1. A voluntary land retirement program.
2. A voluntary transfer of human resources out of agriculture.
3. An effective production control program.
4. A modified free market price program.

Part II. Resource Adjustment Through Voluntary Land Retirement Programs

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A. How the Alternative Would Work

If a market cannot be found for expanding supplies of farm products and the free economic forces are allowed to work, some of our high-cost crop producing areas will shift to other uses. An intelligent and properly administered land retirement program can ease this shift. In the early stages, fairly uniform shifts throughout the country may be required to obtain immediate but temporary adjustments, but eventually the shifts should be directed heavily toward the lower returning plow land. In our dynamic economy, the adjustments brought about by normal economic forces are more likely to succeed than programs which attempt to reverse the natural trend or to maintain the status quo.

The United States has a total land area of approximately 1,904 million acres. Of this, about 450 million acres are in plow land. Approximately 965 million acres are in permanent hay and pasture. The remaining acreage is in nonpasture forest land, waste, and nonagricultural uses. If a land retirement approach is used to bring present agricultural production and demand into a more desirable balance, something like 50 million acres of this 450 million acres of plow land would need to be shifted out of production. The required acreage adjustment may vary 20 percent either way from the 50 million acres depending upon the type of land taken out and the type of program followed.

The 50 million acres equal 11 percent of the total plow land. The question may be raised of why so large a percentage shift is required. We need to recognize that the lower producing land will be taken out of production and that some slack in the administration of the adjustment programs should be expected. We likewise should recognize that some production arises from the 965 million acres of permanent pasture and hay land. Little adjustment would probably occur in this area under a land retirement program.
The present conservation reserve program has been geared to the retirement of either whole or partial farms. It likewise has been directed toward the retirement of the lowest to average grades of plow land.

A land retirement program could take any one of the three following approaches: (1) It could be directed toward shifting a uniform percentage of plow land out of production on each farm. In this case, in most instances, the lowest producing land on each farm would be retired. (2) Funds could be allotted to each state to be distributed on a whole or partial farm basis in the same proportion as each state's agricultural production is of the total United States production. The program could be directed toward moving the lower to average grades of plow land out of production in each state. (3) A program could be developed for retiring the lowest to average grades of land wherever they are in the United States on a whole or a partial farm basis. A program also could be developed to take out only the higher producing land; however, such an approach would not bring about the most desirable long-time shifts and seems less likely to be used. Thus, the question becomes one of whether we retire the lower grades of plow land on each farm, the lower grades in each state, or the lower grades in the nation as a whole.

1. APPROACH NUMBER ONE. If approach number one is followed, then the payments must be higher than where the program is directed to taking out whole farms. Studies made under IRM Project 1 indicate that payments equal to 50 or 75 percent of the value of the crops grown would have to be made to retire land on a partial farm basis. The lower percentages apply in the case of tobacco and cotton where the cash costs are highest, and the higher percentages are required in the grain areas where a higher percentage of the costs tends to be fixed. This study further showed that a program geared to obtain the participation of two-thirds to three-fourths of the farmers was more practical than one depending on 100 percent participation for success. Certain farmers with the same type and size of farm wanted much more than others for participating on a voluntary basis. Bringing into the program the 25 percent asking the highest payment would increase the cost of such a program considerably.

A farmer who puts part of his farm in retirement cannot reduce his expenses as much per acre as a farmer who puts his entire farm in the program. On a partial farm basis, a farm operator has to spread his labor, machinery, and other costs over fewer acres and in most cases, only his cash costs for seed, fertilizer, and the like can be reduced by putting a small portion of his farm in reserve.

This phase of IRM Project 1 was centered at Purdue University and was entitled "Analysis of Various National Grass and Soil Bank Proposals for Adjusting Production and Adding Stability to Farm Incomes."
Once such a program of partial farm retirement is discontinued, then this plant is likely to go back into production. Such an approach does not bring about the adjustment or shift in the marginal land that would normally take place with competitive prices. Such a program does have some advantages politically since it tends to distribute funds to many farmers and results in the minimum immediate social and economic adjustment.

2. **Approach Number Two.** If this approach is taken, the lower to average grades of land in each state can be retired on a whole or partial farm basis. It gives each state its proportionate share of the total funds. This approach has less political appeal than where the funds go to nearly every farmer, but more appeal than if the funds were to go mainly to certain sections of the country under approach number three. Where the program is directed at the whole farm, payments for a given amount of land retired are less than on the partial farm basis.

From society's standpoint this approach is more efficient than number one. From agriculture's standpoint, if the program is directed at shifting only the lower grades of land, it may so concentrate the removal of a large number of farms in certain counties that social and institutional problems are created. In other areas where farmers retire and continue to live on their land or where they have off-farm work opportunities, it may improve the situation.

3. **Approach Number Three.** This approach involves the removal of the low producing land in the United States and may be conducted on a partial or whole farm basis. From a dollar and cents standpoint, this is the most efficient approach. It would tend to remove the land that normal competitive forces would shift out of production. This land would most likely stay out of production if the program were discontinued. Such a program would concentrate participation in certain areas. It would thus no doubt create the greatest social and institutional problem of the three approaches, especially where population shifts were involved. It would likewise concentrate the payments in certain areas, which would raise political problems. Analysis made under IRM Project 1 would indicate that if this approach were used, approximately two-thirds of the adjustment in acreage would occur in the cotton and wheat areas.

**B. Cost of the Problem**

Under approach number one where the land was taken out entirely on a partial farm basis, the cost of the program would be highest because only a small share of the production costs can be eliminated. Figuring the payment at two-thirds of the value of the crops taken out...
of production, the cost would be $25 to $30 per acre as a national average. Even though some better land would be taken out of production on the average with such a program, more loss would occur in setting up bases, and production would tend to increase on the remaining acres. Therefore, the required acreage reduction would still be somewhere near the 50 million acre level. Thus, this approach would require payments of from 1.25 to 1.5 billion dollars per year plus the cost of reseeding with the reseeding and administrative cost added, such a program might cost 1.5 to 2 billion dollars annually.

For approaches two and three we can draw on the experiences of the last two years. In 1958, the average payment under the conservation reserve program for the total United States was $10 per acre plus 80 percent of the cost of establishing cover. Under this rate of payment, 10 million acres were offered to the government. The average 1959 payment for the United States was raised to $13.50 per acre. With this rate of payment, an additional 18 million acres were offered.

With payments raised to a national average of $18 per acre, the 50 million acres likely would be offered. This would result in a total average cost of 900 million dollars plus the cost of establishing cover. Combining the renting and seeding payments and the cost of administration, such a program would probably run about 1.25 billion dollars annually over a five or ten year period.

The cost of a land retirement program under approaches two and three would be much less than we now are spending on agricultural programs. It would also redirect the funds from such items as storage and other nonfarm applications to farmers.

C. Economic Considerations

1. Increasing Efficiency. A study at Purdue indicates that about half of our annual increase in production occurs from the adoption of new technology not related to prices. The other half comes from increased inputs. Thus, a certain amount of our technology is likely to continue with or without a farm program. If a program raises prices substantially, it would speed up the increase. However, if a land retirement program is kept at moderate levels, the increase in agricultural output would probably be relatively small compared with output without any programs.

2. Raising Farm Income. The level of farm prices can be raised to generally comparable levels by this program if sufficient acreage is shifted out of crops. The goal, however, should not be to raise prices much above the long-time competitive levels, as monetary gains beyond
this point may tend to be capitalized into land or to decrease the outward flow of human resources in the more productive areas. Either of these results would tend to decrease the gains flowing to agricultural workers.

3. **Stabilizing Farm Income.** A land retirement program probably would not affect individual commodity price stability very much. Producers could continue to vary the amounts of the individual commodities produced, and production would continue to vary because of weather and other factors. These variations would continue to affect prices. The general level of all farm prices would be more stabilized, and this might have some modest stabilizing effect on prices of individual commodities.

D. Other Considerations

1. **Human Adjustment.** A land retirement program directed to removing whole farm units from production may also aid in the adjustment of human resources. Many farmers participating in both phases of the soil bank program have been part-time farmers and farmers approaching retirement ages. Dr. A. Allan Schmid of the University of Wisconsin summarizes the results of a survey of 400 farmers participating in the acreage reserve program in 1957 in southeastern Wisconsin as follows:

   Most of the farmers participating in the soil bank were revealed by this survey to be part-time and older farmers looking for an opportunity to reduce farm operations. The alternatives given these groups may well be the most significant result of the soil bank program.²

   If a land retirement program is directed at the marginal farm units, it may enable many families to make an adjustment that they otherwise would find extremely difficult. A land retirement program must not, however, raise prices sufficiently to draw other additional land into agricultural production thus offsetting the amount retired.

2. **Freedom.** Prices would continue free in the market place to guide production and consumption except as they were modified by the supply of land and in turn by the volume of production. A voluntary land retirement program simply provides another bidder for the use of the land resources. Individual farmers would be free to plan the best use of their resources and their farm operations. Their actions would be the same as under free prices except as they choose to take advantage of the land retirement opportunity.

3. **Social Costs.** The social costs will depend to some degree on the type of land retirement program followed. A program directed

toward removing whole farms on a large scale in the least productive regions would tend to concentrate the adjustment in certain areas. This would involve major social and community changes in these areas. Such an approach might result in the most efficient agriculture and the least cost to society. This is the type of adjustment that would likely take place under free prices, but at a much slower rate. A program which retired the land more uniformly throughout the United States would result in less violent community and individual adjustments in agriculture. It probably would be more costly to society over the longer run.

A land retirement program will require tax dollars and if effective, will raise food prices slightly. This is the very purpose of the program—to bring about resource adjustment and to decrease output so that farmers may receive returns for their resources more in line with those received by the rest of society. This approach will likewise clearly identify the tax cost of the program.

A question may be raised regarding where such a land retirement program would end. Will technology make necessary an ever-enlarging retirement program with increasing cost to the federal government? Or will demand catch up with supply and make it possible to put the land back into production?

Evidence indicates that the withdrawal problem is likely to be serious if land is taken out uniformly on all farms. For this reason, making the payment on whole farm units in the more marginal areas would appear more permanent and economically sound. To the extent the land is put into grass, timber, or recreational uses, it may stay in those uses if payments are eventually withdrawn. In some areas the land might even eventually be purchased by the government for public use.

Part III. Resource Adjustment Through a Voluntary Transfer of Human Resources Out of Agriculture

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A. How the Alternative Would Work

One of many different avenues could be taken to encourage the movement of human resources out of commercial farming (licensing, market price, land retirement, etc.) A direct approach would be to offer a given amount of money and special services to certain farmers if they would agree to be employed in a nonfarm job. This money and service should be offered as part of a guidance and training program