

Farm Policy Considerations for FEED GRAIN and WHEAT

DEPARTMENT OF AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY / COOPERATIVE EXTENSION SERVICE / THE OHIO STATE UNIVERSITY

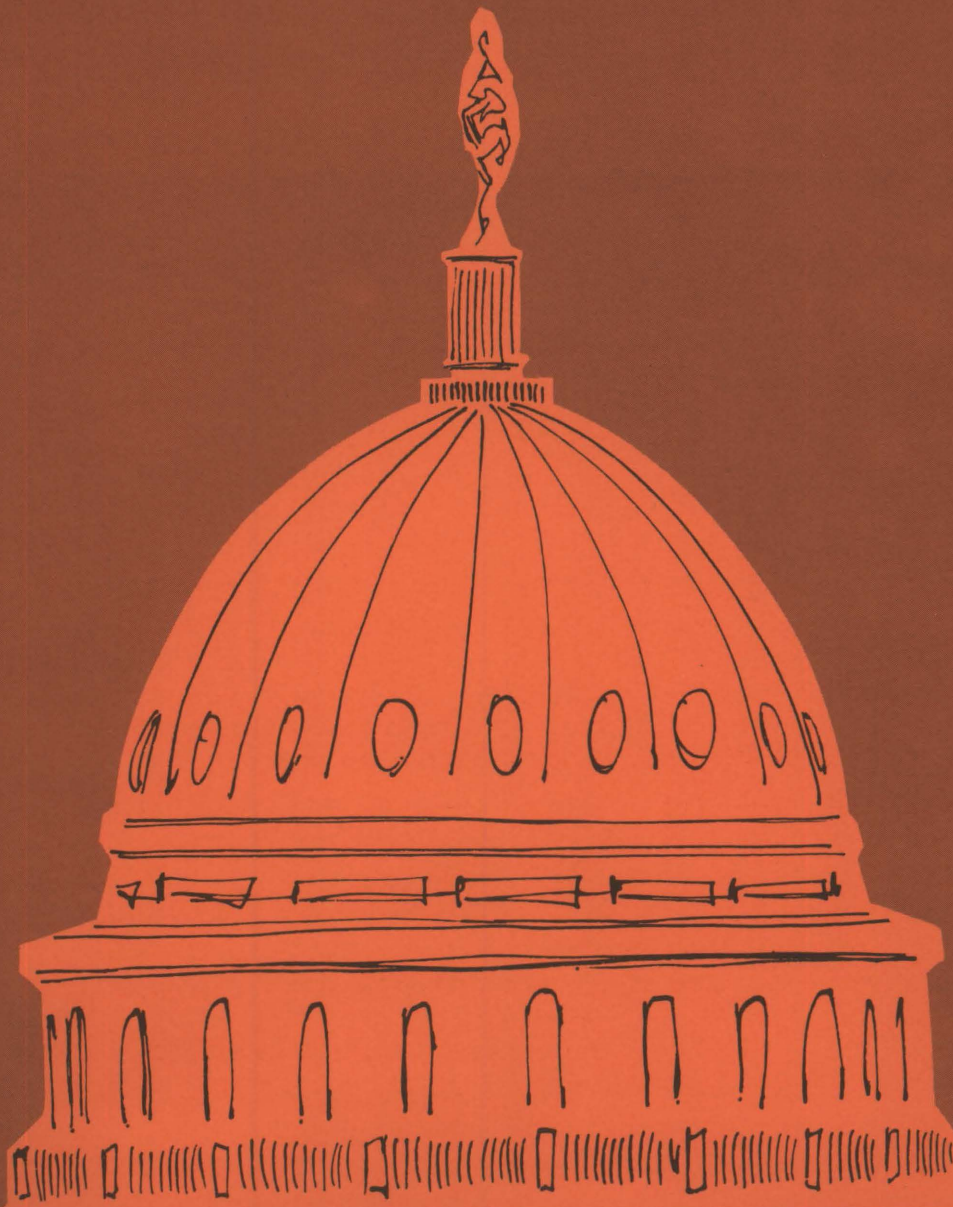


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This publication is one of a series of four prepared by staff members of the College of Agriculture of the Ohio State University. The other leaflets are entitled: 1) Farm Policy Considerations for Dairy, 2) Farm Policy Considerations for Wool and 3) Farm Policy Considerations for the Low Income.

FARM POLICY CONSIDERATIONS FOR FEED GRAINS AND WHEAT

by

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PART I CONSIDERATIONS IN FEED GRAIN POLICY

The feed grain and wheat programs expire at the end of 1965. Congress is considering new legislation for both commodities. For wheat, if there is no new legislation, farmers will be called upon to vote in a referendum by August 1. The vote will be to accept or reject a national acreage allotment and marketing quotas at price support levels announced prior to the vote. For corn, if there is no legislation, the program would consist of price support at 65 per cent of parity.

Feed grains are important to the agricultural sectors of the economy from several standpoints. They used 39 per cent of the total cropland harvested from 1950-61, contributed a sizable proportion of the total cash receipts from farm marketings and are basic to the vast livestock industry. More than three-fifths of the total cash receipts from farm marketings are derived from the sale of crops and livestock and livestock products. Large supplies and low prices of feed grains lead to increased levels of output in the livestock industry. Low levels of supply and high prices of grains lead to smaller output in the livestock sector.

Production of Feed Grains Increasing

Feed grain production increased from 120.8 million tons in 1955 to a record level of 156 million tons in 1963. Over 80 per cent of the increase was due to expanding production of corn. Between 1950 and 1955 changes in the production of feed grains were largely explained by changes in acreage. No doubt acreage allotments for wheat and cotton led to increased acreages and production of feed grains which were the best production alternatives in the affected areas.

Since 1955 increases in yield per harvested acre have had relatively greater effect on production than acreage. While the yields of all feed grains have increased, the increases for corn and sorghum have been more striking. Corn yields in 1963 were 1.6 times the yield in 1955 and 1.8 times the 1950 yield. For sorghum, the 1963 yield was 2.3 and 1.9 times the 1955 and 1950 yields respectively. These yield increases reflect increased use of technology and increased efficiency in production through resource reorganization and adjustment. An Iowa study estimated that one-third of increased yields was due to technology, one-third to increased purchased inputs, and one-third to weather.

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Imports are, and are expected to remain, an inconsequential component to total supply. The production of by-product feeds has shown a continual increase from 1950 to 1963, increasing from 22.3 to 30.0 million tons, an increase of 35 per cent. While by-product feeds have increased in absolute terms, there has been virtually no change (-1%) in their relative proportion to total feed grains.

From 1950 to 1961, carryover stocks of feed grains increased each year with the exception of 1951 and 1952. In 1961 carryover stocks reached a record level of 85 million tons. It is expected carryover stocks in 1965 will be about 62 million tons.

Demands for Feed Grains Depends Upon Livestock Industry

The principal outlet for feed grains is found in the meat animal and livestock product industry. Therefore, the demand for feed grains is highly dependent upon the consumer demand for meat and other livestock products. At any given point in time an increase in consumer demand for meat and other livestock products is reflected to producers of these products through higher prices in the market place. These higher prices lead to improved income expectations and to an expansion, with some lag, in production.

The demand for meat and other livestock products is affected by changes in population, preferences and real income of consumers. Brandow has shown that apparent consumption of specific red meats and poultry in recent years has increased at annual rates ranging from .11 per cent for lamb to 3.76 per cent for beef. As evidence of this movement, per capita consumption of beef has been increasing at about two per cent a year since 1953. With population increasing at about 1.7 per cent a year, total consumption has been increasing at a rate of more than three per cent a year.

Cattle are now the leading consumers of feed, utilizing 38 per cent of all feed units in 1962. Within the beef industry, structural changes in feeding and the movement of herds eastward are resulting in increased concentrate feeding. Technological advances in livestock production, including breeding improvements, improved rations and additives on the one hand, and the development of feeding materials from non-farm produced raw materials, and/or from farm produced raw materials once considered as waste on the other, impinge upon the demand for feed grains. The former through increased feed/meat conversion ratios and the latter through substitution. The effects of both of these are similar in that they increase the meat production potential per acre.

Price relationships are important to the development of feeds from non-farm produced raw materials. The level of feed grain prices can encourage or discourage the development of other feeding materials and their use.

Exports Have Increased Substantially

The quantity of feed grains exported in 1963 was 18.7 million tons or approximately three times that of 1950. It is highly probable that exports will continue to increase over the next 15 years. The extent

of the increase will be dependent upon our access to the European Economic Community, our principal market for dollar sales, and the extent to which we and countries in Western Europe are willing to sell to Eastern European countries.

Shipments under the Food for Peace program could also affect increases in exports. However, these shipments probably will not increase substantially unless significant increases in the level of economic activity and consumer incomes in these countries take place. Currently we are exporting about two million tons annually under this program.

SOYBEAN AND FEED GRAIN RELATIONSHIPS

Although soybeans are not classed as a feed grain, they provide a principal source of feed. At the same time they compete with other feed grains for land and other resources. Soybean producers have increased output tremendously without experiencing depressed prices as in the feed grain sector. Between 1950 and 1963 soybean acreage doubled while production in the latter year, a record, was 2.3 times that in the former year. Between 1950 and 1963 yields increased only 2.8 bushels per acre, or 13 per cent. If yield increases had been of the same magnitude as those for corn or feed grains, prices would be lower or acreage harvested much less than presently.

Soybeans--A Joint Product

Soybean production results in joint products--oil and meal. Until recently the demand for soybeans was derived, in the main, from the demand for oil. Since 1957, the value of meal has been greater than the value of oil. There has also been a tendency for the value of meal relative to oil to widen during this period changing from 1.1 to 1.8 times the value of oil. It is probable that, domestically, the demand for soybeans over the next 15 to 20 years will be principally derived from the demand for meal unless new and expanded uses are found for oil.

Exports of Soybeans Increase

Export demand has been strong and is likely to remain strong. The exports of beans in 1963 were approximately three times the quantity in 1955. Similar increases were recorded for meal. For oil there was only an increase of 40 per cent. This suggests that disparities in increases in demand for oil and meal will have a depressing effect upon the value of soybeans.

Substitutes for Soybean Meal

Another factor that could significantly affect the demand for soybeans is the use of urea. Presently urea can be used as a feed for ruminant animals to meet a maximum of one-third of the total protein

requirement of a ration. Recent feed trials using urea reveal promising results in maintaining gains and carcass grades. It can be expected that the use of urea will continue to increase. One pound of urea and six or seven pounds of corn will replace seven or eight pounds of meal.

The relative prices of urea and soybeans, as reflected in soybean meal, will influence the amount of both products utilized. Increased prices of soybean meal would encourage greater substitution of urea up to the maximum now recommended.

RESERVE STOCKS

How large should reserve stocks be? This is a question fraught with much conjecture and diverse opinions. However, The National Agricultural Advisory Commission suggested reserves for feed grains of 45 million tons and 100 million bushels of soybeans. The feed grain carryover at the beginning of the 1964-65 crop year was approximately 40 per cent above this level. Soybean carryover was only 32 per cent of the level recommended by the Commission. It should be pointed out that these are the maximum justifiable reserves to meet an "all-out" nuclear attack.

THE PROJECTED FEED SITUATION

In making these projections, it was assumed that: (1) there would be no major wars, disasters, or depressions, (2) domestic food consumption programs would not be subject to major changes, (3) population would continue to increase at about 1.6 per cent per year, (4) per capita disposable income would increase at the rate of 1.87 per cent per year, (5) prices of non-agricultural products would remain relatively stable, and (6) imports of red meats will be at such levels that they will not significantly affect the domestic supply-demand price relationships.

Exports of pork and pork products are higher in value than imports. It is assumed that this balance or relationship will be maintained. Beef and mutton imports averaged 8.7 per cent of total domestic production from 1959-1963. Public Law 88-482 provided for quotas on these imports. The law sets a maximum of 725 million pounds that can be imported in any year except that this quantity may be adjusted upward or downward on the basis of the relationship between (1) estimated average annual domestic commercial production in the particular year and the two preceding years, and (2) the average annual domestic production during the years 1959 through 1963, inclusive. In view of this, it was assumed that net imports of these products would be about 5 per cent of total domestic commercial production.

Based on trends in consumption per capita of various meats, yields of crops, conversion factors of feed to meat, it has been estimated that 280 to 290 million acres of harvested cropland would supply the

necessary agricultural products through 1970 and 1980 (See Table I). This means about 70 million acres less cropland harvested than the 350 million acres harvested and retired from production. In recent years, 290 to 310 million acres have been harvested.

TABLE I
Projected Acreage Required for Selected Crops
U. S., 1960-1980

	1960	1970	1980
<u>Feed Grains</u>			
Demand (Bil. Feed Units)	306	316	375
Yield (Feed Units/Acre)	2290	3022	3416
Land Required (Mil. Acres)	138.5	104.6	109.8
<u>Soybeans</u>			
Demand			
Soybeans Crushed (Mil. Bu.)	393.4	526	758
Exports (Mil. Bu.)	148	260	310
Use for Seed (Mil. Bu.)	29	47	64
Total Demand (Mil. Bu.)	571	833	1132
Yield per Acre	23.5	27.5	30
Land Required (Mil. Acres)	24.3	30.1	37.7
<u>Hay</u>			
Demand (Mil. Tons)	119	175	243
Yield (Tons per Acre)	1.76	2	2.3
Land Required (Mil. Acres)	67.6	87.5	105.7

ALTERNATIVE LAND RETIREMENT PROGRAMS

It has been estimated that there is an excess of approximately 70 million acres of harvested crop land in the United States when compared to the number of acres required to meet current needs and projected needs between now and 1980. There are several programs which could be proposed to bring about the required reduction in land devoted to crops.

These range from marketing quotas on the one hand to a free market on the other. The proposals discussed in this publication will be confined to voluntary programs. This type of program is relatively acceptable to farmers, which is a necessary condition to insure sufficient participation. The three general types of programs analyzed here can be outlined as follows:

- I. Continue the present program.
- II. Combined Whole Farm and Voluntary Diversion Plan.
 - A. Whole Farm Land Retirement--Retire 50 million acres by making cash payments to farmers consigning whole farms to a long-time retirement program. Permanent land use changes would be encouraged.
 - B. Voluntary Diversion--Temporarily retire 20 million acres by making cash payments to farmers reducing planted acreage to less than their allotment, assuming 50 million acres have been permanently removed by a whole farm land retirement program.
- III. Farm Base Plan--Reduce harvested acreage by making cash payments to farmers who reduce their planted acreage below a specified total farm allotment.

These general programs can be modified by allowing different combinations of crops to go into the make-up of a farmer's base acreage allotment.

OBJECTIVES OF AN ACCEPTABLE LAND RETIREMENT PROGRAM

The objectives of people regarding agricultural policy vary greatly. Some of the more commonly suggested objectives include:

1. Maintain aggregate net farm income at about \$12.5 billion.
2. Stabilize farm prices at levels consistent with the net income goal.
3. Reduce program costs to the taxpayer.
4. Encourage economic development of the rural community.
5. Encourage conservation of natural resources.
6. Supply sufficient quantities of food and fiber at a cost that reflects a high degree of efficiency.
7. Encourage efficient allocation of both land and human resources.
8. Maintain adequate government stocks for national security.
9. Encourage democratic procedures in making and carrying out farm policy, including the opportunity for individual farm operators to make decisions.

CONSEQUENCES OF CHOOSING VARIOUS ALTERNATIVES

PROGRAM I. Extend the 1964-65 Feed Grain Program in Its Present Form

The 1964-65 Feed Grain Program was a voluntary program. Producers who grew one or more of the feed grains--barley, corn and grain sorghum--

could participate in the program by reducing production by at least 20 per cent of the total feed grain base acreage. The maximum acreage for diversion payments is a) 50 per cent of the acreage base, or b) if the base is 25 acres or less, the entire base.

If they comply, they earn acreage diversion payments and become eligible for price support. Diversion payments are based upon the farm's normal yield and the local price support rate. The payment is made on the qualifying acreage taken out of production. The normal yield is based upon the 1959-1962 average.

Total price supports for feed grains to participants are in two parts--the loan rate and price support payments. The loan rates are: (1) corn at \$1.10 per bushel, (2) barley at \$0.84 per bushel, and (3) grain sorghum at \$1.77 per cwt. Price support payments for eligible participants are: (1) corn at \$0.15 per bushel, (2) barley at \$0.12 per bushel, and (3) grain sorghum at \$0.23 per cwt.

Income

Farm incomes were increased by program payments of \$1.25 billion. Lower supplies and price supports contributed to higher prices for the feed grains produced. The present program has not, however, reduced government stocks to the desired level of 45 million tons of feed grains. Some modifications of the present program may be necessary to allow for the reduction of Commodity Credit Corporation held stocks.

Costs

The cost of land diversion for the 1964 Feed Grain Program was about \$924 million. In addition, the cost of price support activity was about \$260 to \$280 million. Thus, the total cost of the program was about \$1.25 billion plus administration costs.

Acceptability

Acceptance can be measured by participation in the present program. Under the 1964 Feed Grain Program producers voluntarily signed up to divert 34.3 million acres of feed grains to soil conserving uses. The total base acreage on participating farms was 77.5 million acres. Composition of the diverted acreage was corn 23.0 million acres, barley 4.5 million acres, and grain sorghum 6.8 million acres.

The total base acreage for feed grains in the United States was 123.3 million acres in 1964. Farmers representing 62.9 per cent of the national base acreage signed up to participate. They reduced their planted acreage by 44 per cent on the average. This resulted in 27.8 per cent of the national allotment being diverted.

Efficiency

It is difficult to measure what the efficiency of production would have been had the 1964 Feed Grain Program not been in effect. Reduction

of planted acres on an individual farm will reduce efficiency by increasing fixed costs per acre harvested. However, technology may be increased on the remaining land.

PROGRAM IIA. Whole Farm Land Retirement

This proposal is for a voluntary whole farm long-time land retirement program in which owners or operators are free to make their individual decision. It would need to be combined with a voluntary diversion program similar to the suggestions that follow in IIB. Voluntary whole farm land retirement programs can be designed (1) to remove the less productive to average grades of cropland from production in each state or (2) to retire the less productive cropland wherever it occurs in the United States. A whole farm retirement program would need to retire permanently about 50 million acres of marginal cropland from the production of crops out of the 70 million acres. The remaining 20 million acres can be held in reserve by programs as explained later. The 50 million acres amounts to about 11 per cent of the total plowland (tilled plus rotated hay and pasture) of 450 million acres in the U. S.

The period of time the farm is consigned could range from about 5 to 15 years at the option of the producer. Payments would be made on the basis of land productivity on each individual farm. The payments for retired acres in the Conservation Reserve in 1956, 1957, and 1958 averaged \$10 per acre in the U. S. and 10 million acres were consigned. In 1959 and 1960, payments were increased to an average of \$13.50 per acre and another 18 million were consigned. Increased levels of payments will influence the amount of signup. Increasing payments from year to year, however, leads to dissatisfactions among participants. If the lower to average quality land is to be removed in each state, a payment averaging around \$15 per acre would be necessary to attain 50 million acre participation. Payments to cover costs of establishing conserving cover crops are also needed. The cover would be grass, trees, or water. The major emphasis would be to secure permanent land use changes.

The method of payment should facilitate the shift of resources to other uses. Alternative methods of payment that might be considered are: Payments to participants can be made (1) in equal installments over the life of the contract, (2) using a declining balance method in which payments would be high initially and reduced each year till the end of the contract, or (3) payable in the first half of the contract period. The first method (equal annual payments) would attract more land to the program, but may not encourage land use adjustment as readily. It would be attractive to producers retiring from farming. The second method may be found attractive by part-time farmers. The latter method (payable in first half) may be attractive to part-time farmers needing capital to initiate business opportunities, recreation, education or to finance moving to other areas with higher employment opportunities.

The goal of 50 million acres signed up might be attained in 3 to 5 years. Participation in the program would need to be limited on a yearly and aggregate basis to minimize adverse effects in communities. The maximum permitted in the program in a county under the Conservation Reserve was 25 per cent unless it were shown that more than the limit established did not seriously impair community welfare.

Effect on Output

The effect of the Conservation Reserve on output in 1960 with 6 per cent of the cropland consigned as shown by a USDA study was that output would have been greater by 6.9 per cent for corn; 6.6 per cent for hay; 4.6 per cent for wheat; and 4.0 per cent for soybeans. However, the study noted that "apparently some land was shifted to harvested crops from pasture, idle, and other uses." The Conservation Reserve program in an Ohio study reduced total potential output of corn, wheat, oats, and soybeans from 3.1 to 3.4 per cent. There was 4.3 per cent of the total plowland enrolled.

The reductions in the output of various commodities from this choice would vary depending upon the regions of the country in which participation was secured. With about 11 per cent of the plowland in the program, the reduction in output of the major crop commodities would be expected to fall in the 7-11 per cent range.

Income

The program could help maintain farm prices near long-run levels. The program in the absence of price supports would not effect commodity price stability very much. Participants most likely would be retired farmers, part-time farmers or widows. Participants could be expected to have combined farm and non-farm incomes higher than prior to participation.

In communities with below average participation in the program, an increase in the flow of money could be expected. In these communities, the main street businessmen marketing and supply firms could expect increased business. It should be remembered that we had 57 million acres out of production in 1964. Communities with more than average participation in a voluntary land retirement program could expect reduction in agricultural output with different community effects than above.

Tax collections at the local level would be maintained since most local revenues are based on property taxes. Sales and income taxes to local or state governments would change proportional to the change in income.

Costs

Costs of a long-run whole farm land retirement program are less than a voluntary diversion feed grain program. The amount of the payment will

depend upon whether the program is designed to remove the least productive land in the U. S. or the least to average quality land in each state. Assuming the least productive land in the U. S. is to be removed, retirement payments could average about \$600 million annually with 50 million acres at \$12 per acre average payment. If average quality land were removed, the cost would average \$750 annually for 50 million acres at \$15 per acre.

Costs of establishing cover crops may total about \$200 to \$250 million. This cost, however, would be divided according to the annual rate that land enters the program. If all land enters uniformly in a five year period, the annual costs would be near \$50 million. If permanent land use adjustment is achieved, there should be no recurring costs. Studies of the Conservation Reserve indicate that in the U. S. about 50 per cent of the marginal cropland will stay in grass and in the Corn Belt, 30 per cent will remain in grass.

Resource Adjustment

The program reduces the amount of land utilized for the output of crops and helps people adjust to changing conditions and opportunities. The trends to less people, less land and more capital in agriculture will continue with or without programs. Programs can assist the trends or resist the changes. Generally it seems desirable to assist the changes.

Acceptability

Farmers generally have approved this type of voluntary program. A desire to recontract the Conservation Reserve agreement was indicated by 84 per cent of those questioned in Ohio recently. In another Ohio survey, 24 per cent of those surveyed favored a voluntary land retirement program, and another 17 per cent indicated they favored a long-term land retirement program. Forty-two per cent said they would participate in a long-term whole or partial farm land retirement program if it were offered.

This type program provides a degree of certainty and the opportunity for some farmers to retire with social security or on a pension. Some part-time farmers will utilize the program to move permanently from farming although many will reside in the house. It can be expected that widows will participate in the program.

Efficiency

The more efficient land and other resources will continue to produce the food and fiber for the country. The inefficient resources will be withdrawn and retired from agricultural production. Marginal land would be shifted to resource use that will have greater long-run utility than in current uses.

PROGRAM IIB. VOLUNTARY DIVERSION TO ACCOMPANY WHOLE FARM RETIREMENT PROGRAM

This program would be similar to the 1964 Feed Grain Program except that wheat and oat acreage would be included in a farmer's base. The goal of this program would be to retire 20 million acres of cropland now used for the production of feed grains and wheat. The farmer could participate in the program by planting from 20 per cent to 50 per cent less than his base acreage. Payment for this reduction in acreage would be made in the same manner as the 1964 Feed Grain Program. The participant would be allowed to grow any combination of wheat and feed grains, including corn, oats, barley, and grain sorghum, that he desired so long as he did not exceed his base less diverted acres.

The participant would be entitled to Commodity Credit Corporation loans and price support payments at the current price support level for both feed grains and wheat. The loan rate for wheat would reflect its value as a feed in relation to corn.

Income

The greater the participation, the more farm income will increase. Two factors are responsible for this increase. First, the greater the participation, the more supplies will be reduced and with CCC stocks eliminated, open market price will increase, which will increase income to all producers. Secondly, price support payments will also increase the incomes of participants; however, no support payments will be made to non-participants.

Some further increase in income could be expected as a result of the possibility of substitution between crops. This would allow specialization according to areas of comparative advantage, and thus reduce costs of production.

Costs

The cost of diverting 20 million acres would be about \$30 to \$34 per acre, or from \$600 to \$680 million. The cost of price support payments, assuming 1954-1963 average as normal yields, would be about \$185 million. If we assume recent average yields as normal yields of corn at 65 bushels per acre, oats 45 bushels per acre, barley 35 bushels per acre, sorghum 45 bushels per acre, and wheat 25 bushels per acre, the cost of price support payments would be approximately \$215 million. The costs of diversion and price support payments would range from \$785 to \$895 million.

The cost of the 50 million acre whole farm retirement (Program IIA) would range from \$600 to \$750 million. Thus, the total cost of acreage diversion and price support payments would be from \$1,385 to \$1,645 mil., not including costs of administration. The costs are less than those for the wheat and feed grain programs in 1964. The cost of the feed grain program alone was \$1,250 million.

Acceptability

The program is voluntary and does not represent a significant change from present programs. It would appeal to many different groups of farmers. The permanent retirement portion of the program would be popular with farmers who wished to retire or to find non-farm jobs. The substitution between wheat and feed grains within a single base will be more acceptable than two separate bases, and should increase participation. An Ohio survey indicated 24 per cent favored this type program.

Efficiency

Efficiency of production would be increased with this plan over that of the current program. Substitution between crops allowing for increased specialization should lower costs and increase efficiency. In addition, the permanent retirement of marginal land would increase overall efficiency.

PROGRAM III. The Farm Base Plan

This is a voluntary program designed to reduce total cropland harvested in the U. S. by 70 million acres. The farmer would be given an acreage allotment based on a historical average of his rotated acreage. The individual farmer could receive a cash payment for reducing his harvested acreage, including rotation pasture and tame hay, 20 per cent to 50 per cent below his acreage allotment. Payments would also be made to help defer the cost of planting the diverted acreage to grass or establishing some other suitable cover.

Since hay and rotated pasture land is included in the computation of a farmer's base acreage, the diversion payment per acre would be substantially less than for the Voluntary Diversion Plan discussed in Program IIB. This payment would likely average \$18 to \$20 per acre nationally. It would be adjusted to reflect the productivity of the land. The participant would also be entitled to receive Commodity Credit Corporation loans and support payments for corn, oats, barley, sorghum, wheat, soybeans or other eligible crops. The support rate could be held at the current level; however, the loan rate might be dropped while the support payment is increased to encourage participation.

Income

This plan would increase farm income less than the combined Voluntary Diversion Plan since the land retirement payments would be less. The benefits of this program would accrue to the larger farmers as they would have more to gain by participation. More dependence would be placed upon the market as the source of income.

Cost

The cost of land diversion would be \$1,260 million to \$1,400 for 70 million acres or a little less than the previous alternative. The cost of price support activity would be greater than for the Voluntary Diversion Plan since more acreage would be eligible for payments. Assuming 1954-1963 normal yields, the cost would be about \$660 million. However, if we assume normal yields of corn 65 bushels per acre, oats 45 bushels per acre, barley 35 bushels, sorghum 45 bushels per acre, and wheat 25 bushels per acre, the cost would be approximately \$760 million. Thus, the total cost of the program for feed grains-wheat excluding administrative costs would be in the \$1,920 million to \$2,160 million range.

Acceptability

This program would probably be more acceptable to farmers than the Voluntary Diversion Plan since the farmer would be free to decide the kind and amount of crops to be grown upon the acres remaining in production. An Ohio survey conducted in the fall of 1964 indicated that over two-thirds of the respondents favored a whole farm base rather than allotments on individual crops.

Efficiency

This program would increase efficiency due to an increased opportunity for specialization and the corresponding reduction in cost. This increase could be partially offset since there is less assurance that the marginal land will be diverted.

PART II CONSIDERATIONS IN WHEAT POLICY

The Voluntary Wheat Program of 1964 expires in 1965. If no new legislation is passed, the Secretary of Agriculture must declare a marketing quota by August 15, 1965 and call for a referendum.

RESUME OF THE 1965 VOLUNTARY WHEAT PROGRAM

Objectives

The objectives are: (1) raise income to wheat growers, (2) reduce government storage stocks and taxpayers' costs, and (3) permit the United States to assume its responsibility and realize benefits of the International Wheat Agreement.

Methods

To accomplish the above objectives the program authorizes: (a) acreage allotments, (b) price support loans, (c) marketing certificates, and (d) diversion payments. Participation by farmers is on a voluntary basis.

The Secretary of Agriculture declared a National Wheat Allotment of 49.5 million acres applicable to the 1964-75 wheat crop. Current legislation provides for an additional allotment on small farms and results in an additional 3.8 million acres.

For the 1965 crop, the national average price support loan rate is \$1.25 per bushel. Certificates for domestic and export markets are valued at 75 cents and 25 cents respectively. These certificates are allocated on the basis of 45 per cent for domestic and 35 per cent for export on normal production of the individual farm allotment.

For 1965 wheat and feed grain substitution is possible. If a producer has both a wheat allotment and a feed grain base, he will be eligible to use the substitution provision provided he participates in both programs. Feed grains grown on allotted wheat acreage may be put under loan, but there is no eligibility for feed grain support payments on diverted acres. Likewise, there are no certificates issued for wheat grown on feed grain acres. Diversion payments are provided for those farmers who divert at least 10 per cent of their acreage in addition to the 11.11 per cent necessary for participation.

WHEAT SITUATION FOR LEGISLATIVE CONSIDERATION

Wheat production represents a major source of income to a large segment of agriculture. It is also important to other segments in that it facilitates a more complete use of resources committed to agriculture. The crop is grown in over 40 states, on about one-half of all farms, and out of each six acres of cropland harvested. It ranks second among all crops in terms of the land resource used. The supply of wheat tends to be very unresponsive to price changes, but production has increased over time in response to technological change.

Output of Wheat Has Increased

The production of wheat has been more than one billion bushels in 11 of the last 15 years, reaching a record of 1.5 billion bushels in 1958. While acreages have been reduced primarily through government programs from an annual average of 62.4 million from 1950-54 to 48.8 million in 1959-63, average production in the latter period increased by almost 9 per cent. This reflects increased yields of about 40 per cent. Production has been at a level such that it was more than sufficient, in most years, to meet domestic requirements and the export demand, thus increasing year-to-year stocks. Carryover stocks were at a record level of 1.4 billion bushels in 1961. Since that year stocks have declined each year reaching an estimated level of 900 million bushels, as of June 30, 1965. The Secretary has indicated that a carryover of 600 million bushels is desirable.

Domestic Demand for Wheat Stable

Over the recent past, per capita consumption of wheat has been declining. However, this has been just about offset by increases in population so that total human consumption in the U. S. has remained relatively stable ranging from 470 to slightly more than 500 million bushels over the past 30 years.

The use of wheat for feed has generally declined. This decline can be explained by the level of wheat prices relative to feed grains. When the price of wheat is near the price of corn, larger quantities of wheat are fed. As the price spread widens, the quantity of wheat fed decreases. Exports have been increasing and over the past four years have exceeded domestic use. However, the increase in exports has not been sufficient to reduce carryover to the level deemed desirable by the Secretary.

Exports of Wheat Increasing

During the period 1958-62 the U. S. exports averaged 39 per cent of the total world wheat exports. It is highly probable that the U. S. will export a larger proportion of total world exports in the future. Between 1955-57 and 1960-62, the U. S. proportion increased by about seven-tenths per cent a year. In the latter period, U. S. exports represented 41.4 per cent of world exports as compared with 35.9 per cent during the former period.

An additional indication of likely U. S. prospects is found in the level of world consumption and production. It has been estimated that for every future increase of 100 million in world population we will need to provide an additional 13 million tons of cereal. Such a level of consumption will require an increase in wheat production as world stocks, primarily in the U. S., are reduced. It is believed that the potential for expansion of production in the major exporting countries, notably Russia, is limited. Most of the increase must come from countries like the United States, France, Canada and Australia.

One of the most critical considerations in the export potential of the U. S. is the willingness to export under the Food for Peace Program, or similar programs under which sales are made for soft currencies. Over the recent past we have been exporting a larger proportion of wheat under the Food for Peace Program.

Wheat Use to Increase but Acreage Will Decline

What of the future? Projections of demand were made for 1970 & 1980.

Based upon projected yields and utilization, a smaller total acreage will be needed in 1970 and about 18 per cent less in 1980 than the harvested acreage of 1960.

Table II

Projections of Wheat Consumption, Yields and Land Required in U. S.

	<u>1960</u>	<u>1970</u>	<u>1980</u>
Per Capita Consumption, lbs.	165	145	135
Total Consumption (mil. bu.)	496	508	561
Total Domestic Use (mil. bu.) <u>1/</u>	537	559	617
Exports	510	731	816
Seed	63	64.5	61.4
Total Use	1110	1354.5	1494.4
Yield (bu/acre)	26.4	30	35
Land Required (mil. acres)	45.8	45.2	42.7

1/ Total consumption increased by 10% to account for other usage.

ALTERNATIVE WHEAT PROGRAMS

Numerous attempts and proposals have been made for solving the wheat problem. These have been both of the voluntary and mandatory types, ranging from a return to the free market to a rather rigid supply management program.

Among various alternatives are:

1. Continue present program, without modification.
2. Continue present program with modification.
3. Include wheat in a broad base plan with feed grains and/or other crops.
4. Return to the free market.
5. Permit free interplay of supply and demand in the market to determine price with direct payments from treasury to bring incomes up to desirable levels.
6. Rigid controls over production, through licensing or other techniques, that would bring supply in balance with demand at some price deemed desirable.

OBJECTIVES OF WHEAT POLICY

To evaluate these alternative proposals, some criteria is needed. An effective and desirable policy for wheat should be one that would:

1. Provide an adequate flow of wheat and wheat products in commercial channels without continual strain on the absorption power of the domestic market or world market.
2. Maintain or improve income of wheat producers.
3. Reduce year-to-year stocks with due consideration for security reserves.
4. Promote adjustments in wheat resource use without contributing to a maladjustment in the use of resources in other farm enterprises.
5. Contribute to foreign aid programs or balance of payments needs.
6. Reduce taxpayer costs.
7. Be acceptable to farmers, consumers and others.

On the basis of these criteria, the last three alternative wheat programs above are eliminated because they would not maintain or improve farm income or be acceptable to farmers and Congress.

CONSEQUENCES OF SELECTED ALTERNATIVES

PROGRAM I. Continue Current Program

Price

The national average support price is \$1.25 per bushel for participating farmers. In addition, they receive domestic certificates valued at 75 cents per bushel and export certificates valued at 25 cents per bushel for 45 and 35 per cent respectively of normal production. Complying growers who divert the required acreage receive an average of \$1.69 per bushel on normal yields.

Income

The present program is voluntary and farmers have two choices. They are: 1) unlimited freedom to produce at market price or 2) restricted production and higher average wheat prices. The current program has a lower support price than previous programs. However, the certificate payments bring the price up to a level that will somewhat approximate and maintain wheat incomes of the recent past. Income to producers in 1964 under this program was \$2 billion from the market value of wheat plus \$470 million from diversion payments. Income to farmers will in 1965 be somewhat lower due to the decrease in the number of export certificates. This assumes approximately the same level of participation in 1965 as in 1964.

Costs

Direct costs to the government of this program are held down by the fact that a major part of the program is financed by domestic cer-

tificates which are paid by consumers through millers. The export certificate worth 25 cents, has required an export subsidy of up to 24 cents per bushel to keep American wheat competitive in world markets. Diversion costs to the government would be approximately \$470 million. The reduction in stocks would reduce storage costs and bring stocks closer to that level deemed desirable for security reserves.

Efficiency

This program provides freedom of choice to participate or not to participate. Through the feed grain--wheat substitution provision, it permits farmers to use their land which is not diverted and other productive resources to produce that combination of crops thought to be most profitable. However, such a program results in some inefficiency in production if the restraints placed on land use result in less than optimum combination of resources. The underemployment of machinery and labor are examples.

Acceptability

On the basis of participation, the program might be judged acceptable to farmers. More than three-fourths of all wheat farmers are participating. However, there is relatively more support and participation in the Great Plains states where wheat alternatives are less favorable than in the Eastern Corn Belt. There has been some feeling that the consequences of not participating in the program are such that farmers, in general, really do not have a choice.

Millers have voiced some objections to the program. These objections are based on: 1) the effort, time and costs involved in administering certificates and 2) the inequitable distribution of income to wheat producers due to a failure to consider different supply-demand relationships for the various classes of wheat.

PROGRAM II. Modify Present Program

One (1) modification might be to make more equitable payments to complying producers of the several classes of wheat through payments that reflect proportionate usage in the domestic and export markets. This might be accomplished by issuing certificates to all producers initially, and at the end of the marketing year make a direct payment to producers of the various classes in proportion to the ratio of normal production on allotted acreage and use in the domestic and export outlets. The present program in terms of allotments, diversion payments, certificates values for millers and exporters would be continued.

A second (2) modification might be to guarantee a price and issue certificates for wheat used in the domestic market only and discontinue export certificates. Wheat produced in excess would be priced at the world and/or feed price. The value of the certificate for wheat in the domestic market could be maintained at 75 cents per bushel. Or, it could be increased to \$1.00 per bushel or some higher value. This modification could be combined with the above suggestion.

A third (3) alternative modification might be to maintain all present provisions except the value of certificates issued to farmers. Under this approach, producers would receive certificates of one value for all of normal production that is now covered regardless of use.

Modifications could be such that there would be no change in farmer incomes in the aggregate or costs to the government. However, there would be differences in individual farmer income depending upon the type of wheat produced and its relative demand-supply position with respect to the domestic and export outlets.

Price and Income

This brief analysis will limit itself to the consequences of discontinuing export certificates. It assumes the present program in terms of allotments, diversion payments and price support loans and payments are similar to the 1965 program.

Farm incomes could be lower, the same, or higher. With certificates at 75 cents per bushel, the average price of wheat would be \$1.55 to \$1.60 per bushel. This compares to \$1.69 per bushel in 1964. Net income from wheat would be reduced with this choice. If the \$1.00 per bushel certificate value were used, the price of wheat and income would remain near present levels. With the value at \$1.25 per bushel, the price of wheat would average 10-14 cents above the \$1.69 level.

Costs

Government costs would be reduced with the elimination of the export certificate in both the short and long run. The reduction in taxpayer costs would be \$100 to \$125 million annually. Government costs of storage through the price support program should be reduced in the longer run as CCC stocks of wheat are reduced. Export sales could increase because of lower prices to foreign purchasers.

Efficiency

Efficiency would not differ from the present program. Resource use trends would continue as in the past. It is likely that the elimination of the export subsidy would improve the competitive position of the U. S. in world wheat markets. The major objections to the export certificates voiced by European importers are (1) price uncertainty and (2) possible abusive practices that arise or could arise in the handling of subsidies.

Acceptability

This program should be acceptable to farmers judged on participation in the present program and because income could be maintained. Congress should approve of the taxpayer reduction by the elimination of export subsidies. Consumers food costs would remain the same as presently with \$1.00 certificates. Increasing the certificate value to \$1.25 per bushel would mean about \$125 million annual increase in consumer food costs.

PROGRAM III. Inclusion of Wheat in a Whole Farm or Grain Base

This alternative is discussed more fully under the Feed Grain Program alternatives. It would provide a base on each farm for all the grain crops or for all harvested cropland, including hay and rotated pasture. The program could be voluntary or mandatory. To be eligible for benefits, the producers would reduce harvested acreage below the base making him eligible for price supports and any payments for diversion. In such a program the support price of wheat would need to be established relative to the corn price. If the support price for corn is established at \$1.10, the support price of wheat would probably be in the \$1.20 to \$1.25 range.

Price and Income

There would be a tendency for production to take place at minimum costs. However, the logical end of such a process would have a depressing effect on price. This would lead to increased shifts in use of resources and production patterns. Those remaining in wheat production, in the long run, could improve total net farm income.

Taxpayer costs

The base plan would result in a considerable reduction in government costs in the long run. However, it might be expected that in some individual years costs under this program might exceed those under a rigid program of supply management.

Acceptability

It would permit freedom of choice enabling an individual to choose that combination of crops which he thinks will maximize his net income. Such a program would be acceptable to those farmers remaining in wheat production because of improved real incomes. Consumers would approve since the real costs and social costs would be reduced. Congress would experience lower government expenditures.

Efficiency

Such a program would promote adjustments in resource use so that a greater efficiency in production would be realized under any rate of technology. It would promote shifts in production to those farms within regions and to those regions with a comparative advantage.