and

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monetary instruments. As Firch has shown, these new stabilizers and instruments have substantially reduced the effects of business booms and recessions upon the domestic demand for farm products. But, here too, the grand design of agricultural policy has not been adjusted to take account of these favorable developments and this failure has further contributed to the erosion here under consideration.

Still another basis was to achieve more soil conservation. There were strong indications that we had been under investing in soil conservation. Hugh Bennett did much to make us aware of soil erosion. The dust bowl dramatized it. Soil conservation also became a way of reducing production, if only in the short run. But this aside, there was a real economic basis for increasing this type of investment. Yet when such investments are carried beyond a certain point, there is an over investment. We have gone far beyond this point. Thus we are now overdoing what was at the outset a very good thing. The ambiguity of the much idealized notion of conservation especially among urban people has won political support for many programs which have attached to them the word "conservation." But even this ambiguity has its limits. Thus, here too, the over investment under the umbrella of conservation has been reducing the political consensus in support of agricultural policy.

**Real Economic Basis**

9. The hard core of our agricultural adversity is in the unprecedented transformation of agriculture and the massive decline in the farm population that this transformation entails. The burden of this transformation does not fall on land or on farm property generally. It falls on people, on particular groups of farm people. It falls especially hard on the unskilled who are uprooted. The value of their farming skills is very low. It is all well and good to conserve our soils but it fails to aid those farm people who bear most of the burden of this transformation.

10. Government payments to farmers and USDA expenditures to support farm prices are tied to land and commodities. They are strongly biased in favor of income from farm property; income from farm work comes off a very poor second best. (This is my answer to the question raised earlier.) Returns to farm land benefit and capital gains on investment in land mount, but the earnings of farm people for the work they do is sorely depressed. The incentive is to acquire even more farm property and use more fertilizer. Farm people, however, who depend mainly on work for income, those who are low on the property ladder, are not helped in finding better paying work. To make matters worse for them, one of the effects of our present farm programs is to reduce the demand for human effort (work) in agriculture.
Although it is true that the public is ill-informed about the chronic adversity burdening so many farm people, it is vaguely aware that the billions of dollars appropriated annually for agriculture fail to improve the welfare of those large numbers of farm families at the bottom of the farm ladder. The public is not wrong in its apprehension: The flow of government payments to farm people strongly supports this view. A few figures will suffice. In 1963, 11 percent of our farms had sales of $20,000 and over. These farms had over $12,000 of income per farm; they also have much wealth, and yet they garnered 54 percent of all government payments. At the other end of this scale, 56 percent of our farms had sales of less than $5,000. Yet only about 9 percent of all government payments were allotted to them. The following estimates are for 1963:

<table>
<thead>
<tr>
<th>Farms with sales of farms (per cent)</th>
<th>Distribution of total (million dollars)</th>
<th>Government Payments (million dollars)</th>
<th>Distribution of total (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20,000 and over</td>
<td>10.7</td>
<td>918</td>
<td>2,391</td>
</tr>
<tr>
<td>$10,000 to $19,999</td>
<td>16.6</td>
<td>398</td>
<td>670</td>
</tr>
<tr>
<td>$5,000 to $9,999</td>
<td>17.0</td>
<td>213</td>
<td>350</td>
</tr>
<tr>
<td>$2,500 to $4,999</td>
<td>13.0</td>
<td>80</td>
<td>173</td>
</tr>
<tr>
<td>Less than $2,500</td>
<td>42.7</td>
<td>77</td>
<td>51</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>1,686</td>
<td>472</td>
</tr>
</tbody>
</table>

11. Let me summarize the implications of my approach. We have land use problems and commodity disequilibrium problems but these problems are not at the core of agriculture adversity. The problem that matters most pertains to farm people who are bearing the losses of economic progress, specifically of the transformation of U. S. agriculture.

The market for the skills that are required in agriculture has been long depressed. Although the labor force devoted to farming has declined by one half since 1940, the market for these skills is still in serious disequilibrium. Older members of this labor force have had no real alternative but to settle for the depressed, salvage value of the skills they possess. In many farm areas the quality of elementary and secondary schooling has been and continues to be far below par and thus the oncoming generation from these areas is ill prepared to take advantage of the strong market in other parts of the economy for high skills. The vast expenditures by the federal government on behalf of agriculture have not been used to raise the level of these skills; and, to repeat, these expenditures have been made in ways that enhance the income from some classes of property and that worsen the

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personal distribution of income among farm families. Thus it should not come as a surprise that although farm families are presently a very small faction of all U.S. families, they account for much of the observed poverty and that many of the families in urban areas who are below the poverty line have recently come from our farms.

Looked at in terms of poverty, the South is burdened with many more low income families than other regions basically for three reasons:

1. It is more dependent upon agriculture than the rest of the United States. (It accounted for over 45 percent of all U.S. farms at the time the 1959 census of agriculture was taken.)

2. The labor force in the South is more largely Negro than in the North and West and in terms of marketable skills the Negroes in the South are even worse off than the Negroes in other regions.

3. Relatively more of the whites in the labor force in the South have low skills than whites in other regions.

In short the South has been lagging seriously in providing people the opportunities to invest in acquiring the high skills for which the demand has been increasing at so rapid a rate, predominantly because of social, political and economic discrimination adverse to poor people.

A Positive Program

12. Although poor people are classified by residence, poor families are not a local matter. They are not a state's right. They are not specific to agriculture. Their lot is related to unemployment, to the adverse incidence of economic growth on particular sectors and occupations, and to discrimination. Thus, the poverty in agriculture cannot be neatly isolated from the performance of the general economy. While the program here proposed deals with farm families who are poor, the propositions on which it rests are general in their scope.

For a program to be efficient, the first proposition is that the additional income must come primarily from earnings. Our economic development of recent decades strongly supports this proposition. One of the implications is that subsidies and public controls over firms and prices to increase the income from property are an inefficient program.

(Let me illustrate: In 1959, 16.5 percent of the farm operators in the South were Negroes. The average value of the farms they operated was $6,200. Suppose these farms were all fully owned by these Negroes free of debt. Suppose that the rate of return were 5 percent and that by some new farm program the rate of return on this $6,200 were to be increased to a 10 percent rate of return. Such programs would add only $310 to the income stream of these Negroes. This approach, however, could not avoid distorting seriously the allocative efficiency of that part of agriculture.)
The next proposition pertains to identifiable disequilibria. The price (cost) and value productivity (income) of material inputs, i.e., fertilizer, machinery, etc., are in general not in disequilibrium. There are apparent "economics of scale." The value productivity (income) of farm land exceeds its value for reasons of government payments and other realized benefits from the farm programs. Nevertheless, a large additional increase in the income streams from farm land would do little to reduce the poverty in agriculture.

(To illustrate: Suppose the rate of return on the existing value of farm land were somehow to be increased by 50 percent, say from 5 to 7 1/2 percent. Even so large a jump would add less than $644 of additional income per farm family. The Federal Reserve survey cited above indicates farm land and other "business" assets were $25,767 per farm family as of December 31, 1962. An additional 2 1/2 percent return on this figure would add only $644. But not all of these farm assets are land; for they include livestock, machinery, and so on. More important, since the farm families who are really below the poverty line in all probability own little farm land in terms of value, they would benefit little indeed.)

The earnings of human agents in agriculture, whether they are self-employed or work for hire, are depressed seriously by a chronic disequilibrium which is fundamentally related to our type of economic growth. This disequilibrium has been aggravated by the slack in aggregate demand (surely so since 1957) causing the lack of enough jobs to maintain high employment. It has been aggravated also by the low level of skills of the millions of farm people who have been leaving agriculture.

The principal parts of a positive program to assist low income farm people are in principle clear and cogent:

1. Fiscal and monetary policy that will maintain a high level of employment.

2. Programs that will provide farm people with the types of skills for which the demand is strong.

3. Stronger and better enforcement of policies to eliminate discrimination against Negroes.

4. Programs to increase the economic opportunities of farm people by assisting them with job information, by helping them to move and become established in the new community, and by providing them with on-the-job training. (In future decades when historians turn to this post World War II period, they will be shocked to find that although the U. S. government appropriated billions of dollars annually to aid agriculture and although many millions of people
we are leaving agriculture—over 23 millions in terms of changes in residence and net migration from 1940 to 1962—not one agricul­tural program was developed to assist farm people undertake this massive migration out of agriculture.)

We are at a propitious juncture which promises a better deal for farm people. Poverty at long last has been placed high on the political agenda. Schooling is also there and hopefully it will not by-pass the poorer farm areas but will begin to correct the serious under-investment in the quality of elementary and high school education in these areas. The political response to the high costs of existing farm programs is also a strong positive factor. But it remains to be seen whether the agricultural committees of Congress assisted by the USDA will soon respond with programs that will assist farm people through the adversity they face, consistent with acceptable welfare standards. When they do a new, strong political consensus for agricultural policy will emerge.

APPENDIX

Distribution of U.S. Farms by Value of Sales and Income, 1963
(From U.S.D.A. Farm Income Situation, November, 1964)

<table>
<thead>
<tr>
<th>Class No.</th>
<th>Farms with sales</th>
<th>1963</th>
<th>Distribution of farms (per cent)</th>
<th>Income per farm operator family</th>
<th>Totala</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>farms (000) (per cent)</td>
<td>Realized net income</td>
<td>Off farm income</td>
<td>income</td>
<td></td>
</tr>
<tr>
<td>1 $20,000 and over</td>
<td>384</td>
<td>10.7</td>
<td>$10,180</td>
<td>$2,177</td>
<td>$12,357</td>
</tr>
<tr>
<td>2 10,000 to 19,999</td>
<td>594</td>
<td>16.6</td>
<td>6,207</td>
<td>1,512</td>
<td>7,719</td>
</tr>
<tr>
<td>3 5,000 to 9,999</td>
<td>609</td>
<td>17.0</td>
<td>3,731</td>
<td>1,778</td>
<td>5,509</td>
</tr>
<tr>
<td>4 2,500 to 4,999</td>
<td>463</td>
<td>13.0</td>
<td>2,337</td>
<td>2,080</td>
<td>4,417</td>
</tr>
<tr>
<td>5 Less than 2,500</td>
<td>1,523</td>
<td>42.7</td>
<td>1,029</td>
<td>3,222</td>
<td>4,251</td>
</tr>
<tr>
<td>(5a) Part-time</td>
<td>903</td>
<td>25.3</td>
<td>919</td>
<td>4,450</td>
<td>5,369</td>
</tr>
<tr>
<td>(5b) Part retirement</td>
<td>418</td>
<td>11.7</td>
<td>1,086</td>
<td>1,880</td>
<td>2,966</td>
</tr>
<tr>
<td>(5c) Other</td>
<td>202</td>
<td>5.7</td>
<td>1,406</td>
<td>510</td>
<td>1,916</td>
</tr>
<tr>
<td>6 All farms</td>
<td>3,573</td>
<td>100</td>
<td>3,504</td>
<td>2,431</td>
<td>5,935</td>
</tr>
</tbody>
</table>

aIncludes non-money income from farm food and housing.
COMBATING RURAL POVERTY

by C. E. Bishop

Poverty has become a major subject in discussions of public policy. With amazing speed the pendulum of thought in the wealthiest nation on earth has swung from affluence to poverty. As America has discovered its poor, it has begun an extensive examination of current policies and programs with reference to their failure to improve the levels of living of its low income families. Concurrently, there have emerged demands for new programs designed specifically to improve the levels of living of low income families.

In this chapter emphasis is upon the nature of the low income problems in the United States and the types of programs consistent with solving the various problems.

Taking Stock

Current usage of the word poverty is most confusing. Poverty must be measured against some standard. It is most meaningful when defined with reference to a national or community norm. Poverty, therefore, is generally considered to be reflected in the consumption patterns of families, and indexes of living are commonly used as indicators of poverty. During the last few years, emphasis has been placed upon a level of money income roughly sufficient to purchase some minimum bundle of goods and services. In the United States, families whose annual money income is less than $3,000 are said to be poor. In some cases, however, the definition is more rigorous and is in terms of ownership of sufficient assets to be able to purchase those goods and services which are regarded as constituting a socially acceptable minimum level of living. Thus it is sometimes difficult for persons who own their homes or other property to obtain welfare assistance. In popular usage, however, the current level of family money income is generally taken as a first approximation of the extent of poverty.

The Extent of Poverty

As indicated above, families in the United States who have current money incomes of less than $3,000 annually are considered to have less income than is necessary to purchase the goods and services deemed to constitute a minimum level of living. According to a recent survey approximately 8.8 million families in the U. S. had money incomes of
less than $3,000 in 1963. Hence 18.5 per cent of the nation's families had incomes so low that they are considered to be living in poverty.

Although a high proportion of the population is considered to be poor, and public concern over domestic poverty probably is greater today than at any time since the depression of the 1930's, it should be emphasized that real incomes are increasing rapidly in the United States and that the proportion of families in the low income category has fallen sharply. In 1947, for example, 32 per cent of the families had a money income of less than $3,000 (in 1963 dollars) compared with 18.5 per cent of the families in 1963.

The level of income which is considered to constitute poverty varies over time. As per capita real incomes increase, the level of income considered to be minimal also increases. Thus a reduction of more than one-third in the per cent of families with money incomes under $3,000, does not necessarily mean a reduction of one-third in the number of poor families. Nevertheless, such a sharp reduction in the per cent of families in the low income category is encouraging for it means that many low income families are benefiting from economic growth.

The Incidence of Poverty

Poverty bears more heavily upon some segments of the population than others. There are more poor white families than nonwhite families (Table 1). However, the proportion of nonwhite families in the poverty category is two and one-half times the proportion of white families. Likewise, the percentage of farm families in the poverty category is two and one-half times that of nonfarm families; but there are five times as many poor nonfarm families as there are poor farm families.

The relative incidence of poverty is greater in the South than in the rest of the nation. In 1963, 28 per cent of the families in the South had money incomes of less than $3,000. However, there were more poor families in the rest of the nation than in the South. In the case of rural families the situation is quite different. The South has more poor rural nonfarm families and more poor rural farm families than the rest of the nation. Furthermore, a greater percentage of the rural families in the South are in the poverty

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3 Ibid.


5 Current Population Reports, op. cit., p. 4.
category. Even in the South, however, there are four times as many poor nonfarm families as poor farm families.

Table 1. Number and Percent of Families with Total Money Income Less than $3,000 in the United States, 1963

<table>
<thead>
<tr>
<th>Item</th>
<th>Number of families (millions)</th>
<th>Percent of families</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. S. total</td>
<td>8.8</td>
<td>18.5</td>
</tr>
<tr>
<td>Nonfarm</td>
<td>7.4</td>
<td>17.0</td>
</tr>
<tr>
<td>Farm</td>
<td>1.4</td>
<td>43.4</td>
</tr>
<tr>
<td>White</td>
<td>6.7</td>
<td>15.9</td>
</tr>
<tr>
<td>Nonfarm</td>
<td>5.6</td>
<td>14.1</td>
</tr>
<tr>
<td>Farm</td>
<td>1.1</td>
<td>39.6</td>
</tr>
<tr>
<td>Nonwhite</td>
<td>2.1</td>
<td>43.1</td>
</tr>
<tr>
<td>Nonfarm</td>
<td>1.9</td>
<td>40.9</td>
</tr>
<tr>
<td>Farm</td>
<td>.2</td>
<td>78.9</td>
</tr>
</tbody>
</table>


The incidence of poverty varies with the age and education of the rural farm population. A recent study by Glasgow and Baum concluded that the average income of farm males was substantially less than that for nonfarm males and that the income disparity increased with increasing age.6

The relationship between education and income has been clearly defined in several recent studies.7 Sixty-four per cent of the heads of families with annual incomes of less than $3,000 also have less than eight years of formal schooling.8 Other studies have noted the inferior amount and quality of education of rural youth.9 A summary of some salient research findings emphasizes the relationship of inferior education and rural poverty. The dropout


7See, for example, T. W. Schultz, "Reflections on Investment in Man," Journal of Political Economy Supplement, October 1962 and other articles in the same issue.

8A. P. Bird, op. cit., p. 20.

rate among students in rural areas is approximately 50 per cent greater than the dropout rate for students in urban areas.\textsuperscript{10} Moreover, not only do relatively more rural youth than urban youth drop out of school but they drop out with less schooling. Over one-half of the dropouts in rural areas do so before they reach high school while only about one-third of the urban dropouts fail to attend some high school.\textsuperscript{11} Cowhig and Schultz have called attention to the high retardation rates for rural farm white males in the South.

Relatively few farm youth go to college.\textsuperscript{12} Furthermore, they encounter more difficulty in getting into college. A number of studies which have recently been completed indicate that pupils from rural schools make lower grades on achievement tests than students from urban schools. One recent study, for example, indicates that rural pupils in some areas score about 15 percent lower on tests of reading, spelling, arithmetic and social studies and about 25 percent less on grammar and science.\textsuperscript{13} Thus, rural youth have more deficiencies in preparation for college than urban youth, and it is necessary to take time to make up these deficiencies or suffer higher attrition rates.

Cowhig has shown that income differences are associated with differences in education and that they tend to be cumulative over time. When consideration was given to social and economic circumstances of the families, Cowhig reached the important conclusion that "the major reason for higher rural than urban dropout rates is the greater concentration of low income families in rural areas, the higher proportion of rural parents with comparatively little education, and--related to both of these factors--the more frequent employment of rural parents in low-status occupations."

The research cited above emphasizes the importance of human resource development in combating rural poverty. The low productive capacity of

\textsuperscript{10}Cowhig, \textit{ibid}.

\textsuperscript{11}\textit{Ibid}.

\textsuperscript{12}\textit{Education Status, College Plans and Occupational Status of Farm and Nonfarm Youth, October 1959, Series Census ERS (P-27) No. 30, p. 22.}

\textsuperscript{13}John Folger, "Good Schools for Small Communities," unpublished manuscript, Agricultural Policy Institute, 1965.
much of the current rural population has also been emphasized. Other research has emphasized the underemployment of labor in agriculture, particularly in the South.

**Approaches to Policy**

The above discussion makes it clear that there are many facets of rural poverty and that no single approach is likely to cope effectively with all of the different elements. At least three aspects of the low income problem must be singled out for special treatment. The policies relevant to coping with each of these problems are distinctly different.

**Attacking Individual and Family Poverty**

Real poverty characterizes those individuals and families who own too few assets to yield an income high enough to sustain a minimal level of living even when their resources are optimally employed. This situation characterizes the aged, the disabled and many of those in broken homes who have dependent children. These people are poor not by choice and not because they do not employ their resources efficiently but by virtue of the fact that they own so few resources. In other words, they are locked in the poverty category and will continue there unless provided with outside assistance.

This low income category also includes those whose skills have been rendered obsolete by changes in economic and technological conditions and those who for various reasons may be temporarily unemployed. Thus, this category contains a temporary and a permanent component.

The obvious approach in coping with the permanent facet of this type of low-income problem is through direct income payments. The major policy questions concern the size of the payments and regulations governing the manner in which the payments are made.

Clearly the payments must be sufficient to sustain a minimum level of living. The payments may be made in kind or in money, but from the standpoint of the recipients payments in money are preferable. A more important question concerns the regulations governing payments. Clearly every effort should be made to insure that those who can emerge from the poverty category are encouraged to do so. Unfortunately, under many current programs costs are attached to emerging from poverty. These programs carry provisions whereby individuals are penalized for obtaining higher incomes in that as earned income increases welfare payments decrease. Costs in

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15 See, for example, C. E. Bishop, "Underemployment of Labor in Southeastern Agriculture," Journal of Farm Economics. 36(2):258-272.
the form of time and effort are involved in becoming a participant in most welfare programs. Thus, program participants who find that their benefits decrease as their incomes increase may be discouraged to accept the risks and penalties associated with part-time or even full time employment. Obviously, it is desirable to provide incentives for those who can do so to emerge from the poverty category. This can be done by making the income payments independent of income or, perhaps even better, by making payments an increasing function of income. At least it may be desirable to offer bonuses in the form of continuation of welfare payments for a specified period of time as an incentive to obtain employment.

Another aspect of family poverty which warrants further consideration is that of human resource development. It was emphasized above that people in the poverty category own few resources other than labor. Moreover, there is little capital accumulation by families in this situation; thus the prospects for emerging from the poverty category depend heavily upon increasing the returns for labor services. Intensification of training and retraining for those whose skills have been rendered obsolete or who could develop marketable skills is one obvious way of increasing earning capacity of labor.

Even more important, however, is the need to insure an exodus from the poverty category by the children of those now in this category. The major, and perhaps the only, avenue out of poverty for these people is through education and training. The relationship between education and training and earnings is so important that a system of rewards and/or penalties should be considered to encourage school attendance for the children of those who are trapped in poverty. This could be done by reducing welfare payments for school absences or perhaps better by providing additional payments to parents whose children meet minimal attendance targets. Beyond some age it may be desirable to make payments directly to the youth.

The main point I wish to make here is that we should endeavor to use market incentives to encourage human resource developments. Efforts to develop these resources should be rewarded and any penalties associated with development should be removed in the interest of assisting people to emerge from poverty and to reduce the long-term costs of welfare programs.

Attacking Area Poverty

The incidence of low incomes is not uniform over geographic areas. Recent discussion of low incomes has emphasized the fact that "pockets of poverty" have developed in various regions of the nation. These concentrations of low income people emphasize the need for area attacks on poverty.

In the United States we are prone to assume that all areas can become thriving centers of economic activity and population growth. Even casual observation should reveal that in order to achieve reasonable family incomes
it has been necessary in many areas to sharply reduce population. In short, the existence of economic poverty should not be confused with the existence of economic opportunity. Effective policies must distinguish between problem areas and opportunity areas. The possibilities for an area to become economically viable and the kinds of changes which will be necessary vary greatly from one area to another. An attack on poverty in rural areas may require changes in economic structure and development of the infrastructure as well as resource development.

Most attempts at area development have stressed industrial development and the creation of nonfarm employment opportunities. Efforts also have been made to increase farm productivity and incomes. However, the efforts toward structural reorganization of farming in the impoverished areas have been feeble indeed. The average age of farm operators is increasing sharply. The average age of farmers is higher in the low-income areas than in other areas. Moreover, the size of the land holdings is less than in other areas. In order to improve the economic viability of these areas and to provide opportunities for young families, it may be desirable to consider a system of payments for early retirement and for sale or rental of farm property to increase the size of the remaining farms. In some areas it also may be desirable to consider the use of zoning and other techniques to prevent the further parcellization of farms and the development and perpetuation of low areas.

Some areas have good economic potential but lack the basic infrastructure. The construction of highways, hospitals, schools and libraries, for example, may be a necessary condition for local resource development. Lakes, parks and other recreation and retirement activities as well as the further development of agricultural and industrial enterprises may be impractical without improvement in the infrastructure.

One of the most needed changes in infrastructure is the further consolidation and improvement of schools. Much more vigorous programs in this area will be needed before rural youth are assured of educational and training opportunities comparable to those enjoyed by their urban counterparts.

An effective attack on area poverty will require better community organization, development of local leadership and analysis of area economic opportunities. In this respect, we could learn much from the programs of community guidance being conducted in Holland, Sweden and other countries of Western Europe, where families are meeting in groups to consider the developmental potential of their communities.
Reduction of the Farm Labor Force

A third major facet of an attack on rural poverty is through a reduction and change in the composition of the farm labor force. The low incomes in rural American cannot be solved unless a high level of nonfarm employment is maintained. Low incomes in agriculture usually are associated with underemployment rather than unemployment. Transfer of many underemployed people to nonfarm employment is an essential aspect of income improvement for families in most rural areas of the United States. This adjustment, of course, has been taking place rapidly, especially since 1940. From 1940 to 1962 more than 23 millions of people changed from farm to nonfarm residences.16

This massive flow of people out of agriculture has been a major factor in improving levels of living of farm families. Although there is a continuous flow of labor from farm to nonfarm residences, the magnitude of the flow varies considerably from year to year. During periods of low unemployment the flow increases as the wages of nonfarm labor increase in comparison with farm labor. When the unemployment rate is greater than 5 per cent of the labor force, the rationing of jobs and difficulties of obtaining nonfarm employment pose important barriers to mobility.17 A full employment policy involving an increased demand for labor in nonfarm employment is an essential aspect of a transfer of labor from farms. It is a necessary condition for continued improvement of levels of living in rural areas.

Migration is proceeding, however, in spite of the unemployment which has prevailed. Tolley estimates that if the United States maintains about the same rates of unemployment during the current decade as prevailed during the last two decades approximately 40 per cent of the rural farm males who were between the ages of 5 and 65 in 1960 will transfer to nonfarm residences by 1970 (Table 2). However, the incidence of migration is highly selective with respect to age, varying from a high of almost 75 per cent of those between the ages of 15 and 24 to a low of only 11 per cent for those between 45 and 65 years of age.


Table 2. Projections to 1970 for Males Remaining on Farms and Migrating off Farms in the United States

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of 1960 rural farm males surviving to 1970 (thousands)</th>
<th>Number expected to be rural farm males in 1970</th>
<th>Implied off-farm migration</th>
<th>Percent migrating</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-14</td>
<td>1,542</td>
<td>631</td>
<td>911</td>
<td>59.0</td>
</tr>
<tr>
<td>15-24</td>
<td>985</td>
<td>259</td>
<td>726</td>
<td>73.7</td>
</tr>
<tr>
<td>25-34</td>
<td>566</td>
<td>436</td>
<td>130</td>
<td>23.0</td>
</tr>
<tr>
<td>35-44</td>
<td>750</td>
<td>629</td>
<td>118</td>
<td>15.7</td>
</tr>
<tr>
<td>45-65</td>
<td>1,287</td>
<td>1,140</td>
<td>150</td>
<td>11.7</td>
</tr>
<tr>
<td>Totals</td>
<td>5,130</td>
<td>3,095</td>
<td>2,035</td>
<td>39.7</td>
</tr>
</tbody>
</table>


Migration from farms is structured largely by employment conditions. The young, who have less invested in agriculture, and who have better non-farm employment opportunities and a longer period of prospective employment in which to recoup the costs of migration, are transferring out of agriculture in very large numbers. As a result the average age of farm operators is increasing rapidly. Over time, this will result in a continued and accelerated reduction in the agricultural labor force.

The above changes appear to be in the right direction. These changes, however, are not without substantial costs. Net migration, for example, is less than one-half of gross migration. This suggests a substantial backflow of people to farm residences and creates doubts concerning the efficiency of migration as it is now operating. Furthermore, there is cause for concern over the aging of farm operators. A substantial part of our farm resources is owned by farmers of advanced age who have little flexibility. These resources are virtually locked in current uses. In view of the age selectivity of migration and the aging of farmers, manpower policy is an important aspect of agricultural adjustment.

This nation has never developed an explicit manpower policy for agriculture. Land use and conservation policies have been developed and farmers have been provided with subsidies to encourage them to make specified uses of land. Likewise, special credit programs have been developed to encourage farmers to make particular types of investments. Special programs of agricultural education have been developed for farm youth, but education and training programs have not been related specifically to manpower policy. In view of the changes now taking place and the importance of occupational and geographic mobility of labor to
a solution of low income problems in rural America, an explicit manpower policy for agriculture should be developed. This policy should seek to (1) gauge the employment potential of agriculture, (2) provide counsel to individuals and families concerning income potentials in farm and nonfarm employment, (3) continue specialized training programs for those who are to continue as farmers, (4) initiate nonfarm vocational training for those who have limited opportunities in farming, and (5) provide special counseling and possibly relocation loans or grants to those who transfer to nonfarm occupations. The objective of these programs would be to increase the productivity of and returns for labor services. In the same way in which land use policy has recognized that there are substantial differences in the productive potential and best uses of land, farm manpower policy would emphasize the differences in productive potential and adjustment capacity of farm people.

Any additional aspect of a farm manpower policy should include the development of an "early warning system" to detect change in technology which are likely to substantially decrease farm manpower needs. Changes in farm technology usually increase the productivity of capital relative to that of labor and thereby encourage the substitution of capital for labor in the production of farm commodities. Early detection of these changes and analysis of their probable magnitudes should make it possible to cushion the ensuing adjustments.

A further aspect of manpower policy is concerned with those who for one reason or another are not motivated by market phenomena. The market reconciles the preferences of resource owners and those of consumers. It is not possible, therefore, for people to choose arbitrarily the uses which they make of their resources and at the same time to specify the income which they will receive. Once the use of resources has been specified, income has been largely determined. Certainly, society has no responsibility for providing minimum income levels to individuals who are unwilling to employ their resources productively. To the extent that this is a problem of significance, however, it would seem desirable to determine the reasons for lack of motivation and to take steps to improve the use of resources through better occupational guidance of youth and increased incentives to change.

In summary, in this chapter we have argued that the problems of rural poverty are quite complex. They cannot be solved by treating all people and all areas as if they were homogeneous. It is the heterogeneity which is the essence of the poverty problems. Effective programs to cope with poverty, therefore, must give due recognition to differences among families and areas and must be tailored to the needs of each.
PAST, PRESENT AND FUTURE CAPACITY TO DEAL WITH RURAL POVERTY THROUGH PUBLIC AIDS AND PROGRAMS

Lee R. Martin

Poverty is considered to be measured by low disposable incomes to human resources, in relation either to a specified level of living or to incomes of resources with similar potentials. There are valid criticisms of using any income measure as the sole criterion of poverty, but until better measures of wealth are available to supplement income data, there is little choice. Better measures of economic welfare are badly needed. Here the commonly used poverty boundaries of $3000 in net annual cash income for the family and $1500 for the unrelated individual are assumed. (6)

It would be too much to examine all possible elements in a poverty program, and all the administrative possibilities for carrying out public programs. What is under discussion are program elements that could be carried out largely by the land-grant system—the land-grant universities with their capacities for extension, research and instruction, and the U. S. Department of Agriculture (USDA) with parallel capacities in research and with capacity for carrying out action programs.

1. Historical Discussion

A search for references to programs dealing with rural poverty reveals few examples before 1933. However, from the beginning of effective self-government, a great many public actions that affected farming were intended to improve the welfare of farmers or consumers or both.

1 Professor of Resource Economics, School of Natural Resources, The University of Michigan.

2 The numbers in parenthesis refer to the numbered bibliography at the end of the paper. This bibliography includes unquoted studies examined in the process of preparing this chapter.

3 It seems reasonable to assume no major institutional reorganizations in relevant areas, and no creation of new institutions; none of the better known political commentators has interpreted the 1964 election as a mandate for major structural changes like those carried out during the New Deal.
A. Accessibility to Land. Early land programs were intended to bring arable land into production as soon as possible. The programs were quite successful for land that could be used for intensive agriculture; problems arose from the distribution of forest and grazing lands. The philosophy for nearly a century and a half was one of opening up economic opportunities by making arable land available at little or no cost, with few conditions imposed on land use. There was little tendency in Washington to be concerned with the welfare of families whose breadwinners could not eke out a livelihood under prevailing conditions. There was also little direct concern with efficiency of resource use, and practically none with resource conservation problems.

B. Accessibility to Information. In the 19th century, there came more explicit recognition of the role of information in agriculture. In 1862 the land-grant system for creating and disseminating relevant scientific knowledge began to evolve into the effective mechanism it is today. The Morrill Act of 1862 stimulated the creation of the land-grant colleges and another act in that same year established the USDA. The Hatch Act of 1887 institutionalized agricultural research, the Smith-Lever Act of 1914 led to the Cooperative extension Service, and the Smith-Hughes Act of 1917 began federal support of vocational education in agriculture.

In the beginning of the land-grant system, efficiency may not have been an explicit consideration, but it increased steadily in importance. Very early in this period information was regarded as a means for raising the yields of less productive farmers; it was assumed that income and welfare would rise as a result. The land-grant system is a social innovation of the first order of magnitude. Much of the growth in agricultural output supports the validity of the overwhelming importance of information. Even though the land-grant system neither created nor disseminated all of the information that sustained agriculture's phenomenal growth, the system succeeded beyond the fondest expectation of its founders. As Schultz (40, 42) and many others have said, and as Griliches (19) has demonstrated for hybrid corn, the benefits have gone more to consumers than to farmers.

That an individual with land resources and information should be able to produce an adequate income was still the philosophy of this period. Recognition of the existence of relatively low farm income grew in the 1920's and developed into a concern with agricultural credit. After the Civil War, the political leadership for agriculture oscillated around a central position of disenchantment with laissez faire economics and its policy conclusions. There was concern for national policies dealing with money supply, tariffs and foreign trade, antitrust policies and other
methods for regulating monopoly. Concern by agricultural leaders for "nonfarm" policies became more diluted from the 1920's on, because agriculture concentrated increasingly on agricultural policy.

C. Accessibility to Credit. Some concern for low income was directed toward making more resources available to farmers. The outcome of this low-key credit ferment has been a reasonably satisfactory farm credit system, including production credit, intermediate credit, and mortgage credit. Improvements in credit probably assisted more farmers in avoiding a low-income status than it rescued. The credit system may have contributed to the retention of redundant human and land resources in agriculture; if capital resources are also redundant, one might argue with kind of soft logic that injections of additional credit in agriculture contributed to the redundancy in capital resources.

The turn of the century saw a steady growth of interest in the conservation of natural resources, although the initial interest was not so much for arable lands as for "the protection of navigable waters in streams, the control of forest fires, government regulation of the cutting of timber, the retention by the government of underground mineral rights in lands granted to private interests and so on." (3, p. 123) Arid land reclamation programs preceded soil conservation by almost a generation. Reclamation was an attempt to extend the "land" frontier by continuing to make land available to farmers. The agricultural conservation program came into being during the New Deal, and has been continued. While conceptual cobwebs in conservation have gradually been swept away, an interested observer for three decades might be permitted to make the unsupported observation that decisions connected with the agricultural conservation programs have consistently kept one eye on their direct income effects.

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4 Concern over monetary policies led eventually to the Federal Reserve Act (1913); feelings before the trust-busting era led to the Sherman Antitrust Act (1890), and to an impressive list of regulatory statutes. Concern over inequalities in income distribution led to the income tax amendment (1912). A major farm organization was instrumental in massing congressional support for a 1940 extension of the reciprocal trade agreements program. (10, pp. 140-155)

5 That reclaimed land does not represent a net addition to productivity or to land in cultivation was shown by Tolley (51), who concluded in 1959: "The analysis suggests that main effects of western reclamation have been in the South, where perhaps 480 million dollars worth of production have been displaced... Since 480 million dollars is about five percent of gross income in the South, it may be that one farm worker for every twenty remaining in southern agriculture has been displaced by western reclamation."
D. Accessibility to Markets -- Prices, Markets and Supply Management.
The New Deal represents a watershed in agricultural policy, with the role of
demand and supply explicitly recognized and income programs built around
efforts to bring supply and demand into balance at a satisfactory level of
prices. The selected instrument was input control, and the input use that
could be most easily controlled was judged to be land. Unfortunately for the
selection, a technological revolution that had been slowly gathering momentum
burst upon the rural scene and vastly increased the extent to which purchased
inputs could be substituted for land and labor.

There was explicit recognition of rural poverty and experimental direct-
action programs were designed, with the Resettlement Administration and its
successor agencies as examples. This road to welfare improvement was
based upon increasing production in low-income units. Had it been a great
success it would have aggravated supply management problems. Credit
programs were redesigned to be more effective against poverty by making more
resources available to small farmers along with information. World War II
brought the credit goal back to efficiency with a gradual abandonment of the
welfare elements in earlier programs, perhaps due more to war-induced
squeezes on funds and trained personnel than to any conscious abandonment
of the earlier philosophy.

From 1939 to 1947 or 1948, the economic environment facing rural people
was more favorable than it had been since World War 1. Not only could
productive capacity in agriculture be unshackled, but large accumulated
stocks played a crucial role in winning the war (and in reconverting to an
almost believable level of economic productivity in the western world, even
in Italy, Germany and Japan). Nonfarm employment was plentiful, and much
of the excess manpower that had been dammed up in agriculture for two
decades was drained off into the armed forces, or in nonfarm employment.
There was massive migration to large urban centers, while urban centers in
the agricultural regions were able to locate economic activities that
provided employment opportunities nearer to underemployed rural residents.
Per capita income differentials between the low-income and high-income
states (also between the rural and urban states) narrowed considerably
from 1940 to 1959; analysis of income changes in the 14 southern states
reveals that nearly all the improvement of the 19-year period actually took
place during 1940-45, when effective demand was adequate or even
excessive. (9, p. 272)

In spite of the welcome improvement in rural welfare, the war period
turned out to be only an interruption in agricultural programs, not a
turning point. Technological change, not even slowed down by the war, soon
accelerated further, and the reappearance of surpluses forced attention back
to supply management. Actual and suggested programs represented different
combinations of the stick of coercion and the carrot of incentives. But none
of the combinations actually achieved great success either in reducing stocks
to optimum levels or in raising incomes of farm people near equality with nonfarm incomes. Nevertheless, the farm income situation was much better than it would have been without the programs.

From the New Deal on, the preambles to agricultural programs and the Congressional debates paid considerable lip service to the contribution the programs would make to the improvement of low farm incomes. It became possible in the 1950's and then fashionable for analysts to point out that rural poverty was being affected very little by conventional agricultural programs. In an unpublished doctoral dissertation, Pavlick estimated the income effects of federal farm programs on Appalachian farmers and found that the programs had little impact on farm poverty. (38)6

E. Direct Action on Poverty. In the 1950's it came to be recognized that different approaches were required. Because the political climate was not not favorable for structural changes, poverty programs could be characterized as shoestring operations or as social experiments in inducing regional economic growth. Goals of the domestic poverty programs were to be achieved by achieved by reorienting and coordinating existing public programs, particularly those involving federal agencies. An extreme example was the reassignment of technical specialists in soil conservation to the task of preventing further erosion of human capacities in impoverished rural counties.

It was implicit in the programs that the information required to stimulate economic growth was readily available in the form needed. This led away from including much research and led toward the use of "consultants" who were assumed to have the all-important information for designing and carrying our effective measures. Perhaps the most important unmet need was the conceptual framework for economic growth. Whatever empirical information was at hand could not always be placed in a context that led to useful or valid interpretations. Only in the last few years has research been included in poverty programs, especially basic research into the underlying structural relations. The resources allocated are still quite inadequate when considered in relation to the magnitude, complexity and importance of the problem.

6Pavlick's results were stated as follows (p. 68): "The findings were that income effects are small. Only one-fourth to one-third of the farmers farmers participated directly in farm programs, although most are probably affected indirectly. The average increment to participating farmers was about $30 while the average increment to all farmers was from indirect effect was about $120." It should be added that the indirect effects are based on an estimate of what income would have been without federal programs; the indirect income effect on an individual farmer would be roughly proportional to his volume of output.
Evidence of "outside concern" evoked useful responses from low-income areas, almost always energetic and sometimes constructive. The limited availability of useful information probably kept the released energy from being transformed into more dramatic results.

Making small amounts of financial assistance available was probably designed more to stimulate local response than it was to play a vital role in making up capital deficits. The magnitude of capital was underestimated, because of the failure to include human capital and social overhead capital.

The most important recent improvement in the welfare of farm people came about as a result of extending the coverage of Social Security to farm people. To quote Schultz:

Ten years ago farm families of which the head was 65 years of age and over, received a median income of only $1,028; by 1959 it had risen to $2,176 and for 1960, it had become $2,294. Farm families are now receiving about the same amount of income, whereas ten years ago, they received only two-thirds of that of rural nonfarm families. (44)

Table 7.1 shows the realized costs of agricultural and related programs for fiscal years 1932-59. For the entire 27 years, realized costs were approximately $39 billion--$18 billion for price and income stabilization, $7 billion for conservation, $1.6 billion for credit (R. E. A. and F. H. A.), $2.1 billion for research and education, $1.2 billion for marketing services and regulatory activities, $3.7 billion for school lunch and donations (including $1.5 billion for donations abroad, but not including Public Law 480 480), $0.5 billion for the Farm Credit Administration, $4.2 billion for wartime subsidies, and 0.8 billion for other. For the 1932-39 period the realized costs ran at an annual rate of nearly $600 million. During the 1940-49 period the annual realized costs averaged almost $1.3 billion; for 1950-59 the annual average was 2.2 billion, and the annual average for the 27 years was close to $1.5 billion.

Table 7.2 shows budget appropriations (not really costs) for agriculture and related program for 1960-64. During this period the annual appropriation ran to nearly $7 billion on the average, with foreign assistance programs averaging over $2 billion per year.

Table 7.3 shows 1964 actual spending (again not realized cost) and budget proposals for fiscal year 1965 and 1966. For these three budget periods, the rate approached $7.5 billion although the totals were projected to decline from a high of over $8 billion for fiscal year 1964.

Actual and proposed budget appropriations for fiscal years 1960 through 1966 total up to $47.5 billion of which $12.7 billion was for foreign assistance assistance and $26 billion for stabilizing farm incomes.
Table 7.1 Realized Cost of Agricultural and Related Programs, by Function and Purpose, Fiscal Years 1932-1959.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Programs primarily for stabilizing farm prices and income:</td>
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<tr>
<td>CCC nonrecourse loan, purchase and payment programs</td>
<td>19</td>
<td>368</td>
<td>4,038</td>
<td>4,424</td>
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<tr>
<td>CCC supply, commodity export, and other activities</td>
<td>----</td>
<td>(326)*</td>
<td>522</td>
<td>195</td>
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<tr>
<td>CCC interest, administrative, and other general costs</td>
<td>13</td>
<td>106</td>
<td>1,431</td>
<td>1,551</td>
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<tr>
<td>National Wool Act program</td>
<td>---</td>
<td>---</td>
<td>141</td>
<td>141</td>
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<tr>
<td>International Wheat Agreement</td>
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<td>---</td>
<td>1,030</td>
<td>1,030</td>
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<tr>
<td>Donation of commodities to other nations—inventory costs less market value</td>
<td>---</td>
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<td>214</td>
<td>214</td>
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<td>Commodities sold for foreign currencies under Public Law 480</td>
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<td>---</td>
<td>1,916</td>
<td>1,916</td>
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<tr>
<td>Removal of surplus agricultural commodities</td>
<td>314</td>
<td>991</td>
<td>1,116</td>
<td>2,421</td>
</tr>
<tr>
<td>Sugar Act</td>
<td>(34)*</td>
<td>(195)</td>
<td>(188)</td>
<td>(416)</td>
</tr>
<tr>
<td>Soil Bank—acreage reserve program</td>
<td>----</td>
<td>---</td>
<td>1,662</td>
<td>1,662</td>
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<tr>
<td>Acreage allotment payments under the agricultural conservation program</td>
<td>882</td>
<td>1,473</td>
<td>---</td>
<td>2,355</td>
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<td>Other (Agricultural Adjustment Act of 1933, parity payments and other)</td>
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<td>983</td>
<td>243</td>
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<td>Programs primarily for resource conservation:</td>
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<tr>
<td>Agricultural conservation program, exclusive of adjustment payments</td>
<td>264</td>
<td>2,192</td>
<td>2,358</td>
<td>4,813</td>
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<tr>
<td>Soil bank-conservation reserve program</td>
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<td>342</td>
<td>342</td>
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<tr>
<td>Soil Conservation Service programs</td>
<td>70</td>
<td>296</td>
<td>630</td>
<td>996</td>
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<tr>
<td>Forest Service programs</td>
<td>118</td>
<td>301</td>
<td>255</td>
<td>674</td>
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<td>Watershed protection and flood prevention</td>
<td>2</td>
<td>20</td>
<td>155</td>
<td>177</td>
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<tr>
<td><strong>Program</strong></td>
<td><strong>Total, FY 1932-39</strong></td>
<td><strong>Total, FY 1940-49</strong></td>
<td><strong>Total, FY 1950-59</strong></td>
<td><strong>Total, FY 1932-59</strong></td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td><strong>Credit and related programs for electrification and telephone facilities, and farm purchases, housing, etc.</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Lending programs, R.E.A.</td>
<td>2</td>
<td>13</td>
<td>236</td>
<td>252</td>
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<tr>
<td>Lending programs, F.H.A.</td>
<td>132</td>
<td>22</td>
<td>(62)</td>
<td>1,275</td>
</tr>
<tr>
<td>Grants and other expenses</td>
<td>433</td>
<td>462</td>
<td>381</td>
<td>1,275</td>
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<tr>
<td><strong>Total, FY 1932-59</strong></td>
<td>568</td>
<td>809</td>
<td>555</td>
<td>1,619</td>
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<tr>
<td><strong>Research, education, marketing and regulatory:</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Research</td>
<td>160</td>
<td>352</td>
<td>779</td>
<td>1,290</td>
</tr>
<tr>
<td>Extension Service, including payments to states</td>
<td>110</td>
<td>228</td>
<td>430</td>
<td>769</td>
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<tr>
<td>Marketing services, regulatory, disease and pest-control activities</td>
<td>230</td>
<td>303</td>
<td>650</td>
<td>1,183</td>
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<tr>
<td><strong>Total, FY 1932-59</strong></td>
<td>499</td>
<td>883</td>
<td>1,859</td>
<td>3,242</td>
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<tr>
<td><strong>School lunch and donations:</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>School lunch and special milk programs</td>
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<td>358</td>
<td>3,389</td>
<td>3,746</td>
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<tr>
<td>Other domestic donations</td>
<td>---</td>
<td>---</td>
<td>665</td>
<td>665</td>
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<tr>
<td>Foreign donations</td>
<td>---</td>
<td>---</td>
<td>1,533</td>
<td>1,533</td>
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<tr>
<td><strong>Total, FY 1932-59</strong></td>
<td>18</td>
<td>469</td>
<td>335</td>
<td>822</td>
</tr>
<tr>
<td><strong>Other, including wartime, defense, and special needs:</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm Credit Administration (the farm credit system, salaries and expenses)</td>
<td>309</td>
<td>253</td>
<td>(21)</td>
<td>540</td>
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<tr>
<td>Wartime consumer subsidies on agricultural commodities:</td>
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<tr>
<td>Paid by C.C.C.</td>
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<td>2,102</td>
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<tr>
<td>Paid by R.F.C.</td>
<td>---</td>
<td>2,143</td>
<td>---</td>
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</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>4,076</td>
<td>12,913</td>
<td>21,980</td>
<td>38,969</td>
</tr>
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</table>

*Figures in parentheses indicate excess of credits.*

Source: Subsidy and Subsidylike Programs of the U.S. Government, Materials prepared for the Joint Economic Committee, 86th Congress, Second Session, Washington, D. C., 1960, pp. 28-29; for more detailed descriptions of the programs, see the footnotes to Table IV in the Joint Committee Print.
### Table 7.2

Appropriations for Agriculture and R.E.A. and F.H.A. Loan Authorizations,

Fiscal Years 1960 through 1964

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<tr>
<td>Price and Income Stabilization Programs:</td>
<td>3,775</td>
<td>3,149</td>
<td>4,985</td>
<td>4,372</td>
<td>5,826</td>
<td>22,143</td>
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<td>Price Support, supply and related activities</td>
<td>2,044</td>
<td>1,152</td>
<td>936</td>
<td>2,278</td>
<td>2,799</td>
<td>9,209</td>
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<td>Foreign assistance programs</td>
<td>1,265</td>
<td>1,443</td>
<td>3,461</td>
<td>1,527</td>
<td>2,430</td>
<td>10,126</td>
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<tr>
<td>Removal of surplus agricultural commodities (Sec.32)</td>
<td>251</td>
<td>320</td>
<td>326</td>
<td>318</td>
<td>362</td>
<td>1,577</td>
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<tr>
<td>Sugar act program</td>
<td>69</td>
<td>72</td>
<td>76</td>
<td>78</td>
<td>80</td>
<td>375</td>
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<td>Expenses, A.S.C.S.</td>
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<td>88</td>
<td>105</td>
<td>95</td>
<td>115</td>
<td>491</td>
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<tr>
<td>Other A.S.C.S.</td>
<td>50</td>
<td>67</td>
<td>75</td>
<td>60</td>
<td>69</td>
<td>330</td>
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<td>8</td>
<td>7</td>
<td>6</td>
<td>7</td>
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<td>Resource Conservation Programs:</td>
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<td>1,004</td>
<td>981</td>
<td>1,001</td>
<td>1,061</td>
<td>4,920</td>
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<td>Agricultural Conservation Program</td>
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<td>213</td>
<td>209</td>
<td>213</td>
<td>220</td>
<td>1,070</td>
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<td>Conservation reserve</td>
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<td>318</td>
<td>301</td>
<td>300</td>
<td>294</td>
<td>1,530</td>
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<tr>
<td>Soil Conservation Service</td>
<td>133</td>
<td>155</td>
<td>179</td>
<td>193</td>
<td>210</td>
<td>870</td>
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<tr>
<td>Forest Service</td>
<td>208</td>
<td>318</td>
<td>287</td>
<td>295</td>
<td>310</td>
<td>1,418</td>
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<td>Other</td>
<td>---</td>
<td>---</td>
<td>5</td>
<td>---</td>
<td>27</td>
<td>32</td>
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<td>Credit and Related Programs:</td>
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<td>820</td>
<td>798</td>
<td>866</td>
<td>913</td>
<td>3,904</td>
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<td>418</td>
<td>490</td>
<td>506</td>
<td>1,984</td>
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<td>380</td>
<td>376</td>
<td>407</td>
<td>1,920</td>
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<td>Research, Education, Marketing and Regulatory:</td>
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<td>347</td>
<td>352</td>
<td>382</td>
<td>398</td>
<td>1,783</td>
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<td>Research</td>
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<td>239</td>
<td>235</td>
<td>258</td>
<td>268</td>
<td>1,202</td>
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<tr>
<td>Extension Service</td>
<td>64</td>
<td>67</td>
<td>71</td>
<td>76</td>
<td>77</td>
<td>355</td>
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<td>Marketing Services</td>
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<td>37</td>
<td>42</td>
<td>44</td>
<td>48</td>
<td>206</td>
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<tr>
<td>Other</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>20</td>
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<tr>
<td>School Lunch and Special Milk Programs:</td>
<td>177</td>
<td>185</td>
<td>296</td>
<td>325</td>
<td>239</td>
<td>1,222</td>
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<tr>
<td>All other</td>
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<td>7</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>35</td>
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<td>GRAND TOTAL</td>
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<td>5,510</td>
<td>7,418</td>
<td>6,954</td>
<td>8,482</td>
<td>34,005</td>
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</tbody>
</table>

* Budget Estimate

Note: Figures may not add to totals due to rounding.

Table 7.3 Budgets Proposed for Agriculture and Related Activities, 1964-66.

<table>
<thead>
<tr>
<th>Program</th>
<th>FY 1964</th>
<th>FY 1965</th>
<th>FY 1966</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Income Stabilization:</td>
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<tr>
<td>Price support, supply and purchase program</td>
<td>4,144</td>
<td>3,103</td>
<td>2,716</td>
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<td>National Wool Act</td>
<td>73</td>
<td>32</td>
<td>39</td>
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<tr>
<td>International Wheat Agreement</td>
<td>126</td>
<td>30</td>
<td>28</td>
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<tr>
<td>Transfer of commodities to supplemental stockpile</td>
<td>38</td>
<td>80</td>
<td>75</td>
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<tr>
<td>Removal of surplus agricultural commodities</td>
<td>240</td>
<td>242</td>
<td>312</td>
</tr>
<tr>
<td>Conservation reserve and cropland conversion</td>
<td>297</td>
<td>211</td>
<td>161</td>
</tr>
<tr>
<td>Sugar Act</td>
<td>87</td>
<td>103</td>
<td>95</td>
</tr>
<tr>
<td>Other</td>
<td>108</td>
<td>112</td>
<td>144</td>
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<tr>
<td>Financing Rural Electrification and Telephones:</td>
<td>342</td>
<td>199</td>
<td>200</td>
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<tr>
<td>Present programs</td>
<td>342</td>
<td>367</td>
<td>377</td>
</tr>
<tr>
<td>Proposed legislation</td>
<td>---</td>
<td>-168</td>
<td>-177</td>
</tr>
<tr>
<td>Financing Farming and Rural Housing:</td>
<td>250</td>
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<td>138</td>
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<tr>
<td>F.H.A., present programs</td>
<td>259</td>
<td>248</td>
<td>111</td>
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<tr>
<td>F.H.A., proposed legislation</td>
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<td>F.C.A., present programs</td>
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<td>-5</td>
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<tr>
<td>F.C.A., proposed legislation</td>
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<td>Agricultural Land and Water Resources</td>
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<td>441</td>
<td>424</td>
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<td>Soil Conservation Service, present programs</td>
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<td>209</td>
<td>218</td>
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<tr>
<td>S.C.S., proposed legislation for user charges</td>
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<td>-20</td>
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<td>A.C.P., payments, including C.C.C. loan</td>
<td>213</td>
<td>226</td>
<td>223</td>
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<tr>
<td>Other</td>
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<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Research and other Agricultural Services</td>
<td>414</td>
<td>493</td>
<td>466</td>
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<tr>
<td>Present programs</td>
<td>414</td>
<td>493</td>
<td>523</td>
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<tr>
<td>Proposed legislation for inspection fees</td>
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<td>Total, Administrative Budget</td>
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<td>Trust Funds (mainly federally sponsored farm credit institutions)</td>
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<td>615</td>
<td>495</td>
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<tr>
<td>Intragovernmental Transactions and Other Adjustments</td>
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<td>-443</td>
<td>-326</td>
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<td>Forest Service</td>
<td>317</td>
<td>361</td>
<td>340</td>
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<tr>
<td></td>
<td>FY 1964</td>
<td>FY 1965</td>
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</tr>
<tr>
<td></td>
<td>actual</td>
<td>estimate</td>
<td>estimate</td>
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<td><strong>Food for Peace</strong></td>
<td>1,704</td>
<td>1,661</td>
<td>1,661</td>
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<tr>
<td>Sales for foreign currencies</td>
<td>1,415</td>
<td>1,247</td>
<td>1,140</td>
</tr>
<tr>
<td>Grants for famine relief and other purposes</td>
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<td>211</td>
<td>306</td>
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<tr>
<td>Long-term credit sales</td>
<td>60</td>
<td>204</td>
<td>216</td>
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<td><strong>School Lunch and Special Milk Programs</strong></td>
<td>278</td>
<td>294</td>
<td>302</td>
</tr>
<tr>
<td><strong>Food Stamp Program and Other</strong></td>
<td>68</td>
<td>148</td>
<td>193</td>
</tr>
<tr>
<td><strong>GRAND TOTAL, Agriculture and Related Programs</strong></td>
<td><strong>8,213</strong></td>
<td><strong>7,113</strong></td>
<td><strong>6,609</strong></td>
</tr>
</tbody>
</table>

Note: Figures may not add to totals due to rounding

Little of the expenditure for price and income stabilization reached the lowest-income farmers because individual payments tended to be proportional to output or to acreage of arable land owned by the recipient. Low-income rural residents characteristically have smaller bundles of productive resources. Conservation payments tended to be jointly proportional to the quantity and quality of land resources. Likewise, credit programs (especially after FHA gradually evolved into a conventional lending agency) could bring about little abatement of poverty, because the lowest-income farmers had such a small resource base with which to start. The REA program undoubtedly raised welfare throughout rural areas by bringing electricity and telephones within easy reach. At best, research and education were neutral in their effects on poverty, increasing over-all efficiency, but with more of the benefits accruing to consumers. School lunches and other donations increased the demand for farm products and enhanced the welfare of the recipients, as did the distribution of surplus agricultural commodities through welfare agencies; many low-income rural residents were eligible for surplus commodities, and some of their children received free school lunches. FCA loans probably had little effect on poverty. Wartime consumer subsidies obviously benefited the most productive farmers and the consuming units that received the subsidies.

While nearly one-half of the realized cost of 27 years of programs was assigned to price and income stabilization, only a small part became income for farmers in the lowest quartile. Whether this situation has always been understood by urban Congressmen and Senators who supported agricultural legislation faithfully is not clear.

The relative magnitude of direct action on poverty can be seen from 1964 budget estimates quoted by Schultz.

...there are six soil conservation...accounts which will require $200 million. There is an "agricultural conservation program" which will cost $221 million; a "land-use adjustment program," $27 million; an "emergency conservation program," $5 million; and a conservation reserve program which calls for $294 million. There are also a couple of billions of dollars of payments that are tied to acreage allotments. But there is one little item that is different; it is a new item in the 1964 budget, called "rural renewal," which is to provide "technical and loan assistance to local public bodies for economic development in rural areas," a new program about which there is now much ado in the top echelon of the USDA, which could assist farm people. For this new venture, the budget request is $1.8 million -- not even 3/100 of one per cent of the total USDA expenditures this year! (44, pp. 3-4)

The magnitude of this rural renewal effort may be seen even better by referring to Moore's estimate (34) of rural poverty: 17.4 million rural people (11.4 million nonfarm residents and 6.0 million farm residents). Spread among 17.4 million people, $1.8 million for rural renewal comes out almost exactly as a dime a head!
2. A Poverty Program

It makes little sense to discuss in general terms the capacity of the land
land-grant system to deal with poverty. No agency now in existence is so
versatile as to be able to administer effectively -- let alone design all the
programs that are possible. The capacity of the system depends in large
measure on the program. For that reason it may be useful to outline in broad,
general terms a program that would begin to eat away at the hard core of
rural poverty.

What follows is a design for designing a program. It is argued that the
information that can be mustered now for designing a program is nowhere
near adequate -- we simply do not know how to design programs except in
very broad general terms, because the information is not available. Past
programs have proceeded on the unwarranted assumption that information
was not one of the limiting factors; it followed that there was little need
for research and for social experimentation with small-scale programs. For
example, the RAD program evoked a surprising response from impoverished
communities; the results have been disappointing except in a few instances,
because workers at the grassroots level were not able to bring useful informa-
tion to the communities that had themselves poised for action.

The general outline of the program is as follows: (a) full employment;
(b) agricultural reorganization; (c) human resource development; (d) social
overhead capital; (e) area planning and development; (f) leadership develop-
ment; and (g) income transfers. The keystone to the program is the creation
and dissemination of relevant information and this is the strong suit of the land
land-grant system.

A. Full employment. Any effort to achieve substantial improvements in
rural welfare while the over-all unemployment rate hovers around 5 percent
resembles the Hindu rope trick in more ways than one. Unless the
unemployment rate can be lowered considerably, the prospects of relieving
underemployment and unemployment in rural areas will be slight. What
improvement is achieved under these conditions is likely to be at the
expense of welfare in other sections of the society.

For "The Great Society" to materialize for the rural population, the
goal for employment of human resources must be set above 96 percent.
A level of 98 or 98 1/2 percent would make creation of economic opportuni-
ties for rural residents much easier. While policies to increase the
utilization of productive capacity are understood in general terms, there
are several serious problems.

Means must be found of avoiding the chronic inflation that is a
clear and present danger when the economy is "heated up" to the suggested
level. The information underlying decisions to arrest inflation is not
fully available, but there is no reason to think it cannot be obtained from
research. Only during the last decade or so has this type of research been
attempted and then on a small scale. The stake of rural residents is so
great in the findings of this research and the competence of the land-grant
system such that the system should involve itself in this effort on a considerable scale.

It may be useful at this point to digress for a moment or two to attempt to lay some illusions about the land-grant system to rest. First the USDA represents the largest and most versatile collection of social science research resources in the federal government. It is simply not true that the research competence of the department is limited to technical agriculture, or to the applied agricultural sciences.

Second, the land-grant universities comprise an even larger and more diverse collection of social science research resources. The agricultural colleges themselves represent considerable breadth and depth in the social sciences; experiment station directors can call upon research competences anywhere in the university almost as easily as they can muster those in the agricultural colleges.

Third, the writer is of the opinion that there is a volume of research resources in the USDA and in the land-grant universities that could be transferred to poverty-related research without great harm to the research needs of commercial agriculture. Schultz (42) and (43), Paul Miller (33), and Brinser and Martin (9, chapters 6, 8 and 9) have written at length on these challenges to land-grant universities.

To return to the basic issue -- the design and execution of programs to achieve fuller utilization of productive resources -- other questions arise. The effectiveness of the 1964 tax cuts in increasing purchasing power and employment opportunities is now virtually unchallenged, but one wonders whether tax cuts will continue to be an optimum means for increasing effective demand. Much of what Uncle Sam put back in taxpayers' pockets was removed on the second round of spending by state and local taxation, with a considerable improvement in welfare. More information is needed for making the optimum choice of means for injecting employment-increasing purchasing power into the economy--choosing among tax reductions (income or excise), increased government spending for human capital formation (education and training), social overhead capital of all sorts, research and development, and natural resource investigations, among the realistic alternatives.

A final reason for involving the land-grant system in a full employment research program is to begin to educate the rural population and their leaders on the relevance of stabilization policies to rural welfare. Congressmen with large rural constituencies have tended to oppose measures to enlarge effective demand. These voting positions may be due to the failure of impoverished rural residents to qualify and vote; further removal of real and imaginary obstacles to voting might broaden considerably the extent to which the interests of all segments of the little societies are represented in national decision making.
B. Agricultural Reorganization. Improving the welfare of rural residents does not require that agricultural efficiency be sacrificed or even ignored. Welfare and efficiency are masters which can be served simultaneously, although not on an unintended basis. I concur in the following suggestions, made by Bishop in an earlier draft of his chapter: (1) changing the kinds and amounts of farm products produced in low income areas, (2) increasing the amounts of capital and changing the form of capital invested per farm, (3) improving managerial skills, (4) coordinating marketing and farm adjustments, and (5) expediting migration of labor from farm to nonfarm employment.

Full employment is a necessary condition for voluntary transfers of human resources from farm to nonfarm activities, and farm-to-nonfarm transfers will greatly facilitate agricultural reorganization. Making more and better education available in the rural areas will also help in improving managerial skills.

C. Human Resource Development. Once economists could conclude confidently that the national income would be a function of the number of workers employed and the volume of capital they used. With an absolute redundancy in unskilled and farm workers, and with a growing unemployment rate rate among blue-collar workers, the importance of human capital -- formed by investments in education, training, work experience and health -- has come in for increased recognition.

Human capital is a major contributor in explaining increases in national income in the United States, as Schultz (41) and Denison (11) have pointed out. Increases in human capital seem to explain more of the growth in national income than increases in private producer capital. Griliches (21) found that education helped considerably in explaining the growth in agricultural output, 1940–60. Herman Miller (32) showed that educational differences were associated with large differences in annual lifetime earnings.

Education and training appear to be very rewarding investments for individuals as well as for societies. At an intermediate level between individuals and societies, human capital plays a very considerable role in the economic welfare of communities and regions. If natural resources have become less important factors in the location of economic activities, human capital has become more important as a locational factor. When other considerations are equal or nearly so, the availability of human capital becomes the critical determinant of many locational decisions.

Communities and regions aspiring to increase employment and income must be prepared to make several kinds of public investments in order to improve their prospects. One of these is human capital formation. The need may be for improvement in the quality of public education, for establishing opportunities for higher education, for vocational training, for on-the-job training, or for a combination of these. Low-income areas are frequently characterized by low average levels of education among the population and work force, and by a less than adequate provision of opportunities for education, training and experience.
Because our understanding of the influence upon economic growth of the different forms of capital (private producer capital, human capital, social overhead capital and technology) is inadequate, we are not always able to give useful advice to societies or communities on what kinds of investments will lead most surely to economic growth. To begin with, we need better general understanding of these relations. More specifically, we need to develop the ability to assist communities and regions in designing investment programs that have a good chance of achieving the desired results.

Information is needed on what economic activities are reasonable prospects for specific areas, what public investments will enhance these prospects, how these investments are to be financed and how the local program to bring about economic growth is to be carried out. All of these needs rest ultimately upon research findings from several different disciplines. While some research progress is being made in the land-grant system and elsewhere, it is simply not true that all of the information required is on hand. No amount of wishful thinking can alter that hard fact.

D. Social Overhead Capital. Another factor in the plight of low-income areas is the volume and quality of their social overhead capital. Shortcomings run the gamut from such basic essentials as good schools, roads, police and fire protection, and water and sanitary systems, through the full range of cultural amenities, such as parks and other recreational facilities, libraries, museums, drama and music centers.

Social overhead capital contributes to economic growth in a number of ways. It is often a direct substitute for private producer capital, and lowers private capital costs. These forms of capital are also used in human capital formation, and are often effective as lures for attracting needed categories of high-quality human capital. Social overhead capital is required for creating and disseminating technology.

Again, the basic and prior need is for information. Few disadvantaged areas can hope to repair all their shortcomings simultaneously, so that hard choices must be made. The alternatives need to be study carefully, so that public investments are made that are fully relevant to specific economic growth needs.

E. Area Planning and Development. Advances in transportation and communications have brought communities into close economic interdependence that had almost no economic effect upon each other half a century ago. Study of the commuting or trading zones around urban centers illustrates how widely diffused the effects of economic growth are. Increased employment opportunities in an urban center may provide new jobs for workers living within 50 miles (in Iowa) or a 100 miles in more sparsely settled areas. Technological change has reduced the locational significance of natural resources, availability of blue-collar workers, and amplified the importance of human capital and social overhead capital. These requirements that have become more important have another distinct characteristic—they are usually met through public investments.
The employment opportunities that low-income rural households need badly can probably be created no closer than a nearby urban center, and even this will take a great deal of doing. Urban places with less than 10,000 people have rather small probabilities for economic growth while many places over 25,000 have reasonable possibilities for growing into metropolitan areas. Rural households are dependent on the nearest potential metropolitan center to become the location of additional employment opportunities. If nearby centers do not transform themselves enough to be able to create additional jobs, then the unemployed and underemployed workers within that commuting zone will have to migrate to more distant centers to find employment opportunities.

The creation of employment opportunities will require considerable investment in human and social overhead capital and responsibility for these should be shared as equitably as possible among the communities that will benefit from the additional employment. The first need is to identify economic areas and their urban centers for the whole country. Fox (16) of Iowa State University has done pioneering work, but this work needs to be expanded rapidly and extended. It is not enough to agree on the obsolescence of counties as spatial units; more meaningful and useful units must be developed. Economists of the USDA and the experiment stations did yeoman work in developing the old type-of-farming areas on which the now-obsolete state economic areas are based. There is little evidence of interest in the land-grant system in participating in this badly-needed new exercise in developing more useful units for economic planning.

Even if we now had FEA's (Functional Economic Areas), two formidable tasks would remain. One is to find means for associating the communities in each FEA together effectively for making public investments, and for improving the environment for economic growth. This will require reliable information to convince the FEA residents (urban, suburban and rural) of their economic interdependence with all the other units in the FEA. Once this demonstration has been made, institutions must be build or transformed to serve a wide range of cooperative activities.

A second task will be to develop the information on which to base the cost sharing for the needed public investments. This too will be difficult, because "Beggar-Thy-Neighbor" or formal neutrality are more typical feelings between adjacent communities than a cooperative attitude. Rural communities and their leaders tend to cultivate aloofness from or animosity toward adjoining urban or suburban communities.

Action is needed but information is a prerequisite to wise action. The information is not now available in the form, quality or volume required. The land-grant system has a wide enough range of human talent to participate in all aspects of this badly needed research.
F. Leadership Development. Some of the rural communities in low-income situations have leaders who can lead effectively within a given range of activities, while other communities have only "shadow" leaders or individuals who represent leadership symbolically on formal occasions. Leadership for regional or multi-community groupings is seldom present in more than rudimentary form.

In some low-income areas, the availability of the information described above would bring an uncertain response because the structure of leadership is incomplete, and because the competence of the leadership does not encompass the complexities in many of the issues. Better understanding of the social structures and the role of local leadership could be obtained by means of research, and is urgently needed.

One critical function of leadership is to generate motivation for self-improvement and for improvement of the social, economic and political environment. These processes are extremely difficult to initiate. The experience of American social scientists in underdeveloped countries is probably relevant to this process and should be drawn upon.

The Cooperative Extension Service has over 50 years of experience in patiently developing and training leadership in rural communities. The range of issues that is relevant today is broader and more complex than those with which Extension has dealt most effectively—those connected with productive efficiency in farming. There appears to be no reason why Extension could not adapt itself to this wider range of issues and problems, although the adjustments required of Extension and of its chief support, the experiment station, would not be minor ones. The capacity in the USDA and the experiment stations for research in sociology and political science seems to have increased little since the days before World War II.

G. Income Transfers. National concern for the welfare of disadvantaged groups may be justified on humanitarian or on economic grounds. The humanitarian case has been made often and convincingly; the social conscience of the American people is sensitive enough to human misery that welfare programs for the disadvantaged can probably be justified on these grounds alone. This is particularly the case if one can assume that economic productivity is not eroded away by damage to the structure of human incentives. Listening carefully to the prophets of doom for 35 years has yielded little evidence on this erosion that has long-run and analytical rigor as well as statistical meaning.

The economic grounds are of more interest. Even after all the justifiable investments are made in the potentially employable rural population and in potentially renewable urban centers, there will remain many low-income households and communities with severe economic problems. To raise living standards to an acceptable minimum, income transfers will
undoubtedly be necessary. At least two kinds of economic justification could be offered.

(1) As long as society is not using its productive capacity fully, the opportunity cost of welfare payments to the aged and the handicapped, to the uneducated and the discouraged will be less than their budget costs. The social value of erstwhile subsistence farmers and migrant farm workers may be greater as consumers than as producers, as long as effective demand must be increased anyway.

(2) Income transfers may be justified to help break the vicious circle of poverty by which impoverished households produce second and third generations of disadvantaged and economically inefficient individuals. Research findings are beginning to show how "hereditary" these problems are. The costs to society of the resultant social disorganization are so large that an ounce of prevention may truly be worth several pounds of cure.

(3) Another possible justification may be offered tentatively. When the "Great Society" is reached, it may be necessary to redistribute leisure systematically because the work force will be driven by the Protestant work ethic (8) to offer more human services than can be employed. If this is probable, then it may be desirable not to invest in the productivity of labor force members who will be of marginal employability even after the investment. Their employment tenure may be very uncertain and the investment might better be made in an individual whose employment is likely to be of greater duration. In any case, we need to know a great deal more than we now do about the welfare effects of redistributing leisure.

Income transfers fly in the face of values held by many of the rural population. Schultz (45) points out that by their own choice farm people have acquired few of the major social services. To date, their acquisitions include only RFD, farm roads, electricity and telephones, the land-grant system, vocational agriculture training, and, more recently, extension of Old Age and Survivors' insurance benefits to farmers.

Farm people... are opposed to extending to hired farm labor the unemployment and related benefits available to nonfarm laborers. There is virtually no concern...about the social deprivation of migratory farm workers or about the social costs of cheap imported farm labor... Except for agricultural vocational training and for land-grant teaching, research and extension work, there is strong opposition to any and all federal aid to education. There is also objection to public measures for medical care and health facilities. (45, p. 175)

It appears that the enfranchised members of the rural population and their leaders will need more information to become convinced of the appropriateness of income transfers as one of the weapons to use against rural poverty.
3. Summary

Painting with a broad brush, we have examined in a qualitative way the effects of national agricultural programs on rural poverty. Only in the 1950's were programs established to deal directly and specifically with rural poverty, and these have been supported only at token or experimental levels. These efforts suffered seriously from the inadequacy of the basic information required for designing and carrying out poverty programs.

In order to judge the potential of the land-grant system to deal effectively with rural poverty we sketched in the outlines of a poverty program. These elements were included:

(1) Achieving full employment in the economy
(2) Agricultural reorganization
(3) Human resource development
(4) Social overhead capital formation
(5) Area planning and development
(6) Leadership development
(7) Income transfers

In each of these seven elements, information on the structural aspects of the problem area was judged to be inadequate and incomplete. Although action programs obviously need not mark time until long-run research can be completed, research attacks need to be launched on a broad front at once. Program elements should be designed so that research findings can be fed in as quickly as they can be made available. The magnitude of the research program and the eventual magnitude of the attack on rural poverty need to be brought into much better balance with the size and difficulty of the problem, and with the tremendous benefits to society that would accrue from real success.

With all of its different kinds of expertise in research, extension, instruction and in action programs, and with a century of experience behind it, the land-grant system could play a leading role in the attack on poverty. Several substantial adjustments may be needed before all the intellectual capacity available can be focused effectively upon the problem. Criticism of agricultural programs has made the system so self-conscious that it may need a clear signal from the public to put it wholeheartedly into the effort. On their part, public representatives may need from the system a much clearer sign of deep interest in the problem that has been forthcoming from land-grant leaders. If no commitment comes from these leaders, the needed competences can be found elsewhere in the society. They are so scattered that considerable effort would be required to focus and coordinate them, but it could be done. Some agencies in the Department of Health, Education and Welfare are eager to attack the problem, even though their experience with rigorous problem-oriented research is confined largely to the Public Health Service. The Department of the Interior has also indicated some interest, although the relevant research experience is even more limited. With the widespread interest in the poverty problem in the federal government there seems to be little likelihood that the USDA and the land-grant universities...
will be allowed to continue to play "dog-in-the-manger" to rural poverty.

Credit should be given to some of the agencies now working on the poverty problem--the Area Redevelopment Administration of the Department of Commerce, the Bureau of Labor Statistics of the Department of Labor, and the Economic Research Service of the Department of Agriculture. The research sponsored by these agencies has been relevant to the poverty problem and high in quality, even if the total volume has been small. So was the budget they received.
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THE EDUCATION OF LEADERS FOR A VIABLE DEMOCRACY

by Wallace E. Ogg

This presentation will attempt to establish the need in our times for research and education to supplement the traditional sources of information available to interested citizens. But first, to talk about education of leaders in democracy, a statement of democratic political faith is required. Democracy demands a faith in the inherent importance and dignity of the individual.

The highest morality for democracy is to preserve the opportunity for the individual to make decisions, to experience the consequences of those decisions and, given the consequences, to reconsider. Our society seeks to give him enough freedom to develop and cultivate his own personality, but limits his freedom by preventing him from denying this right to others. For practical realization of these ideals in group decisions for social action, representative government, with one vote per adult, is the essential tool.

With such a concept of democracy, a large, indifferent, apathetic mass of people, even a majority, may not seriously threaten democracy and its tool, representative government, so long as they do not rise up in a crisis and destroy the right to reconsider.

In practice, I hypothesize, this is just what we have in the United States. We have an indifferent majority who take very little interest in public decisions and policy so long as the apparent consequences are not too threatening. We have an interested minority who talk about public policy, who make tentative decisions and who actively support or oppose policy positions. Then there is a group of leaders (defined broadly to include informal lay leaders, formal organization leaders and administrative leaders in government) who formulate the specifics of policy and work closely with elected representatives in either developing and advocating or opposing a new policy, or in modifying and defending an old policy. Also, in practice, the elected representatives must, regardless of what the active leader group want and say, be sensitive and responsive to this interested public. The leaders may occasionally become insensitive

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to the interested public in their enthusiasm for or opposition to a specific policy, but the representatives cannot.

This concept of working democracy is very dynamic. The size of the indifferent apathetic group is variable depending on the intensity of the times and the consequences of former policy. If the times are threatening, the size of the indifferent apathetic group shrinks and the interested public grows. People who are members of the interested public on most issues may be leaders on specific issues. When policy crises pass, leaders on specific issues settle back to being part of the interested public.

Representative government, to be effective then, demands:

1. An informed interested citizenry who know in broad outline:
   a. What their goals for the general welfare are.
   b. What constitutes problems to attaining these goals.
   c. Some sense of the consequences of alternative policies.

2. Leaders who understand the above but who in addition are sufficiently well informed in detail on specific issues to develop realistic alternatives for policy to deal with identified problems.

3. A sufficiently firm consensus on the part of the majority to support action by leaders and representatives.

4. Elected representatives who are sensitive to the public consensus.

5. Leaders among elected representatives well enough informed on specific issues to help draft legislation and conduct the debate leading to compromise.

Democracy and representative government in the United States have been effective. They have involved considerable trial and error, but the errors have not been disastrous. The traditional tools on which we have relied for the enlightenment of the interested public, lay leaders and representatives are political debate, mass media news coverage and serious literature. For needed research we have depended on the imagination and creativity of physical and social scientists to anticipate the needed additional knowledge, with very little structuring between needs and research effort. This freedom for imagination and creativity should and will be preserved, but perhaps something more is needed.

In recent decades the gravity of the world situation and the leadership role of the United States have simultaneously increased. The world situation and United States foreign policy are closely related to the domestic scene. On the domestic scene, the rapid expansion of technology and the economic growth stemming from it have brought a
sharply increased rate of change. Adjustment to change creates tensions in individuals and communities. Policy responses may conflict with foreign policy. In this grave and dynamic environment, key political, editorial and educational leaders are questioning whether the traditional system for enlightening the interested public, leaders and elected representatives is completely adequate. Serious mistakes about the nature of problems or the consequences of policy might be disastrous. Perhaps a more deliberate structuring of research and educational efforts towards the critical public problem areas is needed.

Actually a substantial beginning is under way. In the land-grant system there is a long tradition of closely structuring research and educational programs to the felt needs of farmers for technological applications of science. To a much more limited extent the need for social science research and educational programs on public problems of farmers has been recognized and carried out. These beginnings lay a foundation for dealing with more general social problems, for a much wider audience and with more effective educational programs.

Administrators of our public educational institutions and especially of the land-grant system have been acknowledging this responsibility, which the institutions with their vast research and educational resources might accept. Policy statements to this effect have been issued frequently in the two decades since World War II. Exciting pilot efforts at team or task force research have demonstrated competence. Effective educational programs have been carried out on a state-wide basis in several states. Some of the programs have been sharply focused to meet the needs of particular leaders and some have been designed to reach up to 100,000 interested people through reading and small intense self-administered discussion groups. People who have been involved in these educational efforts express a new confidence that the individual can have an intelligent impact on policy formation in big democracy.

We have sketched a simplified model of the process of policy formation and the possible need for more carefully structured research and citizen education.

Perhaps these abstract ideas can be communicated more clearly by a recent real life example. The 1962 Agricultural Act as it applied to feed grains provides such an example. The voluntary feed grain program had been developed by administration leaders in 1960 with the idea that it could be stop-gap legislation pending a more permanent program for feed grain. The administration's more permanent program proposal was presented to the 1962 Congress. Its objectives included improved aggregate farm income, reduced government feed grain stocks and reduced treasury costs for the program. The new tool was to be compulsory crop land reduction. Administration leaders conducted an intense effort to get the program through Congress. They were strongly supported by the Farmers Union. The American Farm Bureau Federation strongly opposed the administration's program and pressed very hard for a voluntary crop
land retirement program involving whole farms. Under these circum-
stances, what did Congress do? After a long, painful fight, it passed
a program for which no leadership group had asked. It extended the feed
grain program with very little change.

Evidence from two sources indicates that what Congress passed was
the strong favorite of a sizable majority of feed grain farmers. Sam Lubbell,
the well-known political analyst, surveying farmers at the time the bill
was being considered, found farmers strongly favored a continuation of
the feed grain program. Early last year sociologists conducted a survey of
a statistically representative sample of Iowa farmers on the farm problem
and farm policy. These data are in the process of being processed. In
two sets of questions involving choices of program, the choice most
nearly resembling the present feed grain program received the support of
a strong majority.

Before there is too much complacency about the effective working of
this representative government and thus the infallibility of the decision
making in democracy, a second look at the sociological research is re-
quired. Whereas farmers were quite firm in favoring the present feed
grain program as their choice of the program alternatives offered them,
their understanding about the nature of the farm problem, as indicated by
their responses, is disturbing.

As already evidenced at this conference, there is a strong concensus
among agricultural economists that there is a substantial excess capacity
to produce crops, especially wheat and feed grains on American farms.
This has resulted because supply has grown faster than demand. An im-
portant factor accounting for the rapid growth of supply has been the rapid
improvement in technology. Total food supply has grown rapidly. But
most of the growth has been contributed by commercial farms. Thus,
since many small farms have inadequate land and equipment relative to
labor for modern mechanized farming, adjustment to better opportunities
will mean continued migration of workers from farming.

But these representative farmers in the sociological study ranked
"Too many farmers" at the bottom out of 12 choices and "Surplus produc-
tion due to application of too much technology" ninth as causes of the
farm problem. At the top was "High cost of farm production inputs--", "High profits taken by processors and distributors..." and "Union prac-
tices in industry which are continually raising wages which are in turn
reflected in rising costs of agricultural outputs" in that order. These
are familiar scapegoats of long standing among farmers. Obviously
there is some basis in fact for their top choices. These answers deal
with immediate "causes" not underlying relationships. They do not

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2Experiment Station Project 1493, George Beal and Joseph Bohlen.
indicate an understanding and acceptance of the world as it is. Such a level of enlightenment is discouraging to the prospect for policy consistent with long-run adjustments.

The strongly supported goal of growth in income per capita in the United States provides an excellent example of the need for research and an effective educational program. The interested nonfarm as well as farm leaders must understand the process of such economic growth if policy is to be relevant. Briefly sketched the process includes:

1. The applications of science to technology.

2. The new technology changes the economic environment. Often capital in the form of large machinery is substituted for labor. People have to learn new skills and change jobs.

3. If this adjustment takes place, both machines and human ingenuity are more effectively used, and output per person and income per person, rise.

This process is not easily understood, is highly rewarding to some and painful to others. Witness the closing of the Brooklyn Navy Yard.

As indicated above a good beginning has been made towards committing some of the research and educational resources of our public institutions to research sharply focused on social problems and effective educational programs for leaders and the interested public. It is important to recognize the awesome responsibility which this involves. Objectivity and integrity are imperative. Objectivity and the limited time and effort which will be allocated to learning by adults pose hard decisions. Which problems and issues should be studied? Which leaders are to be educated? Out of research findings what information should be presented? What will be the most effective educational technique?

In spite of these difficulties the Center for Agricultural and Economic Development and the Farm Policy Institute have actively encouraged participation in this kind of research and educational activities.
WHAT'S AHEAD AS A CONSEQUENCE OF LEGISLATIVE REAPPORTIONMENT--
IN TERMS OF BOTH THE POLITICAL AFTERMATH AND THE
EFFECT ON AGRICULTURAL POLICY?

by Charles Press

Apportionment of legislators is an issue on which our federal convention almost floundered in the summer of 1787. Now over 175 years later it again becomes controversial as we hear talk of federal plans for the whole of the federal system to be accomplished by constitutional edict. My assignment is to examine the current struggle and trace as well as I am able, its effects for agriculture.

I want to begin by reviewing the history of the current apportionment struggle, then say a word about the moral arguments on each side, next examine the probability of success for those attempting to reverse the one man-one vote trend, and finally discuss the long run effects for agricultural interests and welfare. First, the historical evolution of the apportionment fight.

The Historical Background

The early English kings based representation in parliament on taxable wealth because they invented parliament to raise taxes. The American colonies seem to have followed along in this pattern. But the one man-one vote ideas of the seventeenth century Levelers did also affect early American thinking as is evidenced by the requirements laid down in the Northwest Ordinance of 1787. Though stated vaguely, these ideas were generally interpreted to mean that both houses of western state legislatures should be based on population alone. Through the nineteenth century most new states came into the union with representation by population embedded in their constitutions, and some older states, though not all by any means, changed their constitutions this way. Inspired by the populism of the frontier, the movement in theory was away from property qualifications and representation of units to representation of population.

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But when it came to drawing district lines, practical matters triumphed over abstract theory: legislators districted for personal and political advantage. The gerrymander has an illustrious parent. It is named after a patriot Elbridge Gerry who was one of the few to sign the Articles of Confederation and Declaration of Independence, who attended the Constitutional Convention as a delegate, was a representative to the First Congress, governor of Massachusetts and died in office as vice president to James Madison. The rules followed are: protect seated legislators where possible and protect the party interest.

But representative government can easily survive such minor jockeying for advantage by officeholders. The practice only took on significance when large-scale shifts of population occurred in the late nineteenth century and after. The national House of Representatives for a time dodged the problem by increasing its size so seated legislators would be undisturbed. But by 1920 it ran out of floor space and so skipped an apportionment, contrary to the explicit instructions of Article I, section 2.

State legislatures also squirmed to avoid constitutional clauses. Several things happened. In 1930 the national Congress faced up to constitutional requirements but softened their effect somewhat. Dropped from the earlier act were the requirements for compactness and contiguity. No one raised embarrassing questions of population equality within states when seating took place at the beginning of the session. Heartbreak was generally avoided by gerrymandering Congressional districts at the state legislative level. A recent analysis indicates that in the twentieth century, four-fifths of the variation from representation by population for national House seats is traceable to gerrymandering in the districting, and only a minor bit from the apportionment formula itself.

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2 See the discussion of all Kansas redistricting acts in Thomas Page, "Legislative Apportionment in Kansas," University of Kansas Publications, Lawrence, 1952. Chapter 3, pp. 29-78. This monograph is unusual in its sophisticated approach to the subject. For a study of a recent legislature in the process of redistricting, see Gilbert Steiner and Samuel Gove, "Legislative Politics in Illinois," Urbana: University of Illinois Press, Urbana, 1960, Chapter 4, pp. 84-117.

The states generally took a different route. Some changed constitutions away from the population base. Every twentieth century change proposed by legislators was of this kind. In other states constitutional provisions were disregarded. State courts sometimes overruled blatant gerrymanders but hesitated to issue orders that constitutional provisions be followed. This tendency was confirmed for most in Colegrove v Green (1946). The United States Supreme Court told a professor of political science that apportionment of Illinois congressional districts was a political question; in Justice Frankfurter's expressive phrase a "political thicket" the court would do well to avoid. But the decision was peculiar in a number of respects. There was no sitting chief justice and one of the court was at the Nuremberg trials in Europe. Even worse, in the 4-3 decision Justice Rutledge sided with the majority in agreeing no relief should then be given, but with the three minority members that the case was justiciable. Nevertheless most persons assumed that the Court had said the question of apportionment was not a question to be handled by the judiciary.

But the drift from population standards continued at an even more rapid rate as suburbs grew and central cities lost population. And cases kept appearing in the courts. At this point, after the 1960 census, Baker v Carr was accepted and ruled on by the U.S. Supreme Court. The Tennessee Constitution of 1870 required reapportionment of both houses every ten years. None had occurred since 1901. In March 1962 the Supreme Court held by 6 to 2 that the question was justiciable and remanded the case back to the lower federal courts. All but Frankfurter and Warren had something to say in separate opinions.

At this point the dam burst. If Colegrove v Green had been misinterpreted as saying more than it did, now the justices were second guessed on Baker v Carr. Within six months there were 70 new cases in 33 states; within two years apportionment action had occurred in 42 states. In these two years it is fair to say a greater movement was made to approaching the population standard of one man-one vote than in the previous 60 years. And the Supreme Court followed up with a series of decisions that hammered home the trend. The Georgia county unit system was declared unconstitutional for statewide elections as contrary to the equal protection clause of the Fourteenth Amendment. (Gray v Sanders.) In February 1964, in Wesberry v Sanders, the court ruled that on the basis of Article I, Section 2, Congressional districts within states must be relatively equal in population. Then in June 1964,

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5 David-Eisenberg, op. cit.
using the equal protection clause of the Fourteenth Amendment, the court ruled in Reynolds v Sims that both houses of state legislatures must be apportioned on a population basis. The division was 6 to 3.

**Moral Arguments**

This is perhaps a good place to pause and ask what the moral questions were on each side of this fight. On the one man-one vote side, the battle for apportionment was viewed as a continuation of the struggle against special privilege that began when King John signed the Magna Charta, or even perhaps before that, and is continued into modern times in fights over such issues as civil rights or woman suffrage.

The other side of the argument is more complex. Most variants go back to notions expressed perhaps best by John Calhoun in his theory of concurrent majority. Decisions, he argued, should be made only when all important political interests agree. Defining the significant political interests leads to variations. In some cases special moral qualities are claimed for such groups as Jefferson did for rural as opposed to urban citizens. In more sophisticated arguments, a plea is made for representation by communities. One student suggests a combination of representation by population, by communities which he defines by local legal boundaries of counties, cities and villages and of the top 20 functional groupings according to the latest census (farmers, lawyers and I was about to say professors, but they don't show on any method of rating).

But while moral arguments are worth considering, there is a certain artificial quality in their use in current debate. Only a relatively few on each side are really concerned with them. The rest are concerned with advantage. Most of those favoring one man-one vote will gain by it. Those who now listen with favor to theories of consensual democracy are open to question about past activities. (Why, they might be reasonably asked, was one house never set aside for cities when they were the minority? How can perpetual freezing of districts, even when they are counties, claim to represent communities that grow and change over time?)

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I should like to interject my own position here. More important than numerical equality is timeliness. By timeliness I mean a willingness in government to face up to the problems currently agitating important segments of the citizenry. Today such problems are primarily urban, or to be specific, metropolitan. State governments from World War I on have been viewed by many of their citizens as somewhat less than timely. Yet the U.S. Senate, despite its straying much farther than many states from a one man-one vote norm, is not so viewed by most persons. This is because, I suspect, most Senators have urban constituents in sizeable numbers even when from sparsely populated states. The question of timeliness is one to which I should like to return after first exploring the probabilities that the one man-one vote trend may be reversed.

Prospects for Reversing One Man-One Vote

Little direct help can be expected from the courts. Almost immediately after declaring both houses of state legislatures must be based on population, the Supreme Court, in *Lucas v Colorado General Assembly*, overruled an amendment to the Colorado constitution that placed one house on other than a population basis. Even a majority of a state electorate, they argued, can not deprive citizens of their constitutional liberties.

Both state and federal courts have also dealt with more severity with foot-dragging. In some states they have apportioned legislatures or ordered elections at large. In others they stated that until apportionment was accomplished they would only honor as legal routine, housekeeping actions. In Georgia a federal court prevented the proposal of a new constitution. On October 28, 1964 Chief Justice Warren in effect ordered the lower federal courts to move ahead on Virginai apportioning by refusing to grant a stay until 1968 when incumbent terms would be finished.

Attempts also have been made to reverse one man-one vote through amendment of the federal constitution. Three amendments proposed by the Sixteenth General Assembly of the States affiliated with the Council of State Governments struck at what was considered Supreme Court interference with state matters including apportionment. Few states have adopted these proposals. At the same time a second constitutional convention was proposed. Sixteen of the required 34 state legislatures have petitioned Congress to call such a body. More may act in early 1965, but the outlook is not too hopeful. It is not clear that Congress must call such a body, particularly on the petition of state legislatures that at the time of acting were not always apportioned according to the formula then the law of the land. The proposal also smacks of desperation since to call such a convention in the view of many is to open a pandora's box. Since most regard our system of government a fairly
successful one, given the history of mankind's follies, there is a tendency to avoid unpredictable change.

Thus more attention is being given to a constitutional amendment proposal aimed specifically at the problem of apportionment. The Seventeenth General Assembly of the States endorsed this, with some dissents, and the National Grange and American Farm Bureau, at about the same time in late autumn of 1964, endorsed it. It would permit one house of the state legislature to be apportioned on some basis other than population if the voters in an election so decided. Even this considerably more modest proposal is in for rough sledding.

The last Congress debated a proposal to delay apportionment for two years, and while this passed the House, it was killed in the Senate. An amendment to the Foreign Aid Bill proposed by Senator Dirkson to accomplish a similar result was killed by filibuster. Finally a mild resolution to urge the Supreme Court not to take undue haste passed the Senate. Now Senator Dirkson has reintroduced the amendment in the new Congress. It has the support of every Republican Senator but one, about 18 southern Democrats and a scattering of Northern Democrats. The most optimistic proponents see it as still short ten or more votes from the required two-thirds for Constitutional amendments. The amendment still leaves some questions unanswered: can a state reconsider its adoption of an apportionment of one house based on factors other than population without having to get that house to agree to amend the state constitution? Can the basis other than population include apportionment on the basis of race?

In the meantime, state legislators have been experimenting with methods of softening and sometimes partially avoiding the effects of the one man-one vote principle. Some apportionments have been ruled by courts as inadequate as both legislators and courts experiment to find out how close apportionment must be to the population standard. The method of giving weighted votes to incumbent legislators so that they can remain seated as is but cast votes according to the population of their districts has been thrown out by courts in Washington state and New Mexico. An ingenious method to test the court's acceptance of various methods was completed by the lame duck New York legislature in late 1964. Each of four apportionment acts was an amendment of the previous one. Thus if number 4 were unconstitutional, number 3 would be in effect, etc. These included provisions for apportionment on the basis of those who actually vote rather than population alone.

Thus the current trend in most states has been to find out what the acceptable standard of deviation from population might be, that is "how much?" and for the current majority to gerrymander in their own interest. Those states most resistant to any change are a half dozen or so in the
south. But in a good many of the states, enough shaking up has already occurred, combined with the results of the 1964 elections, to suggest that things will never be quite the same again. Important leaders of the fight against one man-one vote have been defeated while new proponents of the theory have been elected. Perhaps as important as any other fact is that in many states the balance of power within party organizations has shifted to those who would pay considerable attention to metropolitan problems.

Whether an absolute standard of population is carried out with mathematical precision in every state or not, rural areas should face up to the fact that as a practical matter they are not going to wield as much influence with legislative bodies as they did in the past. This even includes local government bodies such as county boards of supervisors, which are under challenge in such states as California, Wisconsin and Michigan. Most rural residents probably regard this trend as inevitable, given the current population trends. Some, given their Populist past, fight it only reluctantly on moral grounds. Even if the Constitutional amendment allowing one house on a non-population basis passes, which is unlikely at least before 1968 (if it passes at all), state legislatures will have changed markedly from what they were in the early 1960's.

The Effects of One Man-One Vote

The next point that I plan to examine is that of the likely effects of one man-one vote trend. But first it is important to ask who the beneficiaries in actual representatives were of the system as it operated before Baker v Carr. Of course the agricultural interests gained, but even more so did the residents of small cities and villages. Agricultural areas frequently are represented by the small town lawyer, banker or insurance man, and even urbanized areas choose such a representative if he has worked his way up through county government. It is the small town, already having felt the fierce impact of big city competition in business, that will suffer most. Agriculture will lose some influence, but its interests can never become wholly irrelevant in any society.

It is also important to examine, simply on a representation basis, who the major beneficiaries will be. These of course will be the metropolitan areas, but they are not as cohesive as some rural persons imagine. Few differences politically are as sharp as those between low and upper income areas within a large city or between large parts of the central city and some of its suburbs. 8

It is indeed these suburbs that gain most in the long run since the trend of decline in population in central cities, noted dramatically in many areas after the 1960 census, is likely to continue. Even more important, in very few states (according to the most careful study I know of) will two or three population centers by themselves be able to dominate a house apportioned on population. Of states with more than 15 counties, three or less counties have a numerical majority in eight states; if all states are considered, three or less counties have a numerical majority in 15 states. In only five states do central city residents in the three largest cities (excluding suburbanites) have more than 40 percent of the population. These are Hawaii, Nevada, Rhode Island, New York and Arizona. But while dominance of a few areas is not immediately a problem in most states, a general increase that will give urbanites a clearcut majority in many states is a problem.

The impact in representational changes would of course vary. The Congressional Quarterly estimates that in the national House there would be a shift of 27 seats from rural areas, with seven going to central city districts and 20 to suburban areas. In most states the shift would be to a division of representation between central cities, suburbs and rural areas, with none in the majority.

The above analysis implicitly assumes that every representative usually votes his constituency on important issues. There is some tendency in this direction, but it is not as great as one would suppose. On specific issues party membership is generally more important than constituency as a predictor of voting. In state after state rural members have voted for urban programs, perhaps reluctantly or only in part at the urging of party leaders and candidates wishing to make a party record for a statewide election. There have also been urban representatives who voted a good deal like rural representatives, either on the basis of party program or because they won in an upset election and are more concerned with voting their true feelings than getting re-elected. Our studies show that only on a few issues is there a sharp split on roll call votes: on prohibition, civil rights in the south and of course on apportionment.


The record is less clear on labor and welfare measures, though there is some tendency for a split presently. Occasionally one can also find clear indications that state-shared funds have especially benefited rural areas, though in some of these cases a good argument can be made that proceeds should be distributed according to need and not according to source of funds. But whereas in Florida, the lucrative race track proceeds have been distributed equally among counties, urbanites can argue that something less than a careful judgment as to need determined the formula.

But some students have made studies that examine state policies on other than a roll call basis, and they argue that rural influence on policy making is more pervasive than shows up on roll call votes. For one thing, issues are often decided in committee of the whole or legislative party caucus and without formal roll call votes. The record vote may be considerably different than the informal votes. A second point is that rural legislators have often been able to gain more than average influence through holding leadership positions. From my own observation of the Michigan Legislature during the period of crisis in the 1958 and 1959 sessions, I should say this influence was of greater importance than would be indicated by roll call votes, which were as a rule strictly party line votes.

The influence I am talking about is what I have previously referred to as timeliness. I am referring to the kinds of political ideas that prevail in a legislative body. In making policy, policy makers need a kind of short hand philosophy which they can use to make judgments. Interest alone doesn't explain political coalitions. Rather a general viewpoint binds together groups of legislators and politicians in a common cause. I think three important facts about these ideas need to be remembered:

12 See the review of the literature in The Advisory Commission on Intergovernmental Relations, op. cit., pp. 23-29.


1. They spring in part from experience. Political ideas that are widespread are not wholly the result of abstract theory but of groupings within society struggling to get a viewpoint that will help them somehow control their environment.

2. In America I think these sets of ideas have as well been attempts to restate our tradition, that is the ideals of freedom that flow through our history from Thomas Jefferson on. In other words, I think groupings in our society meet with new experiences, and they attempt to restate American ideals in a way that helps them control their environmental.

3. Out of the many groupings that have unique experiences some must be chosen that are widespread enough to build a political coalition on them. This is the job taken over by political parties.

The experience of one's trade no doubt leads its members to unique ideas, some of which are politically relevant. But these are not widespread enough as a rule to serve as a general set of political ideas on which one can conduct campaigns but rather are better furthered by specialized interest groups. The same is true of the ideas of such subgroupings derived from their unique experiences as Negroes, white southerners, or even women.

The subgrouping which is widespread enough to use in political campaigns but yet narrow enough to be less than an overwhelming majority, is that related to place of residence. Place of residence as used here relates to the density of population that occurs where one lives and affects what sociologists call his life style.

I believe that as the experience of the majority of Americans has changed, new ideas have emerged and political parties have built new coalitions on these ideas. And with Samuel Lubell, I would argue that once a party becomes associated with the set of ideas shaped by the new majority it remains almost exclusively in power until a new set of ideas emerge.¹⁶

Look at the history of presidential elections and note how seldom the Whigs won after the Jacksonians and consolidated their power with the emergence of the frontier majority, or how often Democrats won after Republicans had fashioned a new coalition based on the ideas growing out of small town experience, or how often Republicans have won since the Roosevelt New Deal coalition built on the ideas of large cities emerged. I should like to review briefly the ideas that emerged from these major political coalitions and then return to the notion of timeliness.

I view the Jacksonian coalition of 1828 as an attempt to deal with that frontiersman considered an emerging aristocracy. The political ideas were those that made sense in a frontier environment, though they do not in the opinion of many make as much sense in an urbanized setting. They were that ballots should belong with everyone elected since every one in the community could make a fair judgment of everyone else. They included the patronage system as opposed to long tenure in government jobs since the common man on the frontier was a jack of all trades who could handle any or most of the simple government jobs then in existence. They included short terms of office and laws against succession, particularly by treasurers. All of these would smash an incipient aristocracy of eastern officeholders.

When after the civil war a new majority existed in America, that of residents of small towns, a new set of ideas was devised in terms of that experience. The gift the small towns gave America was to make it a great nation. Small town boys from Henry Ford on, through ingenuity, hard work and thrift made the land blossom. The idealized version of the process is of course in the Horatio Alger stories, but the reality of their accomplishments is too clear to deny. The political implications of their ideas were that the small town boy should not be hindered by government regulations or by taxation that would deplete his working capital. Also related was the belief that the morally upright would in the end win out and therefore there was a reluctance to have the government interfere by handing out doles. This is still the viewpoint derived from experience of many small businessmen.

However, farmers, at least in the nineteenth century, parted company with these ideas as the result of drought and depression in world markets. In their experience the moral did not always win out. But more important was the parting that occurred when a new majority emerged in the big cities. Their experience was heightened by a depression. To them achievement of the American dream was to come through government aid. Government must regulate traffic or building or sanitation where population was densely concentrated. Impersonality made the social controls of the small town ineffective in situations involving working conditions, the accuracy of the butcher’s scales, or the ingredients of products purchased. To the crowded residents of cities, such experiences suggested government aid and regulation.

The majority has shifted once more and I think the new mood is the most important one in judging the long term effects of apportionment. The experience of suburban living has fashioned a low pressure political creed, one that prefers to avoid conflict and controversy in politics, and one that has an inordinate trust in the technical expert. At an earlier time the War on Poverty program, for example, would have been viewed as a handout to the victims of society. The new mood looks at it more as the professional social worker would. An other view stressed the moral responsibility for
overdrinking, the new set of ideas stresses that this is a disease, renames it alcoholism, and recommends psychiatric treatment. There are two points to note about the suburban experience: the suburbanite expects and wants large-scale organization to stay, but at the same time he is afraid individuality will get lost in the process.

These are what I would argue have been the main sets of politically relevant ideas. Note, that all can be present in society at the same time. Note secondly, that I am not necessarily arguing that the ideas of any one set are right or wrong but only that they seemed to the people involved to help them restate democratic ideas under new conditions. Finally, by timeliness I mean that the set of political ideas that dominates the governmental unit harmonizes with those fashioned by the then current majority. The United States Senate has I believe been generally looked up to by the citizens because most view it as timely—it discusses what they consider important problems and deals with these problems in ways that to them seem proper. This is true even though they are grossly disproportioned on a population basis. It springs from the fact that many Senators from rural states have urban areas that must be considered.

State legislatures, on the contrary, have been viewed as not timely and in part as a result have been deliberately bypassed by the New Deal majority when this was possible. But even they have not remained unaffected by the urban viewpoint—only less affected. Because even in the legislatures most dominated by small town political viewpoints, the newer urban viewpoints set the direction of policy. The debate was always in terms of "how much." Attempts to turn back to the previous majority viewpoint if carried into statewide elections, frequently resulted in political disaster.

The Effect of the Trend on Agriculture

What then can we say about agriculture, given the emerging political ideas and apportionment that is likely to give such ideas wide influence. In terms of benefits, less unless the experts think such programs justified. But there will be areas where they do consider such benefits justified: In research and in eliminating rural poverty. Thus I would anticipate increasing efforts to reduce subsidy payments, especially to prosperous farmers, an attempt to rationalize marketing conditions so that efficient production will pay off, and finally a reduction in the number of farms with larger farming operations encouraged. This means the direction will be one of de-emphasizing farming as a way of life and emphasizing agriculture as a business.

On the state level I would suppose the trend which began symbolically when the agricultural college was changed into a state university, will continue. Research or extension programs will not be abandoned simply because rural persons no longer control numerical majorities in both houses.
of state legislatures. But such programs will no longer get preferential
treatment over what urbanites consider legitimate needs. One of the
important issues I would argue will be property taxation programs that
are devised where rural and suburban areas overlap (particularly where
new schools are built). Another will be the problems of zoning in the tran-
sitional period before suburban settlement is dense enough to sell out agricul-
tural land but at the same time farming is more difficult and somewhat
less profitable. These are important battles that agricultural interests
might well lose to their serious disadvantage.

If my analysis is correct, the burden of it seems to be that of the fam-
ous prayer of the theologian Reinhold Niebuhr, "Lord give me that courage
to change what can be changed, the patience to accept what can not be,
and the wisdom to know the difference."

Living with government more dominated by urban and suburban resi-
dents' viewpoints will not be all that one might desire. But given present
day conditions, it is likely to come about. The job then is to find a way
that agriculture can profitably come to terms with it.
THE IMPACT OF FUTURE WORLD SUPPLY AND DEMAND PROSPECTS ON U.S. AGRICULTURAL TRADE

by Lester R. Brown

It used to be, as someone recently remarked, that 25 years was not a very long time. Nothing much happened in 25 years. But today 25 years is a very long time. For those of us who spend much of our efforts trying to anticipate what lies ahead, even 10 years seems a long time.

Although the topic assigned is future-oriented, much of this paper will be devoted to reviewing the past. Before making any judgments concerning the future we must look to the past, at where we have been and where we are now. The early part of this paper identifies some of the principal forces bringing about changes in the world market for farm products. The latter part focuses on U.S. export prospects for individual commodities.

U.S. Agricultural Exports in Retrospect

Throughout most of U.S. history, three commodities—wheat, cotton and tobacco—dominated our agricultural exports. During most of the past century either wheat or cotton was the leading export item. Recently, however, wheat has moved well out in front, reflecting more than anything else the growing food shortages in Asia. Since the second world war, soybeans and feed grains have grown in importance so that we now have five major export commodities.

In the usual pattern of development the role of agriculture declines as an economy becomes more industrialized. Thus agricultural exports—accounting for about three-fourths of total exports at the time of the Civil War—declined until they reached a recent low of 18 percent in 1953. Since then, however, this long term trend has been reversed. In the early 1960's the agricultural share of total exports reached 24 percent; preliminary data for 1964 show a further gain to 25 percent. There is good reason to believe that this figure will climb still higher in the years ahead.

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U.S. Agricultural Exports in Perspective

The United States is today the leading exporter of agricultural products, completely dominating trade in temperate zone commodities. It is the principal source of such major commodities as wheat, corn, cotton, tobacco and soybeans.

Our exports of farm products exceed those of Canada, Australia and Argentina combined. In most years, exports of farm products under the Food for Peace program alone exceed the total agricultural exports of any of the other major exporting countries.

U.S. exports of farm products, averaging just over 4 billion dollars per year in the late 1950's and 5 billion dollars per year in the early 1960's, have exceeded 6 billion dollars in each of the last 2 years. The output of one acre out of every four now moves into export. In recent years two-thirds of the wheat crop, almost two-thirds of the rice crop, close to one-half of the soybean crop, one-third of the cotton crop and about one-fourth of the tobacco crop has moved abroad. These facts indicate a new era in agricultural trade. The broad outlines of this new era are evident in the shifting pattern of world grain trade.

The Shifting Pattern of World Grain Trade

Grains, providing a major share of man's food energy supply and occupying more than 70 percent of the world's harvested cropland, are a convenient commodity with which to measure shifts in world food trade.

Trade Trends by Geographic Regions

From the beginning of modern trade until about 1940 the regional pattern of world grain trade was rather constant. Western Europe was the big importing region. Other regions were net exporters. In the late 1930's North America exported 5 million tons of grain per year, Latin America 9 million tons and Eastern Europe (including the Soviet Union) 5 million tons. The other three regions Asia--Africa, and Oceania (Australia and New Zealand)--exported smaller quantities. The situation, then, was this: one importing region and six exporting regions.

Since World War II, however, the world grain trade pattern has changed dramatically. The only region maintaining essentially its prewar position is Western Europe. Its net grain imports, averaging 23 million tons in recent years, have changed little from the 24 million ton yearly average in the 1934-38 period.

North America and Oceania are now the only consistent net exporters. Asia and Africa have joined Western Europe as permanent net importing regions. Eastern Europe and Latin America appear to be losing
their surplus producing capacity, both having been net importers in some recent years.

Trade Trends by Economic Regions

The world now comprises two major economic groupings: the developed and the less developed. Asia, Africa and Latin America may be considered the less developed world. The other four regions mentioned above comprise the developed world.

Prior to World War II the less developed world exported to the developed world 11 million tons of grain per year. After World War II this flow was reversed. The flow from the developed to the less developed world was 4 million tons annually in the 1948-52 period, 15 million tons in the 1957-60 period, 21 million tons in 1961, and according to preliminary estimates, 25 million tons in 1964. According to this indicator, the less developed world is losing the capacity to feed itself. A growing share of each year's population increment is being sustained by food shipments from the developed world, primarily Food for Peace shipments from North America.

The Growing Demand for Food

What is it that creates additional demand for food? There are two important sources. One, of course, is population growth. The other is rising per capita incomes. These two forces are distinctly different. One is a demographic force, the other an economic force. Both are increasing faster than ever before in history.

Population Growth and the Demand for Food

Until the outbreak of World War II, world population had never increased more than 1 percent per year. Since then the rate of increase has accelerated sharply. Today it is increasing 2 percent per year. Even without any further gain in per capita incomes, world food needs will rise 2 percent annually.

Population growth rates vary widely between countries. The populations of several countries in both Eastern Europe and Western Europe are growing at less than 1 percent per year. At this rate, these countries will require the better part of a century to double their populations. Some less developed countries such as Brazil are expanding at more than 3 percent per year. The number of people in these countries will double within a generation.

The relative importance of the two principal demand-increasing forces varies widely between countries. In the less developed countries where population is growing 2-3 percent per year or more, and where per capita incomes are rising slowly, if at all, population growth is the major demand-increasing force.
Rising Incomes and the Demand for Food

Per capita income levels also vary widely between countries. In subsistence-type economies such as India or Pakistan they may average only $60 to $70 per year. In the more advanced economies of the industrial West, they may range up to $3,000. Rates of increase in per capita income also vary widely between countries. Rates of gain are very high in several West European countries and Japan. The combination of high rates of overall economic growth and low rates of population growth in these countries over the past several years has resulted in extraordinary gains in per capita income. In Japan, the country with the most rapid rate of economic growth, income per person is doubling each decade.

As incomes rise, consumption patterns follow certain rather predictable changes. At the lower income levels, diets consist largely of starchy foods. Consumption of livestock products and other costly foodstuffs is low, often negligible. Thus in Asia, grain products, roots and tubers, account for three-fourths of total caloric intake. Livestock products supply only 5 percent. In North America, where incomes are quite high, starchy foods account for less than one-fourth of total caloric intake; livestock products provide more than 30 percent. The consumption of fats and oils also rises steadily with income levels.

One way of relating rising incomes and the resulting additional demand with agricultural resource requirements is to measure the quality of diet in terms of grain. About 1 ton of grain per person per year is required to maintain the high quality, high protein diets of North America. Per capita grain consumption in the less developed regions such as Asia is only 450 pounds per year. The difference between these two economies is the difference between one which can afford to convert large quantities of grain into meat, milk and eggs, and one which requires nearly all available grain for direct human consumption. With development we can expect per capita grain requirements in the low income areas to gradually rise from the current 450 pounds to much higher levels, gradually moving toward North American levels as incomes permit.

The Less Developed Regions--Growing Food Shortages?

We noted earlier that the less developed world, exporting an average of 11 million metric tons of grain per year to the developed world prior to World War II, has become a net importer, importing an estimated 25 million tons in 1964. This net shift of 36 million tons approximately the total grain production of Canada and Australia combined.
Why Has this Vast Deficit Developed?

The rapidly growing import deficit is readily explained. In traditional societies food output is expanded along with population by simply expanding the area under cultivation. But now relatively little new land can readily be brought under cultivation in many densely populated countries. Additional food output must come largely from raising yield per acre. Herein lies the problem, for underdeveloped economies, almost by definition, are not prepared to do this. Raising yields is far more difficult than merely moving to new land.

Historical evidence indicates that there are certain preconditions for generating and sustaining a steadily rising trend in yields per acre. One of these preconditions appears to be a reasonably high level of literacy. It is difficult to imagine a largely illiterate society, as in India or Indonesia, generating and sustaining a trend of rapidly rising yields such as those currently existing in the United States, Japan or some of the countries in Western Europe. In many countries, the level of literacy, though rising, is still quite low—especially in rural areas. Only a small fraction of the rural population is literate in such countries as India, Indonesia, Pakistan and Egypt.

A minimal level of literacy is but one of many preconditions. There may be a minimum level of per capita income, below which there is not enough difference between output levels and subsistence levels to finance the capital inputs needed to raise yields. Commercialization of agriculture may have to develop to a certain minimum extent before there are enough sales of farm products to permit the purchase of yield-raising capital inputs. The nonagricultural sector of the economy must reach a certain size and level of development and sophistication before it can provide capital inputs, such as chemical fertilizers and pesticides and the services needed in agriculture to increase per acre yields. Note that these preconditions were not needed so long as food output was expanded in the traditional manner, i.e., by simply expanding the area under cultivation. The nature of these preconditions shows why, historically, yield takeoffs have been confined to the more advanced economies.

In summary, rapid population growth in the less-developed regions, coming at a time when little new land is left, is forcing the process of economic development, which required centuries in the Western World, to be telescoped into a period of a few decades. It does not seem likely that the disturbing tendency for food output per person to trend downward in several major less developed countries can easily be reversed.
Illustrating the Problem

It is too early yet to assess the impact of the current and projected population growth rates on the food economies of the less-developed regions. One of the most effective ways for us to grasp the magnitude of the problem is to interchange the projected population increases of the developed and less-developed regions.

Consider these facts. The agricultural land resources of the two economic regions, measured in terms of cropland, are not too different. The 1960 population of the developed world was less than 0.9 billion; that of the less-developed world, more than 2 billion. The projected increase between 1960 and 2000 for the developed world, according to the United Nations medium level projections, is 0.4 billion and that for the less-developed world, nearly 3 billion.

Now let us interchange the projected growth in population of the two regions. The developed world would then absorb the 3 billion and the less-developed world, the 0.4 billion. The United States, with about one-fourth of the agricultural land resources of the developed world, could expect to accommodate one-fourth of the 3 billion total (750 million). This amounts to an addition of about 190 million per decade—roughly the equivalent of our current population every 10 years.

What would happen to our food consumption levels under these circumstances? But we are much better prepared to absorb population increases of this magnitude than are the less developed regions. We have the capital, the agricultural and industrial technology, and the high levels of literacy and education. And we have a much more favorable land-man ratio to begin with.

Unfortunately, the vast increases in population are projected for the regions least prepared to feed them. The imbalances between population and food in the less developed regions are certain to grow.

Western Europe—Uncertain Trends

The trends in Europe are much less clear. The big question centers around the agricultural negotiations with the European Economic Community— the main negotiating focus of the Kennedy Round.

If the rates of economic growth prevailing in Western Europe in recent years continue, the demand for agricultural products will rise rapidly. How much of this additional demand will be translated into import needs will be heavily influenced by the outcome of the negotiations now under way.
Japan--Our First Billion Dollar Market?

Japan is today our leading overseas market, taking nearly $750 million worth of farm products in the year just ended. Because of its prominence as a market for U.S. farm products it deserves some special attention.

Japan's population growth rate, over the past decade, has been less than 1 percent per year, among the lowest in the world. But Japan now has 95 million people--half the population of the United States--compressed into an area smaller than California. As this population built up, mostly within the last century or so, the Japanese were forced to look to the sea for their animal protein, using their scarce land resources to produce starchy food staples, mostly rice. Thus the Japanese developed and became accustomed to a very plain diet, consisting largely of fish and rice.

In recent years, however, as Japan's phenomenal economic growth rate of 7-8 percent per year has permitted per capita incomes to double within a decade, the Japanese have begun to develop a taste for meat, milk, eggs and other livestock products. But with nearly all the cropland devoted to the production of food crops such as rice, the Japanese must either import these livestock products or the feed grains needed to produce them domestically. Feed grain imports, averaging 2-3 million metric tons per year in recent years, are projected to reach 10 million tons by 1975.

A continuation of the explosive rate of increase in per capita income prevailing over the past several years will require ever growing quantities of imported food. It now appears to be only a matter of time until Japan becomes our first billion dollar market for farm products.

The Outlook for U.S. Farm Exports

Proceeding from this background, what is the outlook for U.S. farm exports?

Wheat Export Prospects

The United States is today the leading world exporter of wheat, supplying some 40 percent of all the wheat entering the world market. With exports increasing, we have, within the past five years, made the transition from producing primarily for the domestic market to producing primarily for the export market. During the past two years, two-thirds of our wheat crop has moved abroad, mostly under the Food for Peace program.

The past quarter century has witnessed some pronounced changes in the geographical destination of our wheat exports. Up until World War II, Europe took most of our wheat. In recent years the less developed regions, especially Asia, have taken the bulk of our exports. Thus far this fiscal year, the less developed regions, in addition to taking the usual large volume of Public Law 480 shipments, are taking a major share of our commercial exports as well.
Japan, importing better than 2 million tons of wheat in recent years, is expected to increase its imports to well above 3 million tons by 1970. In Western Europe where both per capita and aggregate consumption of wheat for food is declining as incomes rise, and where output is trending steadily upward, dependence on imported wheat is certain to decline. More and more of the indigenously produced wheat will be used for feeding purposes.

The situation in several of the less developed tropical countries, however, is quite different. Per capita consumption of wheat, a preferred staple in nearly all less developed countries, is rising. Population growth rates of 2 to 3 percent per year, coupled with rising per capita consumption, is resulting in an impressive rate of gain in the aggregate demand for wheat.

In Brazil, where demand is growing and production is declining, the need for imported wheat has grown rapidly. Brazil now imports close to 3 million tons of wheat per year—half as much as China and two-thirds as much as India. About half of this wheat is imported commercially and about half under the Food for Peace program. Brazil now produces only one-tenth of its annual wheat requirements.

Nigeria, the most populous country in Africa, has had a similar lack of success in expanding wheat production. Although its imports of wheat are rather small compared with Brazil's, they are growing steadily. The Philippines, producing less than 1 percent of its wheat requirements and now importing half a million tons per year, has doubled its imports in the past few years. Further increases in imports are projected. Indonesia, another tropical country, also produces little or no wheat. Its rising internal demand can be met only through imports.

The above countries were singled out because they represent a group of countries where wheat consumption is rising rapidly but which produce little of their wheat requirements. Another group, including such countries as India, Pakistan and Egypt, have growing wheat import needs, not because they do not or cannot produce wheat, but because they cannot expand production fast enough to keep up with the rapidly growing demand. U.S. exports of wheat, more than any other commodity, will reflect the growing imbalances between food needs and food production in the less developed regions.

Rice Export Prospects

Rice, along with soybeans and grain sorghums, is a relatively new U.S. agricultural export. Prior to World War II, quantities of rice

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2 Production in Brazil has declined from 500,000 metric tons in the early 1950's to less than 300,000 tons in recent years.
exported were negligible. Exports of rice in 1963/64 at 1.5 million metric tons nearly doubled the average exports of the 1950's.

A large part of our total rice exports now go to Asia. India, largely a concessional market, and the Philippines, buying most of its rice commercially, are our big outlets. The dropping of Indonesia from our list of concessional markets is partly offset by the return of Japan as a large commercial purchaser of U.S. rice.

Mainland China, which ranked third as a major rice exporter behind Burma and Thailand until a few years ago, has now lost most of its exportable surplus. The United States with its steadily rising volume of rice exports has moved into third place. With neither Thailand nor Burma expanding production or exports very rapidly in recent years, the United States has come very close to overtaking both of these traditional exporters. The United States has the potential to become the leading supplier of rice in the world market if favorable export conditions should develop.

Feed Grain Export Prospects

In this discussion we will use the North American definition of feed grains, including corn, barley, grain sorghums and oats. Grains used almost exclusively as feed in this country are important sources of food in many parts of the world. Corn, for instance, is the leading food staple in Latin America. In Africa, grain sorghums are the principal food. In some African countries, grain sorghums supply a major share of the total food energy supply.

Corn is the leading U.S. feed grain export, accounting for some three-fourths of the total. Grain sorghums rank next in importance, followed by barley.

Feed grain exports go mostly to Western Europe and Japan, both characterized by rapidly rising per capita incomes and rapid gains in the per capita consumption of livestock products. With little additional land available to support expanding livestock industries these countries must look to the world market for feed grains.

Exports from Argentina, a longstanding feed grain exporter, have not kept pace with growth in world feed grain exports. Newly emerging corn exporters such as Thailand and the Republic of South Africa have picked up much of the slack. The United States supplies one-half of all the corn and four-fifths of the grain sorghums entering the world market. In the export of barley, the United States, competing with Canada, Australia and more recently France, enjoys a much less favorable position.
U.S. feed grain exports have increased steadily over the past decade, nearly tripling the levels of the early 1950's. This country is an efficient, highly competitive producer of feed grains. As long as we keep our prices competitive, we should experience little difficulty in at least maintaining our present share of a rapidly growing world market.

Soybean Export Prospects

Soybeans merit the title of outstanding performer among the major export commodities. Though a relatively new export crop their rise as an export crop has been phenomenal. During the 1930's, U.S. soybean exports averaged 2 million bushels per year; during the early 1950's they averaged almost 30 million bushels. Since then exports have risen dramatically, reaching 186 million bushels in the fiscal year just ended. These exports this past year earned half a billion dollars in foreign exchange. If the value of soybean oil and oilcake exports is added, the total approaches three quarters of a billion dollars.

In the 1920's and 1930's, when soybeans were just catching on here, Mainland China completely dominated world soybean trade, supplying some four-fifths or more of total soybean exports. Today, however, the United States dominates soybean trade, supplying a similar share of total exports. China has lost its traditionally large exportable surplus. Lagging agricultural output and the addition of 15 million people per year will likely prevent China's reemergence as a serious competitor in soybean market.

U.S. soybeans and soybean oil have proved formidable competition for other oilseeds and vegetable oils in the world market. Soybeans are today the leading oilseed, having eclipsed such traditional oilbearing commodities as peanuts, copra and palm kernels. As U.S. soybean exports continue their expected rapid expansion, the U.S. role in the international market for vegetable oils and oilseeds will become even more dominant. If past trends continue, it is only a matter of time until exports of soybeans and soybean products reach the billion dollar mark.

Cotton Export Prospects

The longterm trend in our cotton exports contrasts sharply with that of other major commodities. During the 1890's, cotton exports ranged from 5 to 8 million bales per year. As recently as the 1930's, cotton exports averaged close to 7 million bales per year. But since World War II, two important developments--the emergence of several new exporting countries and growing competition from synthetic fibers--has made the expansion of cotton exports difficult. The use of synthetic fibers is expanding much more rapidly abroad than the use of cotton, thus reducing cotton's share of the overseas fiber market. Cotton exports, facing continuing keen competition from other suppliers and synthetic fibers, are likely to remain at about current levels.
Tobacco Export Prospects

Tobacco exports, though edging upward during the past several years, have been rather stable during the postwar period. But, like cotton, tobacco faces stiff competition from newer producing countries, especially Rhodesia. Most of the growth in world tobacco trade in recent years has been accounted for by the expansion in exports of the newer exporting countries. With a sustained effort to improve our quality advantage, tobacco exports should expand modestly over the next few years.

Export Prospects for Livestock Products

Until quite recently prospects of significantly expanding our exports of livestock products did not seem good. However, annual exports, ranging from $500 to $700 million between 1955 and 1963, are now beginning to expand. Preliminary figures for fiscal year 1964 show the value of livestock product exports moving up toward $800 million.

Nonfat dry milk, frozen poultry, pork and variety meats have made significant gains over the past few years. Exports of nonfat dry milk this past year reached a record level, more than doubling the level of the late 1950's. In addition to sizable shipments of nonfat dry milk for use under the Food for Peace program, growing quantities are beginning to move to Western Europe, where they are used largely as an ingredient in feedstuffs.

Exporting nonfat dry milk to the less developed regions is a practical way of using our agricultural production potential to alleviate diet deficits in animal protein. Nonfat dry milk ships and stores well. It is especially important in the U.S. sponsored school lunch programs now operating in many less developed countries as part of the Food for Peace program.

Beginning in the late 1950's, there was a rapid rise in our exports of frozen poultry. But this was seriously set back by the imposition of import restrictions in the EEC countries. With rapid growth in exports to non-EEC countries, however, the long-term prospects for expansion are good.

Exports of variety meats, approaching 200 million pounds this past year, are expected to continue to gain. The rapid growth in variety meat exports reflects the rapidly rising income levels in the major importing countries of Western Europe. Exports of pork, the other livestock product doing very well in recent years, have nearly doubled over the past several years. Other developments such as exports of small quantities of feeder cattle and young calves to Europe, also hold some promise for the future. It now appears that exports of livestock products are beginning to rise, perhaps initiating a long-term trend.
Summary

A review of the various projections of U.S. farm exports made over the past several years is revealing. The one consistent element in all the projections is the tendency to underestimate future export levels. This has been true for most individual commodities as well as for total agricultural exports.

Both population and per capita incomes are increasing more rapidly than ever before. In Europe and Japan, where population growth rates are low, demand is expanding largely as a result of rising per capita incomes. Given their limited land resources and the high production costs associated with attempting to get more and more output from a fixed land area, these regions must turn to imports to fill their needs.

In the less developed regions of Asia, Africa and Latin America most of the additional food needs will arise from increases in population. Many less developed countries, lacking both new land to bring under cultivation and the capacity to raise yields rapidly, will be faced with growing shortages of food.

The forces which have resulted in a doubling of U.S. farm exports over the past decade still exist. They may have an even greater impact on the level of U.S. farm exports in the years ahead, further increasing the share of our farm output moving abroad.
ALTERNATIVE TRADE POLICIES: THEIR IMPACT ON U. S. AND WORLD PRODUCTION AND TRADE

by D. Gale Johnson

I. Introduction

It is not now possible to discuss alternative trade policies without discussing alternative domestic farm policies of the major trading nations. In a sense it has never been possible to entirely divorce the domestic and international aspects of national measures affecting agriculture.

For centuries governments have attempted to influence the development of agriculture through the control or direction of international trade. Import duties, quotas and embargoes and export subsidies have an ancient and almost uninterrupted history in the major nations of the world. Free trade in agricultural products, as practiced by the British after the abolition of the Corn laws, has been the exception rather than the rule.

But compared, say, to the end of the nineteenth century, the interconnection between trade and agricultural policies are now much more intimate and all pervasive. Trade restrictions and inducements are now only one of the numerous tools in the policymaker's kit. And perhaps most important, trade interference is now largely determined by or accommodated to a whole series of domestic interventions in the markets for agricultural products. At one time it was possible to negotiate on tariff rates on agricultural products without becoming involved in a complex set of national legislation and administrative actions. Now a negotiation about variable levies is a negotiation about the level of price supports in the European Economic community or a negotiation about U. S. trade restrictions on peanuts is a negotiation about the U. S. program of acreage allotments and price supports for peanuts.

It is not difficult to determine why these interconnections have become more direct and complex. Most governments of industrial countries have accepted the responsibility for reaching certain income objectives for their farm populations. A nation can have such objectives -- and pursue and attain them -- without interference with international trade. However, most nations are attempting to achieve their farm income objectives primarily by influencing, that is increasing, farm product prices. It is the use of the price system to achieve income objectives that necessitates

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import restrictions or export subsidization. No nation can long afford to increase the world price for an important commodity; sooner or later some means for separating domestic and international prices must be resorted to.

If any important trading nation or area relies upon higher farm product prices as a means of achieving farm income objectives there are certain obvious effects upon international trade. First, domestic output is encouraged. If the country is an importer, this means that less will be imported; if the country is an exporter, this means that more will be exported. Either of these consequences limits the export markets for third countries. Second, unless deficiency payments are used, domestic consumption is reduced. Again, if the country is an importer, less will be imported; if the country is an exporter, more will be exported.

It is often argued that the response of either output or consumption to higher prices is relatively small and thus little weight should be given to such effects. It is true that in the richer countries people tend to vary quantities purchased of farm products very little as prices change. But this, by itself, is not an adequate indicator of the effect of high consumer prices on the amount of product imported or exported. If before a price increase imports accounted for 20 per cent of a nation's consumption of a product, the percentage effect of the price increase on imports would be approximately five times the percentage effect on national consumption.

The same "multiplier" effect occurs as a result of output increases due to higher prices. A given percentage increase in production in importing countries can have a much larger proportional effect on quantity imported; the same statement applies to the effects of increased production in exporting countries upon the change in their exports.

The consumption and output effects of higher farm product prices are additive and this is true whether a nation is an importer or an exporter. Thus even if demand and supply are both quite inelastic in a given nation, the impact upon the volume of foreign trade can be significant.

This has been a long introduction to make a rather simple point, namely, that if governments use manipulation or support of prices received by farmers as the means of meeting income objectives, modifying trade policies require modifying domestic farm programs. While the point is a simple one, it is hard to overemphasize its importance. The point explains why the EEC has had so much difficulty in arriving at a common agricultural policy; it explains why there are so many tensions in the present round of trade.

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2 In more precise economic terms, the price elasticity of demand is very low.

3 Thus if the price elasticity of demand were -0.2 and the price increase were 20 per cent, national consumption would decline by 4 per cent. Imports, assuming no change in local production, would decline not by 4 per cent but by 20 per cent.
negotiations when the problems of agricultural trade are under discussion. And the above discussion also indicates why exporting nations are legitimately concerned with the domestic agricultural policies of other countries, whether those countries are importers or exporters.

There is one other point of an introductory nature that merits attention. There exists quite different views concerning the effects of U. S. farm programs upon our farm output. Officially we have taken the position that our acreage allotment and other governmental programs have restricted total farm production. There is a great deal of skepticism about this conclusion by other governments. Until we conduct the sophisticated and detailed studies that can determine whether the aggregate effect of all of our governmental programs has been to restrict total output, we are not likely to convince others that they have any responsibility for avoiding measures that encourage farm production. I feel that we have here a serious source of misunderstanding between the EEC and the U. S. And until this misunderstanding is cleared away we are not likely to make much progress in convincing the EEC and other major importing areas that they have an obligation not to encourage high cost agricultural production.

In the outline that was sent to me by the program organizers I was asked to discuss the following major topics:

1. Continuation of expanded trade -- effect on commodities
2. Selective import restrictions
3. Market-share doctrine based on rights established because of market development costs
4. The gains and losses from alternative policies

I shall restrict my comments to the above four topics.

II. Continuation of Expanded Trade -- Effect on Commodities

How much has agricultural trade expanded in the post World War II period? This is a seemingly simple question, but the answers are quite complex and differ for different commodities and different countries. Obviously in this chapter I can do nothing more than to indicate some of the differences that appear if one approaches the question from different viewpoints.

The volume of world agricultural exports increased by about 43 per cent between 1953 and 1963, when valued in 1957-59 average prices of U. S. imports or exports. It may be noted that the 1953 volume of world exports of agricultural products was approximately the same as the 1934-38 volume.

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4 Price supports, acreage allotments, conservation and acreage reserves, agricultural conservation program, soil conservation, small watersheds, irrigation and reclamation.
The increase in the value of world exports of agricultural products between 1953 and 1963 was less than 43 per cent since world export prices of agricultural products declined by roughly 5 per cent during the period.

The growth in exports of food and other agricultural products has been quite uneven. For example, between 1953 and 1960 the value of food exports changed as follows:

<table>
<thead>
<tr>
<th>Total world food exports, excl. exports of Eastern Trading bloc*</th>
<th>per cent change</th>
<th>1953-1960</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEC to EEC</td>
<td>119.9</td>
<td></td>
</tr>
<tr>
<td>Industrial to Industrial</td>
<td>44.8</td>
<td></td>
</tr>
<tr>
<td>Non-industrial to industrial</td>
<td>6.2</td>
<td></td>
</tr>
</tbody>
</table>

* But includes imports of the Eastern Trading bloc

Of the $4,458 million increase in world exports of food, as defined, $2,522 million represented increases in trade among industrial countries and only $475 million from non-industrial to industrial areas. While the value of food imports of the Eastern Trading bloc was still small in 1960, the increase in value of exports by non-industrial countries to the bloc was $320 million during the period or about two-thirds of the increase in food exports to the industrial countries. The other large component of the increase in food exports was the increase of $807 million in exports from industrial to non-industrial areas. A large fraction of the latter increase was due to increase in food shipments by the U. S. under our various foreign aid activities.

A study made by the Food and Agriculture Organization of the changes in the value of world exports of the main agricultural products among the major regions between 1952-53 and 1960-62 is of interest in assessing the growth of trade. This study was concerned with broad world regional groupings -- Western Europe, North America, Latin America for example. Thus trade among nearby countries, such as trade between Canada and the U. S. or among the EEC members, was excluded. The increase in the interregional trade in agricultural products (not just food) was $3,283 million during the period. This increase may be described as follows: (1) The increase in the agricultural exports of the less developed countries was only $815 million; (2) the increase in commercial exports of the industrial countries was $1,097 million, and (3) the increase in the value of products made available as economic aid or surplus disposal by the U. S. was $1,371. It would appear that a very large fraction -- perhaps two-thirds -- of the increase in commercial exports was due to larger exports by the United States.
While I do not want to underemphasize the importance of trade among nearby countries, the above material indicates that the growth of agricultural exports from the less developed to the industrial countries has been very modest during the past decade and that much of the increase in interregional exports by the industrial countries has been captured by the U. S. And much of the increase in U. S. interregional exports has been in terms of economic aid and surplus disposal.

It is clear from all the available data that the increase in exports of agricultural products during the past decade has been much smaller than the increase in exports of industrial products. Excluding exports by the Eastern Trading bloc, world exports of agricultural products increased 32 per cent between 1953 and 1961 while the world exports of manufactured products increased 67 per cent.

The slower growth of trade in agricultural than in industrial products is what one would expect. In general the demand for agricultural products grows much more slowly than per capita income. In fact, for a number of farm products per capita consumption declines as per capita incomes increase. In most industrial countries it appears that food grain demand has this characteristic.

The relatively slow growth in international trade in agricultural products, especially in the exports of less developed countries, has been partially due to the tendency of industrial countries to provide increasing protection for their farmers. This increased protection has been associated with a decline in the share of the total food supply imported by Western Europe. Before World War II, Western Europe imported 31 per cent of its food supply; the region now imports significantly less than 25 per cent. U. S. imports of agricultural products have remained approximately stable in value terms for the past decade, while exports have increased by 60 per cent -- even more if the very high export level of 1964 is considered. Thus the U. S. has added very appreciably to the supply of agricultural products moving in international trade, but it has not added to the demand. Most of the stability in the value of our agricultural imports has been due to strictly economic factors -- demand growing more slowly than per capita income and declining product prices; but not all. We have clearly used trade barriers to restrict our imports of sugar, many dairy products and peanuts.

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5 In economic terms, agricultural products have low income elasticities of demand.

6 That is, they have a negative income elasticity.
As population increases and real per capita incomes grow in most parts of the world, and especially in the industrial countries, international trade in agricultural products will continue to grow and perhaps at the recent rate of 2.5 to 3.0 per cent per year. Some of the important agricultural raw materials and beverages -- cotton, oilseeds, copra, tea, coffee and rubber -- are subject to relatively limited trade barriers. Increasing per capita incomes will probably result in increased international trade in feed grains and perhaps for some kinds of meat.

But a significant expansion in commercial international trade in agricultural products must await a reduction in barriers to that trade and a reduction in the degree of subsidization of agriculture in the industrial countries. If the industrial countries gradually dropped their protection of sugar, international trade would expand and real national incomes would be increased in both the importing and exporting countries. If the agriculture of Western Europe were given less protection and subsidization, international trade in wheat, feed grains, fruits, tobacco and poultry would expand significantly. If the U. S. provided less protection for certain parts of its agriculture, international trade in dairy products, peanuts, wool, fruits, vegetables and nuts would expand considerably.

III. Selective Import Controls

It is my opinion that the introduction of additional quantitative import controls -- whether "voluntary" or unilateral -- would be a serious mistake and should be resisted by all who are concerned with the maintenance of an efficient and prosperous U. S. agriculture. Certainly we cannot expect other nations to eliminate or reduce quantitative restrictions on the importation of agricultural products when we resort to the same technique. While much remains to be done in the elimination of quantitative restrictions, there can be no denying that substantial progress has been made in the last decade. In the face of this gradual progress, it is little short of tragic that we have resorted to voluntary import restrictions on beef, veal and mutton and certain dairy products and now have legislation providing for beef, veal and mutton import quotas under certain conditions. Even if the meat quotas provided in the legislation are never imposed, the legislation authorizing the quotas has been and will be a costly venture for us. The existence of the legislation, which I interpret to be inconsistent with our GATT obligations if applied, provides an excuse for others to resist our efforts to induce them to eliminate such barriers. Obviously we are not opposed to quantitative restrictions on principle; we are only opposed to such restrictions when it is in our interest. Or so at least will run the argument of our trading partners who have quantitative restrictions that they wish to maintain for domestic political reasons. For example, the domestic political reasons for France maintaining restrictions on the imports of fruit are undoubtedly as respectable and forceful as are our political reasons for providing import controls on meat.
Selective import restrictions -- under the guise of the euphemism, market sharing arrangements -- have gained some popularity in certain circles. It is sometimes argued that the greatest potential for maintaining or expanding our trade in certain farm products with the EEC is to negotiate a series of market sharing arrangements which would allocate a specific quota to imports, with this quota increasing as utilization grew as a consequence of increased population and income.

Such arrangements have the effect, if effective, of freezing the share of national consumption supplied by imports. Future changes in relative costs will affect the amount and flow of international trade only slowly and uncertainly, if at all. Would we have been willing to enter into such an arrangement with the EEC for feed grains in the mid-50's? We were then exporting about 2.1 million metric tons of feed grains annually to the EEC; by now a growth sharing formula might have increased our share to about 3.0 million tons. I doubt if anyone would now want to accept this figure as our negotiated share of the EEC market for imported feed grains. Even the imposition of very substantial variable levies on feed grains has not had the effect of reducing our feed grain exports to the level that we might have accepted had we negotiated a market sharing arrangement with the EEC in 1958.

When domestic political and economic pressures are strong enough, few nations can resist violating international economic agreements if such violation permits a solution, even a very short-run solution, of a domestic problem. The long inclusion of the escape clause in our reciprocal trade legislation was an open recognition of this fact. How much confidence could we have that freely and sincerely negotiated market sharing arrangements would, in fact, be observed in the face of farm income and price problems in the importing nation? Suppose that in a given year domestic output of feed grains equalled expected use in an importing country that had signed such an agreement. Thus the entire import quota would have to be stored or exported. If exported, the exporting nations signatory to the agreement have gained little or nothing. Are importing nations likely to incur the heavy storage costs that would be required if the imports were stored? Perhaps, but I doubt if we can have any certainty that such would be the case.

Negotiation of market sharing arrangements may turn out to be superior to any other alternative with which we may be faced. Nevertheless, I feel that we need to approach such agreements with caution and with recognition of the fact that enforcement of them may be nearly impossible.

IV. Market-sharing Doctrine Based on Rights Established Because of Market Development Costs

I find it hard, and I should say so at the outset, to take this idea seriously. The allocation of markets, either nationally or internationally, on the basis of market development costs (or should I say advertising costs?)
impresses me as a way to maximize waste and to minimize international good will. It is one thing for the United States to impress the Japanese with the desirability of U. S. wheat and then try through quality control of the product and effective pricing to retain the market developed; it is quite another for the Japanese to guarantee that if we spend ten times as much as the Canadians to develop or expand the Japanese market for wheat that we should from then on export ten times as much wheat to Japan as Canada.

One consequence of such an arrangement would be to enrich the Japanese or the German equivalent of Madison Avenue. What export nation could stand by while another nation was engaged upon a market promotion campaign if they knew what future market shares would depend upon costs incurred in developing the market? The only way to prevent wasteful expenditures would appear to be a cartel arrangement among the potential exporters -- an arrangement that would result in agreed market shares. Why not approach the matter of market share directly?

But assume that the above brief comments are beside the point and one takes the idea seriously. The administration of such a scheme would surely present a number of difficult problems.

One issue that would arise is how to handle the expenditures from P. L. 480 counterpart funds generated by our food aid program. Are the expenditures from these funds for market development and trade fairs legitimate and real expenditures made by the U. S. ? If we claim these to be real expenditures, do we then reduce our claims concerning the amount of foreign aid provided under the Food for Peace Program? Could the U. S. count some of the value of food or other agricultural products provided under Title I as market development costs? Who would decide what was a legitimate expenditure? How would the market development costs of various nations be compared? Would costs incurred by private firms in promoting branded products be included?

If the contribution of foreigners to the development of a market is to be used as the criterion for the allocation of import shares, the most appropriate claim for a given share would be the effect of the various promotional devices upon the development of the market. The use of costs is obviously a very imprecise guide and one chosen, presumably, because we have no way of measuring the effectiveness of market development programs.

I have so far interpreted this market-sharing doctrine in terms of allocation of shares in a volume of imports determined by any arbitrary rule. I suspect that the promulgators of this rule have something more in mind, namely that the total market -- including that supplied by domestic producers -- should be allocated in terms of relative market development costs. I find it hard to believe that any important nation would accept such a rule. Such a rule would guarantee foreigners a
definite claim against the growth of a market that was due to increasing population and rising per capita incomes. Does any one really believe that the recent growth in per capita meat and wheat consumption in Japan is due primarily to market development expenditures rather than to increasing per capita income and, in the case of wheat, the rationing of rice?

It is probably true that U. S. private and public efforts to introduce broilers into West Germany had some effect upon the growth of poultry consumption in that country. But was the contribution of these market development efforts so considerable and so certain that the costs of these efforts constitute a legitimate or reasonable claim for a share of German poultry market? Per capita poultry consumption in West Germany increased by 160 per cent between 1956 and 1961, but in the Netherlands -- an important poultry exporter where I suspect that we did not engage in market development activities -- per capita poultry consumption increased three fold. And in Belgium and Luxembourg the absolute increase in per capita consumption of poultry was almost half again as large as in Germany, though the relative increase was only 70 per cent.

I do not want to be misunderstood. I believe that poultry producers should receive the full support of the U. S. Government in obtaining access to the West German poultry market under reasonable conditions. They deserve that support because on the basis of price and quality they can deliver poultry to West Germany on terms that are fully competitive and because it is our national policy to promote trade to gain the advantages of international specialization. But I do not think that poultry producers have an ethical or economic claim to any part of the German poultry market because of expenditures on market development.

V. The Gains and Losses from Alternative Policies

Unless there is a significant modification of the trade and agricultural policies of the major industrial nations, we can look forward to only a modest absolute growth in the value and volume of commercial agricultural trade. With existing policies, Western Europe will continue to expand the relative importance of domestic production in total consumption. This trend is important, of course, to the major agricultural exporting countries such as Canada, Australia and the U. S. But this trend when combined with increased efforts on the part of the U. S. to expand agricultural exports through surplus disposal and the payment of subsidies on several important export products is of critical significance to the less developed areas of the world.

If the less developed areas of the world are to achieve the kind of economic growth envisaged in the Alliance for Progress, for example, these areas must be able to finance a significantly larger volume of imports of capital goods and related items for the investments in agriculture, industry, transportation and communication that are essential for rising per capita incomes. Except for the small part of the world
with petroleum or minerals to export, such areas must rely primarily upon
export earnings from agricultural products to finance the required capital
imports. The deliberate subsidization of agriculture by most of the impor-
tant industrial nations clearly limits the export earnings from such areas.

Thus one of the important losses of the continuation of the trends in
agricultural policies of the past 15 years, including trade policies, is the
adverse effect that such policies have upon the growth rates of the poorer
areas of the world.

A second loss that is and will be suffered by a failure to remove some
of the impediments to an efficient allocation of agricultural production in the
free world is the real loss in income suffered by the area. Western Europe
is involved in encouraging high cost production of many agricultural pro-
ducts rather than exchanging industrial output for farm products on a much
larger scale. But the U. S. is guilty of the same type of action. Recently
we have encouraged the expansion of sugar production even though over
the long run we could probably import our sugar requirements at about 60
per cent of what it is now costing us to produce it. Nor can our highly sub-
sidized rice production be justified in terms of efficient use of our re-
sources or the resources of the free world.

A third loss from the existing agricultural and trade policies is the bar-
rier that these policies present in the path of achieving effective economic
integration of the free world. The present round of trade negotiations are
burdened by the high priority that most participants to those negotiations
give to maintaining their current farm programs.

I do not believe that selective import restrictions or market-sharing
arrangements such as those described earlier can do anything but to ag-
gravate the losses described above. Such arrangements, in my opinion,
will have the effect of contracting rather than expanding trade.

There are clearly substantial gains to be achieved by expanding
economically justified trade in agricultural products. However, we must
not make the error of assuming that any and every increase in trade is
beneficial. Some of the increases in agricultural trade within the EEC
has probably replaced products from relatively low cost sources by rela-
tively high cost products. Some of our P. L. 480 shipments have dis-
placed lower cost products by relatively high cost products from the
U. S.

But it is all too clear that it is not going to be easy to achieve the
modifications that are required before international trade in agricultural
products will both expand and be redirected to permit demands to be met
by relatively low cost producers. To achieve these ends require sub-
stantial modifications in the agricultural policies of most industrial
nations, especially the nations of Western Europe and the United States.
Where income support for the farm population is deemed essential, it must be achieved in ways that do not encourage production or discourage consumption. Many of the industrial countries have followed policies that encourage too many resources, especially labor, to be retained in agriculture. It is difficult to now extricate themselves from this situation. But the long run gains, both directly to the countries involved and to the free world as a whole, are sufficiently important for industrial countries to give greater weight to the international implications of their domestic agricultural policies than it has been their practice in the past.
REMARKS OF A CONGRESSMAN

by Hon. Robert B. Duncan

I feel most inadequate in my present capacity as a commentator on the two preceding papers (Lester R. Brown and D. Gale Johnson). As a member of Congress talking to farm program specialists, I am somewhat in the position of a general practitioner speaking with a group of heart specialists on problems peculiar to the heart. I would far prefer to listen and to learn an, incidentally, perhaps preserve the illusion of wisdom.

I have been a lawyer and as a lawyer, I had to acquire some knowledge about many subjects in order to properly represent my clients in particular cases involving many different interests, including farmers, dairymen, and ranchers. I have served on the Agriculture Committee in the House for two years. All of this is far too little to give one more than the most cursory of expertise. I felt badly during my initial service on the Agriculture Committee that I couldn't come up with ready solutions to the complex problems of agriculture until I looked around and saw how many far wiser than I were in the same boat.

Yet the realities of our system of government are such that the decisions on policy in agriculture, as well as all other fields of governmental interest, are made, and I think should be made, by general practitioners rather than by specialists. Broad questions of national policy cannot be decided only by reference to specific interests of specific specialities. We must not permit the trees to obscure our vision of the forest. Specific solutions to specific problems can frequently be worked out if we have only minimal concern about the problems created by the solution in other areas. For all of its defects, our system of bringing to the decision-making process "general practitioners" aided and advised by "specialists" has worked rather well in maintaining a balance in this country.

The specialist is something of an advocate as is the lawyer in the trial of a lawsuit. Each need look only to the best interests of his speciality or his client. The decision-maker, be he judge or a member of the legislature, must decide the over-all merits without the chance of being able to close his eyes to one or the other side. He is immeasurably aided, however, by the give and take of the controversy and conflicting interests which, hopefully, will permit him to arrive at the truth and a sound solution.

I think it is true that some of these problems are of such significant local importance that the member of Congress from the affected district becomes something of an advocate himself. In this instance, he, too, tends to be less inter-

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1Mr. Duncan, a Democrat, is U. S. Representative of the Oregon 4th Congressional District.
ested in the over-all merits of a proposed solution to a problem and to look only at the result so far as his own district is concerned. Even here, however, the broad spectrum of interest represented by 535 members of Congress guarantees a broad constructive approach to the problem for any such proposed narrow solution must almost inevitably conflict with another interest represented by other members of Congress. In this instance and to the extent we can avoid the combining of multiple pieces of legislation in the same vehicle, these conflicts of direct interest will cancel each other out and the decision will basically be made by the balance of the Congress, hopefully, considering the over-all national interest.

In the statement presented by Mr. Brown, we have heard factual testimony—a statistical analysis—of what we must conclude is an expanding demand for food both in quantity and in quality. The rapid expansion in population and the rising per capita income amply bear out this conclusion. He quite properly further points out that there are only two surplus food producing areas in the world and emphasizes the important stake the American farmer has in the export market with the production of one out of every four American acres now moving into export channels.

Dr. Johnson's paper, it seems to me, is a plea for freer trade (as distinguished from free trade) and for greater specialization with a significant discussion of contrary tendencies that appear on our national scene today.

The lesson to me, in both papers, is again the importance of realizing that we cannot consider any of these problems in a vacuum. We cannot consider our commodity price support programs without considering their impact on each other and our whole domestic economy. We cannot consider our domestic agricultural program without considering its effect on the world market, on our exports, and our imports. We cannot consider Food For Peace without considering its effect on the commercial market place and our political relations with other producing countries, as well as the political implications in the cold war. We can't consider our agricultural program without realizing the impact of population control or its absence, the development of the harvest of food from the sea, future power development—nuclear or otherwise,—which might lead to saline water conversion and the reclamation of presently fertile but arid areas of the world, labor policies, conventional reclamation policies, indeed, the reapportionment of state legislatures, and the redistricting of the Congress.

Indeed, my own conclusion is that there is no greater potential for ultimately achieving world peace than a profound and sagacious agricultural policy. I do not believe we will ever have a world at peace as long as half the world's population goes to bed hungry.

We learn from these papers that no one economic interest in the United States has a greater stake in the expansion of our foreign trade than does the farmer. Yet it is specific farm commodity groups from whom we hear most frequently cries for protection from foreign imports—cries heard simultaneously with those from other commodity groups demanding a greater and freer access
to overseas markets. It is politically impossible to pursue both courses simultaneously, as Dr. Johnson points out.

I think, too, we learn from this conference and these papers that there is every prospect that the next decade or two will see a change in the nature of our farm problem from one of producing too much to trying to produce more. This, it seems to me, is the justification for reclamation today and even with the tremendous potential for increased productivity in this country, we must lend our best efforts to increasing the productivity of the underdeveloped nations who so far cannot keep up with the increase in their population. We must, without ignoring research in techniques of production, concentrate a greater share of our agricultural research dollar to improving our marketing techniques, both transportation, packaging and others, so that we can get what we produce to hungry people at a fair return to our producer.

I would conclude with only one further thought. I wish that the speakers who have addressed you today and throughout this conference could speak and get their message across to our constituents across this land. I wished equally as fervently that each of the farmers in my district could have accompanied me to the Food and Agricultural Conference in Rome last year to which I was a Congressional delegate. It is important that we raise our sights beyond our own farm, our own business, to know and realize intimately that we are a part of the whole world, that these questions are not all black and all white, that they cannot be reduced to "Are you for us or are you against us?" It is important that we, as a nation, realize that our long-run best interests as a nation and as individuals sometimes run counter to what we think are our short-term best interests. Herein lies the explanations for conflicting viewpoints be members of Congress, all of whom have the best interests of this country at heart on such questions as Food for Peace to Egypt and the beef import bill.

It has been a pleasure to be with you; I assure you it has been most helpful and profitable for me to hear and study both of these excellent papers.
NEW DEVELOPMENTS AFFECTING AGRICULTURAL TRADE

by John A. Schnittker¹

In his inaugural address last week, the President emphasized change, which is the chief characteristic of our world today. Change at breath-taking speed distinguishes our age from all those which have gone before us.

A changing world presents new challenges and new opportunities to American farmers and to that part of industry and trade which deals with agriculture.

The great test of our time is not our skill in preserving the past but of our ability to direct the future to the fulfillment of our highest aspirations.

There are before us now many new economic and political developments whose importance to agriculture have been clearly recognized and thoroughly debated. The European Economic Community and its internal agricultural policies and external trade policies and the Kennedy Round of trade negotiations are two examples in this category.

There are other actual or potential developments in world economic and political affairs whose importance is less clear and on which debate has been both confusing and vague. The possibility of linking domestic farm policies and trade agreements is one example here.

There are still other economic prospects on the horizon which are intimately bound up with political considerations and where those considerations call for a flexible policy which may differentiate between countries. Our trade relationships with the Soviet Union and with Soviet Bloc countries are one example in this area.

Finally, there are emerging developments whose shape and scope are yet so dim that they remain on the fringe of public discussion, and they are debated seriously only within government and in the universities. Excellent examples of this latter group are the crucial role of the developing economies to the future of world trade, the arithmetic of the food gap

¹Director of Agricultural Economics, U.S. Department of Agriculture
in a decade or two if agriculture in the developing economies does not "take off" and the importance of the unity shown by the underdeveloped nations in last year's United Nations Conference on Trade and Development.

The European Economic Community is, of course, the most visible and most important of a number of endeavors to promote regional economic integration. The European Free Trade Association and the Latin American Free Trade Association are less well known. All of them increase the possibility of expanded trade in the future. If these economic groupings do not follow liberal, outward looking trade policies, all of them pose the threat and danger that the walls dismantled within may be maintained or even raised against outside countries.

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The prospects for continued economic growth and expanded markets in Western Europe and Japan appear to be good. Continued pressure on food prices and wages may make our farm products even more attractive there than they have been, barring setbacks to expanded trade as the negotiations and the Common Agricultural Policy develop, and as their effects are felt.

On the supply side, the United States will continue to be in a favorable position to supply Western Europe and Japan with all they need since we continue to have an exportable surplus and an excess productive capacity.

Rising incomes in Western Europe have rapidly increased the demand for meat and meat products in recent years -- more rapidly, in fact, than their domestic production could be increased. Clearly this expansion in demand for meat and other quality foods will continue. What is less clear is whether or not efficient producing countries will have competitive access to European markets -- particularly for feed grains and oilseeds. Pending decisions on other products give cause for concern that European markets may not be allowed to expand as rapidly as their own interest might require.

A second "new development" much in the public eye is the Kennedy Round of trade negotiations under the GATT. In Geneva today is being held a meeting of the Committee on Agriculture, the first since April of last year. Charged by the Ministers of the GATT countries in May 1963 with conducting negotiations leading to expansion of trade in agricultural products, the Agriculture Committee is exploring the means of furthering the negotiations.

The United States remains determined that any ultimate Kennedy Round agreement must include liberalization of trade in agricultural as well as industrial products.
The second category of developments which I noted -- the relation of domestic farm policies to international trade -- is one of the enigmas of present negotiations. More than two years ago, responsible officials of the United States and the EEC as well as other countries made known the willingness of their countries to "bring domestic policies into the negotiations" on a reciprocal basis.

Since that time, there has been a striking contrast between the direction of the domestic farm policies of the two major parties to the negotiations.

In the EEC, protection of poultry was increased sharply. The EEC grain price decision promises to give sharply higher prices to the only producers in the Community capable of significant expansion -- The French farmers.

In the United States, in approximately the same period, feed grain export subsidies have been terminated, wheat export subsidies sharply reduced and cotton export subsidies slowly reduced. And the beef import legislation, which has been criticized in some quarters, is inoperative because of the world beef shortage. But more than that it provides an access formula for imports which includes growth -- the kind of formula we would like to have our friends abroad consider.

A year ago in citing our hopes for agriculture in the Kennedy Round, Secretary Freeman said that our negotiating approach"...is a plan for trade liberalization and that is what the trade negotiations are all about.

"It would require tariff cuts."

"It would assure markets to efficient producers and would require some limit to the measures encouraging inefficient production."

"It would expose the trading practices and the domestic farm policies of the Free World to the test of the high principles under which the trade negotiations were launched."

These words are at least as relevant today as a year ago.

A third category of factors affecting trade is represented by our uneasy East-West trade position.

There are some farm products whose export to the Soviet Union we license routinely. There are others -- like wheat -- which have been licensed under certain restrictions and after a long public debate.

Trade with the Soviet Union and the countries of Eastern Europe is still another question, and there are extremely sensitive political
questions which must be resolved in connection with our policy toward these countries. As you know, the President said in the State of the Union Message that the government is now exploring ways to increase peaceful trade with these countries and with the Soviet Union.

My purpose in citing this problem is to call it to the attention of a group of economists well situated to bring this matter to public attention. Future trade flows may well be significantly affected by the policy we ultimately adopt with respect to this trade.

Finally, there is the role of the developing economies in the expansion of the world's commercial trade.

The highly developed countries have been the best export markets for U.S. agricultural products. With higher incomes, their consumers demand not only a larger volume of farm products but also a much greater variety.

Our agricultural trade with the developed countries has grown about in line with increases in their national incomes. It will continue to expand this way. In fact, our farmers can look upon the developed world in much the same manner they view our own economy -- as a solid expanding market -- and one which we expect to share in.

It is the developing countries of the world that promise the greatest potential for long term growth in our markets for farm products. Population in these countries is increasing more than twice as fast as in developed countries. Most of their people have been poorly fed and clothed, and they will demand more and better food and clothing as their incomes improve. However, in the absence of sufficient production or foreign reserves to finance food imports, the increased demand can frequently result in inflation and reduced economic growth. It is in these situations that food aid can make a vital contribution.

Total world trade appears to expand at a slightly faster rate than world incomes under present conditions.

But world trade in farm commodities rises more rapidly than total trade. A 10 percent increase in income in most countries is likely to result in a 12 percent increase in imports of farm commodities. Farm products commercially imported from the United States, those bought for dollars, have gone up fastest of all in recent years.

If these large potential markets for our farm products are to be tapped in the emerging countries of Latin America, Asia and Africa, the countries must have higher incomes.
Our stake in their success may not appear to be as great as their own. But it is great enough to draw from us an enormous investment in food assistance, and a growing investment in technical assistance.

There are other developments in the developing world which demand our attention. I referred to the "arithmetic of the food gap." The ominous decline in per capita food supplies in free Asia the past few years must not only trouble the Free World nations; it must move us -- and them -- to action.

The trade aspirations of the developing countries as expressed in last year's U.N. Conference and as noted in new GATT provisions about to be signed present a serious challenge to developed countries. These nations want to trade. In particular, they want concessions which will expand their exports without reciprocity. Expanded trade for the less developed countries will raise their standard of living, expanding demands for all kinds of products.

In laying the groundwork for the Trade Expansion Act, the late President Kennedy pointed out that a rising tide raises all boats. Our objective is a rising tide of international trade.
W. Robert Parks, ISU vice president


Lester R. Brown, USDA; Rep. Horace R. Kornegay (D-N.C.) and D. Gale Johnson, University of Chicago

Participants listening to one of papers during session at Brookings Institution.
Sen. Bourke B. Hickenlooper (R-Iowa)

Lester R. Brown, USDA

Rep. Graham Purcell (D-Texas), Lauren Soth, Des Moines Register, and Rep. Neal Smith (D-Iowa)

K. L. Robinson, Cornell, outlining background of farm policy problems

Rep. Albert H. Quie (R-Minn.)

R. J. Hildreth, Farm Foundation, and Charles E. Bishop, North Carolina State
Walter W. Wilcox, Library of Congress


Part of luncheon crowd listening intently to discussion of legislative reapportionment.
Rep. Robert B. Duncan (D-Oregon)

John Schnittker, director of agricultural economics, USDA

Charles Press, Michigan State U

Conference participants continue informal discussions during coffee break.
W. G. Stucky and Wallace E. Ogg, ISU; Rep. Bert Banstra, (D-Iowa) and Earl O. Heady, ISU

D. Gale Johnson, U. of Chicago


W. Robert Parks, ISU vice president; Sen. Bourke B. Hickenlooper (R-Iowa), Brooks James, N. C. State dean of agriculture, and Russell G. Mawby, W. K. Kellogg Foundation

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