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Effects of ACREAGE-ALLOTMENT PROGRAMS, 1954-1955

A Detailed Analysis for Selected Crops and Areas

Agricultural Research Service
UNITED STATES DEPARTMENT OF AGRICULTURE
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CONTENTS

PREFACE

This is a report of work initiated in July 1955, in response to a request from the Appropriations Committees of the 84th Congress that the Agricultural Research Service, U. S. Department of Agriculture, "make a special study of (a) the effect on farm income and the general economy of the United States of acreage reductions imposed on 1954 and 1955 crops, and (b) the most satisfactory solution to this problem, including the encouragement of sound soil conservation practices upon land diverted from production under such acreage restrictions."

This report presents the results of cooperative work by the Department of Agriculture and the Land-Grant Colleges. Because the problem of diverted acres is of interest to other agencies in the Department of Agriculture and to the State agricultural experiment stations, the Agricultural Research Service solicited their counsel and assistance in planning and conducting the study reported here. The Experiment Station Committee on Organization and Policy voted to cooperate. A representative from each of the four experiment station regions was designated to advise with the Department in developing study plans. In addition, the State experiment station in each State in which field studies were initiated cooperated with the Department in planning and conducting the studies.

The four designated regional representatives of the State experiment stations, George Brandow, Pennsylvania; George Montgomery, Kansas; T. R. Hedges, California; and R. J. Saville, Mississippi, assisted representatives of the Agricultural Research Service, Soil Conservation Service, Agricultural Conservation Program Service, Commodity Stabilization Service, Agricultural Marketing Service, and the Office of Experiment Stations in the Department in developing plans for the study and in reviewing this progress report. However, neither the representatives of the State experiment stations nor the representatives of Department agencies other than the Agricultural Research Service participated in the writing of the report nor are they responsible for the interpretations made. This report was prepared in the Farm Economics Research Division, Agricultural Research Service, U. S. Department of Agriculture. It is not possible here to give recognition to all those who made significant contributions to it.

It was obvious that complete and adequate solutions to the complex and chronic problem of surplus crops and acreage diversion could not be developed quickly. The study reported here, therefore, was confined largely to analyses of the national and regional effects of the allotment programs, and to an appraisal in a number of selected areas that produce cotton, wheat, corn, or rice, of the effect of acreage-reduction

programs on farm production and income, and on conservation practices. No analyses of the peanut-and tobacco-allotment programs were attempted because of the relatively small acreages involved and the long duration of the peanut and tobacco programs.

The aggregate phases of the study are reported in the first two sections of this report. The appraisal of effects in specific farm situations is reported in the third section. The latter section is based primarily on an enumerative survey of a cross section of farmers in 14 selected cotton, wheat, corn, or rice type-of-farming areas. The surveys were made to determine for different farm situations the effects of acreage-reduction programs on the production of specified allotment and alternative crops and livestock, on farm practices, farm tenure, conservation, and farm income. In all, nearly 3,000 farmers were interviewed. Producers of the major allotment crop in each of these areas also were asked questions that would tend to bring out their reasons for changes or lack of changes in their farming programs. The relative productivity of diverted acreage compared with the acreage retained in allotment crops was determined wherever feasible. In a few selected areas, land use capability data that had been developed by Soil Conservation Districts were compared with the changes in land use reported by the individual farmers interviewed.

Effects of changes in farming on farmers' income and expenses are illustrated by calculating the net income effects of such changes for the typical types and sizes of farms found in each of the 14 study areas. In the study areas where such information was available, data for the "budgetary analysis" were derived from the "Commercial Family-Operated Farms" series maintained by the Farm Economics Research Division, Agricultural Research Service, U. S. Department of Agriculture.

Unless otherwise specified, national and regional crop and livestock production data carried in this report are based on official estimates of the Crop and Livestock Reporting Board available through December 1955. Subsequent revisions and more recent estimates have not been incorporated. It was felt that they would add little to the usefulness of this detailed report in that it is intended primarily as a reference volume to depict the major effects of acreage allotment programs.

EFFECTS OF ACREAGE-ALLOTMENT PROGRAMS, 1954-1955

A DETAILED ANALYSIS FOR SELECTED CROPS AND AREAS

Prepared in Farm Economics Research Division

HIGHLIGHTS [1/]

The acreage-allotment, marketing-quota, and associated price-support programs that have been in effect during the last 2 years have been generally successful in restraining the production and promoting more orderly marketings of the "basic" crops carried. Thus, these programs were successful in achieving the objective outlined by the Congress. But inasmuch as the production of most feed grains and other nonbasic crops was not controlled by allotments, much of the land and other resources diverted from production of the "basic" crops were used to grow feed grains other than corn, oilseed crops, rye, and hay. An 8-percent reduction from 1953 to 1955 in the total production of the 4 basic allotment crops - cotton, wheat, corn and rice - was more than offset by increases in production of nonallotment crops.

Acreage allotments, even when coupled with price supports, have not been effective in controlling the acreage of corn where the corn is fed to livestock on the farm on which it is grown.

Most producers of cotton, wheat, and rice complied with the acreage allotments and marketing quotas in effect for these crops, but only 40 percent of the farmers in the commercial corn area complied with corn allotments. The harvested acreage of corn decreased by only 1 percent between 1953 and 1955 compared with 30- and 31-percent reductions in wheat and cotton and a 28-percent reduction in rice (between 1954 and 1955).

Allotment programs that control acreage do not always control production. With acreage restricted, producers tend to step up the use of fertilizer and other yield-increasing practices. Yields of wheat increased by 15 percent and yields of cotton by 28 percent between 1953 and 1955. Yields of rice increased by 16 percent between 1954 and 1955. Much of this increase in yield probably would have been accomplished without acreage allotments, but the allotment programs undoubtedly accelerated the use of yield-increasing practices. The smaller acreage of cotton was concentrated on the best land and a higher proportion of the wheat acreage was planted on fallow.

1/ Taken from a summary report of this study, "Effects of Acreage Allotment Programs, 1954 and 1955, A Summary Report," USDA, Production Research Report No. 3, June 1956.

Despite important shifts in acreages of individual crops, allotment programs have affected major uses of land very little. The total planted acreage of all field crops decreased by only 1 percent from 1953 to 1955; relatively little land was shifted from harvested crops to pasture.

Allotment programs in 1954 and 1955 have not induced any significant shift to conservation systems of farming. Farmers generally have been reluctant to make the capital investments required for improved pasture and for forage production for roughage-consuming livestock because of their desire to continue production of more profitable allotment crops and because of the annual nature of the programs.

The rapid increase in carryover stocks of most allotment crops has been reduced by the acreage-allotment programs. Only moderate additions to carryover stocks of wheat, corn, and rice are expected from the 1955 crop. Substantial additions to carryover stocks of cotton are expected only because of record yields.

Diversion of land and other production resources from allotment crops to feed grains other than corn resulted in a 10-percent increase in production of feed grains and a record accumulation of total stocks of feed grains. The investments required in total CCC stocks were reduced, however, because the value of the increased additions to stocks of feed grains was more than offset by reductions in the additions to stocks of cotton, wheat, and rice.

The expansion in production of feed grains and the lower prices of these grains tended to encourage an expansion in production of grain-consuming livestock. However, much of the 6-percent increase in this type of livestock that occurred between 1953 and 1955 probably would have occurred without allotment programs. There was no increase in these years in roughage-consuming types of livestock; it would take much longer than 2 years for acreage-allotment programs to bring about a significant increase in these types. The temporary nature of the present programs is not conducive to such long-term shifts.

The acreage allotment and associated price-support programs tended to support farm income from crops. Although the total farm value of crop production decreased from 1953 to 1955, it would have decreased even more if production of the allotment crops had continued at preallotment levels and if prices had not been supported by Government programs.

In the cotton areas studied.- Incomes were higher in these areas in 1955 than in 1953 because of higher yields, an expansion of alternative crops, and reduced cotton-production expenses. Higher yields in 1955

than in 1953 were due to better weather, more fertilizer, and other improved cultural practices, and the concentration of a smaller acreage of cotton on the better land.

In most of the areas studied, farmers were in position to make adjustments, and land diverted from cotton was used to produce other crops - chiefly feed grains, plus soybeans in the Mississippi Delta, and specialty crops in the San Joaquin Valley of California. In the Clay Hills of Mississippi and Tennessee and the Southern Piedmont of South Carolina and Georgia, where alternatives were more limited, from one-fourth to two-fifths of the diverted acreage was idle in 1955. In all areas studied, unrestricted production of cotton would have been preferred if it could have been achieved without disastrous price effects. Also, the larger volume of cotton could have been produced at a lower cost per unit. If cotton had been produced in 1955 at preallotment levels in the areas studied, farmers could have sold the cotton at prices from 5 to 18 percent lower without any sacrifice in farm incomes, but they would have produced 20 to 56 percent more cotton.

In the Piedmont, Clay Hills, and Delta areas, many cropper and share-tenant families left the farms as a result of the reduction in cotton acreage. Despite this migration, the acreage of cotton per worker in 1955 was only three-fourths the acreage per worker in 1953.

In the wheat areas studied. - Farm production and farm returns in most of these areas were more affected by the weather than by acreage allotments and marketing quotas. In north-central North Dakota and west-central Kansas, both production and returns on wheat farms generally were higher in 1955 than in 1953 because yields in 1953 had been restricted greatly by drought. Had average or normal yields prevailed in both 1953 and 1955, and had prices remained constant, farm returns in these and other wheat areas studied would have declined with the decline in acreage planted to wheat. Alternative uses for land are more restricted in the drier wheat areas than in most farming areas.

Diverted acreage in the wheat areas was used mainly for production of feed grains and for summer fallow. Some acreage was used for flaxseed in North Dakota and some for dry peas in the Northwest. These uses generally are less attractive than wheat. If farmers had been permitted to grow the same acreage of wheat in 1955 as in 1953, and if normal yields had prevailed, they could have maintained their 1955 incomes with up to 24-percent reductions in the 1955 support price of wheat.

In the corn areas studied. - Compliance with corn-acreage allotments was limited chiefly to cash-grain farmers and farmers who were allotted

an acreage at least as large as the acreage they intended to plant anyway. Livestock farmers had little incentive to comply with corn allotments. In order to avoid payment of penalties, most wheat growers in these areas either complied with their wheat allotments or grew no more than 15 acres of wheat.

The effect of reductions in acreages of corn on compliance farms was more than offset by other adjustments, which included: Increases in the acreages of corn on noncompliance farms; increases in use of fertilizer and other improved practices on both compliance and noncompliance farms; and increases in acreages and production of feed grains other than corn. In both the Illinois and the Pennsylvania areas, total production of feed grains increased rather than decreased from that of 1953, although it was lower than it would have been without the acreage allotment program.

Land diverted from corn and wheat was used primarily to produce other feed grains and soybeans. Only small acreages went into hay or rotation pasture. The program had no notable effects on conservation in the 2 years studied.

Compliance with corn allotments was profitable for farmers who sold corn, but not for those who fed the corn.

In the rice areas studied. - Most farmers complied with their allotments or planned to do so. Most of the land diverted from rice was left idle, except that much of it in Louisiana was pastured and much of it in California was fallowed. If normal yields and 1955 prices had prevailed, the farming systems of 1955 would have provided net farm incomes only 80 to 92 percent as large as those to be expected with the preallotment acreages.

In all areas studied. - The effect of allotment programs on farm income depended partly on the level of support prices in relation to the prices that would have been received if no price support had been available, and partly on the productive use that could be made of the land and other resources released by the allotment programs.

Effective use of the land, labor, and equipment released depended on opportunities for (1) shifting the acreage diverted to other income-producing uses, (2) more intensive use of both allotment and diverted acreages by applying more fertilizer and other improved practices, (3) rental or purchase of additional land, and (4) employment off the farm.

BACKGROUND

Provisions of Programs

As provided by existing legislation, acreage-allotment programs were put into effect for cotton, wheat, and corn in 1954 and 1955 and for rice in 1955. Acreage restrictions also had been in effect for these crops in 1950 but in no other year since World War II. In the areas and years in which these programs were in effect, farmers were required to comply with acreage allotments established for their farms in order to be eligible for price supports under government programs.

Having been approved by at least two-thirds of the growers, marketing quotas were applied along with acreage allotments for cotton, wheat, and rice. Farmers who harvested acreages of these crops in excess of their allotments therefore were subject to penalties on excess production. As marketing quotas were not in effect for corn, farmers who exceeded their acreage allotments for corn could sell or use the crop as they wished without payment of penalties.

Acreage-allotment and marketing-quota programs have been in effect for peanuts during all years since 1949 and for most varieties of tobacco for a longer period. There have been no major changes recently in programs that affect peanuts and tobacco as there were for cotton, wheat, corn, and rice in 1954 and 1955. Therefore, attention here is centered on the effects of acreage allotments imposed on cotton, wheat, corn, and rice in 1954 and 1955.

During these 2 years, acreage allotments were in effect for corn and wheat in commercial areas only. The commercial corn area included 834 counties in 1954 and 805 counties in 1955. The average price-support level for corn in the commercial area was 90 percent of parity, or $1.62 a bushel, in 1954 and 87 percent of parity, or $1.58 a bushel, in 1955. Farmers outside the commercial corn area were free to grow as many acres of corn as they wanted without having their eligibility for price support affected. However, the level of price support for corn in the noncommercial area was only 75 percent of the level in the commercial area.

The commercial wheat area included all States in 1954. But in 1955 it excluded 12 States for which acreage allotments were less than 25,000 acres. Although farmers in the commercial area were not eligible for price support and they were subject to the payment of penalties if they exceeded their acreage allotments, they could dispose of wheat in any way they wished without payment of penalties if they harvested 15 or

fewer acres, or if normal production on the acreage planted was less than 200 bushels. In the commercial area, the average price-support level for wheat was 90 percent of parity, or $2.24 a bushel, in 1954 and and 82.5 percent of parity, or $2.06 a bushel, in 1955. In the noncommercial States, there were no restrictions on the acreages of wheat farmers could grow. But the level of price support in the noncommercial areas was only 75 percent of the level in the commercial areas.

Acreage allotments were in effect for all growers of cotton in 1954 and 1955 and for all growers of rice in 1955. The average level of price support for upland cotton was 90 percent of parity for both years, or 31.58 cents a pound in 1954 and 31.7 cents a pound in 1955 (for middling 7/8 inch). The average level of price support for rice was 85 percent of parity, or 4.66 cents a pound, in 1955.

Farmers were free to use land diverted from allotment crops to grow other crops. Price-support programs were in effect for certain other crops at a lower level in relation to parity than for cotton, wheat, corn, and rice. In 1955, for example, the average support level was 70 percent of parity for oats, barley, grain sorghum, soybeans, and rye. It was 65 percent of parity for flaxseed.

Cross-compliance was not required, that is, farmers who grew more than one of the acreage-allotment crops were not required to comply with allotments on their farms for any of the other crops in order to be eligible for price support on the one crop. Many farmers, for example, complied with allotments for wheat but did not comply with those for corn. Thus, they were eligible for price support on wheat but not on corn.

Farmers were eligible for agricultural conservation payments in 1954 even though they did not comply with the acreage allotments established for their farms. However, in 1955 prior to May 23 (when Section 348 of the Soil Conservation and Domestic Allotment Act was repealed) farmers were not eligible for agricultural conservation payments if they did not comply with acreage allotments. Although this legislation was repealed in May of 1955, it affected farmers' plans for the year, especially relative to participation in the Agricultural Conservation Program.

What the Programs Called For

National acreage allotments for cotton, wheat, corn, and rice in 1954 and 1955 are compared with the harvested acreages of these crops in 1953, 1954, and 1955 (table 1). Legislation specified the procedure to be followed in determining national acreage allotments as well as how acreage allotments were to be determined for individual farms.

Table 1. - Acreage allotments for corn, wheat, cotton, and rice in 1954 and 1955, and harvested acreages of these crops in 1953, 1954, and 1955, United States

Crop	Acreage allotment		Harvested acreage 1/		
	1954	1955	1953	1954	1955 preliminary
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
Corn 2/	48,896	49,843	55,532	55,092	55,299
Wheat	62,000	55,000	67,661	54,279	47,222
Cotton 3/	21,420	18,159	24,341	19,251	16,882
Rice	---	1,928	2,129	2,542	1,822
Total	---	124,930	149,663	131,164	121,225

1/ A farmer generally was in compliance when the acreage he harvested of a crop was within the acreage allotment for that crop for his farm.
2/ Acreages shown are those for commercial corn areas only.
3/ Total of acreage allotments for upland and extra long staple cotton.

Legislation also specified the procedures to be followed in establishing levels of price support. 2/

Total acreages of cotton, wheat, and rice were reduced greatly under acreage-allotment and marketing-quota programs. In contrast, the total acreage of corn harvested in the commercial area was substantially above national acreage allotments in 1954 and 1955. Many farmers exceeded their corn acreage allotments. The total acreage of corn changed very little from 1953 to 1955.

In the case of cotton, wheat, and rice, total acreages harvested were less than national acreage allotments. Crop failure and other factors prevented many farmers from harvesting as many acres as provided for by their acreage allotments.

Acreage-allotment programs called for a total reduction of nearly 21 million acres, or about 14 percent, in the harvested acreages of corn,

2/ For a detailed explanation of acreage-allotment, marketing-quota, and price-support programs, see Price Programs, U. S. Dept. Agr. Agr. Inform. Bul. 135, January 1955.

wheat, and cotton from 1953 to 1954 (table 2). 3/ For some farms, acreage allotments established in 1954 and 1955 were larger than acreages harvested in 1953. This was especially true of wheat farms in the high-risk areas of the Great Plains where there was much crop failure in 1953.

Table 2. - Reductions in harvested acreages of corn, wheat, cotton, and rice called for by acreage-allotment programs from 1953 to 1954 and 1955, United States 1/

Crop	1953 to 1954		1953 to 1955	
	Reduction in harvested acreage	Percentage reduction	Reduction in harvested acreage	Percentage reduction
	1,000 acres	Percent	1,000 acres	Percent
Corn	9,128	11	5,959	9
Wheat	8,631	15	14,866	24
Cotton	3,042	12	6,227	26
Rice	---	---	307	14
Total	20,801	14	27,359	18

1/ Total of reductions for individual States, and in the case of corn for commercial areas within States required in order that harvested acreages in 1954 and 1955 not exceed allotments.

Allotment programs called for additional reductions in acreages of wheat and cotton, a reduction in the acreage of rice, and an increase in the national acreage allotment for corn from 1954 to 1955. A net reduction of 27 million acres, or 18 percent, in the total harvested acreage of these crops from 1953 to 1955 was required.

These four allotment crops - corn, wheat, cotton, and rice - accounted for nearly half of the 341 million acres of all field crops harvested

3/ The 21 million acres referred to here make up the total of the differences between the harvested acreage of each of these crops in each State in 1953 (and in the commercial area of each State in the case of corn) and the acreage allotment of each of these crops in each State in 1954. The total reduction called for by acreage allotments would have been even greater if it had been computed by adding the differences between acreages harvested in 1953 and acreage allotments in 1954 for individual farms.

in 1953. The reduction in acreages of these crops called for by allotment programs from 1953 to 1954 was equivalent to 6 percent of the harvested acreage of all field crops. The reduction called for from 1953 to 1955 was 8 percent. However, land diverted from allotment crops could be used to grow other crops, and it was not necessary to reduce the total acreage of harvested crops by these percentages.

Additions to Carryover Stocks

An accumulation of large stocks of wheat, cotton, corn, and rice was a major factor causing the imposition of acreage allotments for these crops. Production of wheat, cotton, and corn in 1952 and 1953 had been much larger than the quantities disposed of in the marketing years that followed. As a result, there were large additions to carryover stocks of these commodities from the 1952 and 1953 crops. Production of rice also was much larger than the quantity disposed of, especially in 1954.

Stocks increased by two-thirds of a billion bushels of wheat, nearly half a billion bushels of corn, and 7 million bales of cotton from the beginning of the 1952 marketing year to that of 1954 (table 3). These increases were relatively large in relation to annual production. The addition to stocks of wheat, for example, was equal to 55 percent of 1953 production; that of cotton, 43 percent; and that of corn, 14 percent.

Table 3.- Annual increases in carryover stocks of wheat, cotton, corn, rice, and feed grains, by marketing years, United States, 1952-56 1/

Marketing year	Wheat	Cotton 2/	Rice	Corn	Feed grains 3/
	Mil. bu.	1,000 bales	1,000 cwt.	Mil. bu.	Mil. tons
1952-53	306	2,816	-525	282	6.8
1953-54 4/	340	4,123	6,031	151	4.8
1954-55 4/	120	1,477	22,354	109	7.2
1955-56 5/	58	3,495	7,050	121	4.0

1/ Data indicate changes in stocks in all positions - July 1 for wheat, August 1 for cotton and rice, October 1 for corn, and in the case of feed grains, October 1 for corn and grain sorghums, and July 1 for oats and barley.

2/ Running bales.

3/ Includes corn, grain sorghum, barley, and oats.

4/ Preliminary.

5/ Forecast.

Despite acreage allotments, additions to stocks continued from the 1954 wheat, cotton, and corn crops, although they were smaller than in the previous 2 years (fig. 1). Small increases in stocks of wheat and corn and a substantial increase in stocks of cotton also occurred from the 1955 crop.

From relatively moderate levels at the beginning of the 1952 marketing year, carryover stocks of these crops increased to the levels shown in table 4. Total stocks of wheat at the beginning of the 1955 marketing year were greater than total production of wheat in the United States in 1954 or 1955 while those of cotton on August 1, 1955, were equal to 90 percent of all cotton produced in 1955. Stocks of corn on October 1, 1955, were equivalent to about a third of 1 year's production and those of rice on August 1 to about half of all rice produced in 1955. Total stocks of feed grains,

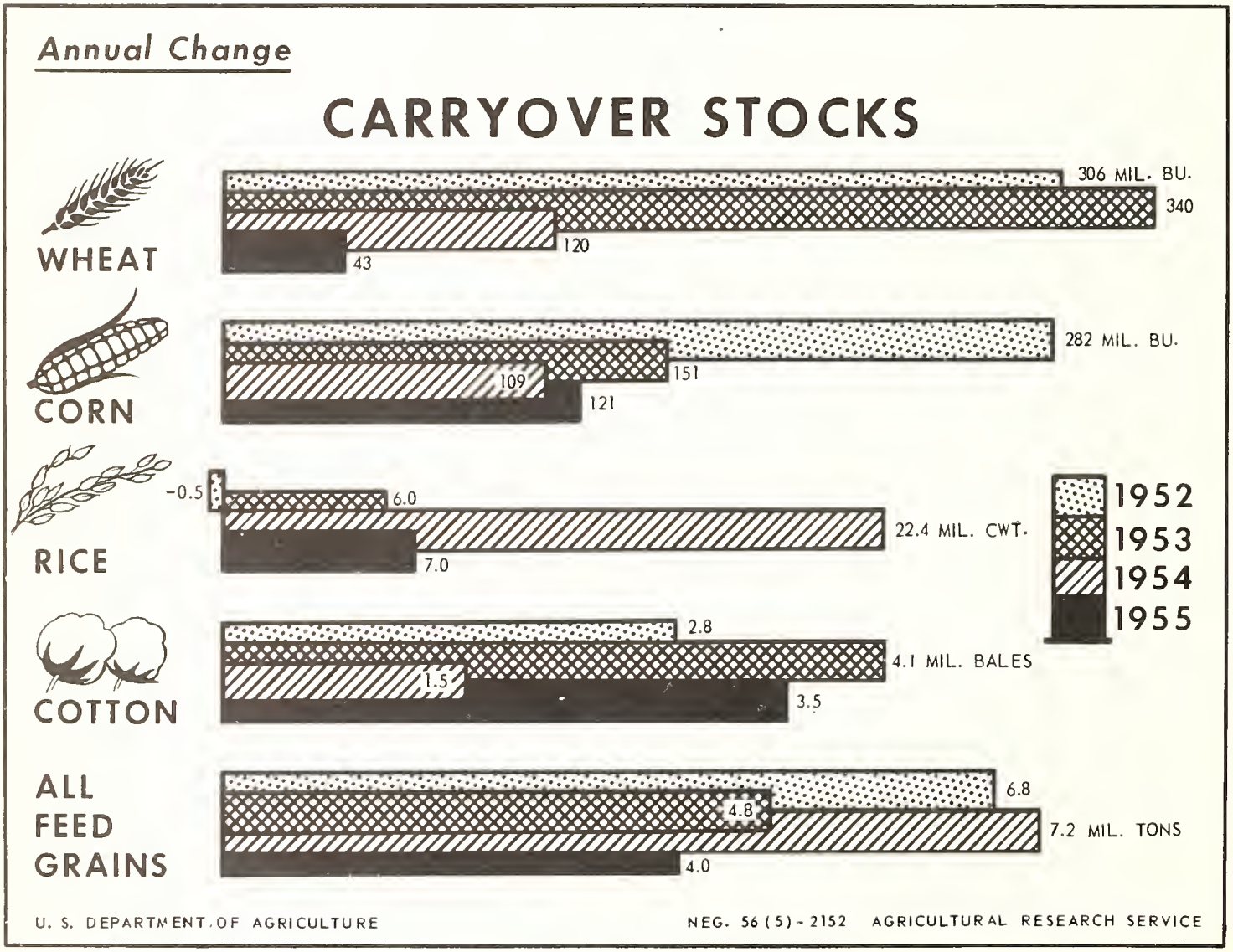

Figure 1. - The rapid increase of carryover stocks of most allotment crops was checked with acreage allotments in 1954 and 1955. Additions to stocks of feed grains, however, increased.

Table 4. - Carryover stocks of wheat, cotton, rice, corn, and feed grains, United States, average 1947-51 and annual 1952-56

Marketing year 1/	Wheat	Cotton 2/	Rice	Corn	Feed grains 3/
	Mil. bu.	1,000 bales	1,000 cwt.	Mil. bu.	Mil. tons
1947-51	282	4,004	2,367	561	22.3
1952	256	2,789	2,040	487	20.2
1953	562	5,605	1,515	769	27.0
1954 4/	902	9,728	7,546	920	31.8
1955 4/	1,022	11,205	29,900	1,029	39.0
1956 5/	1,080	14,700	36,950	1,150	43.0

1/ Stocks in all positions carried over from production in previous years on July 1 for wheat, August 1 for cotton and rice, October for corn, and in the case of feed grains, October 1 for corn and grain sorghums and July 1 for oats and barley.
2/ Running bales.
3/ Includes corn, grain, sorghum, oats, and barley.
4/ Preliminary.
5/ Forecast.

including corn, grain sorghum, oats and barley, also increased, and at the beginning of the 1955 marketing year they were equal to about a third of 1 year's production.

Stocks of wheat, cotton, and rice would have increased even more if programs to encourage exports had not been in effect. However, it was not possible to maintain exports at the peak levels of the early fifties. Despite intensive efforts to maintain our exports, exports of wheat, for example, decreased from a record high of 475 million bushels in 1951-52 to 217 million bushels in 1953-54. Those of cotton decreased from 5.5 million bales in the year beginning August 1, 1951, to 3.0 million bales in 1952 and 3.8 million bales in 1953. Exports of rice decreased from 25 million hundredweight in 1952-53 to 14 million hundredweight in 1954-55.

Acreage Diversion Problems

Reductions in acreages of allotment crops generated many adjustment problems for individual farmers. In an effort to maintain their incomes as fully as possible, farmers sought profitable alternative uses for land, labor, and other resources formerly used to produce allotment crops.

However, problems of adjustment were not limited to farmers who grew the allotment crops.

Diversion of land, labor, and other resources from allotment to alternative crops increased the supply and consequently decreased the market price of these other farm products. Feed grains other than corn were not covered by allotments and their production expanded greatly. Total stocks of feed grains increased to record levels. (See table 4.) Acreage-allotment programs, therefore, affected farmers generally and not just those who produced allotment crops.

Because of the year-to-year nature of acreage-allotment programs, many farmers found it especially difficult to make long-term adjustments in their farming systems and production methods that would be desirable from the standpoint of improved efficiency of production and conservation of soil resources. For example, they were reluctant to begin a program of pasture improvement and low-cost livestock production that would take considerable time to carry out and would be profitable only if continued over a period of several years. They had no assurance that acreage allotments would continue or that their allotments would be maintained from year to year. Under these circumstances, many believed that farming systems which emphasized allotment crops would be most profitable.

Special Problems of the Great Plains

Because of the variation in crop yields, the Great Plains region represents a special problem so far as acreage-allotment and price-support programs are concerned. These programs are designed to bring supplies in line with market demands. But this objective is more difficult to achieve in the Plains than in other areas because production is greatly affected by variability of crop yields. 4/

Areas having highly variable yields are shown in figure 2. Variability is measured by calculating deviations of annual county yields from the average and constructing coefficients. From 1926 to 1948, 154 counties in the Great Plains had 10 percent or more of the cropland in wheat and coefficients of yield variability for wheat of 58 percent or more. This means that yields of wheat in these counties were 58 percent or more above or below their respective averages in a third of the 23 years. Sixty-six counties in Texas and Oklahoma had coefficients of yield

4/ For a detailed statement of agricultural problems of the Great Plains and the programs that deal with them, see Programs of the Great Plains, U. S. Dept. Agr. Misc. Pub. 709, January 1956.

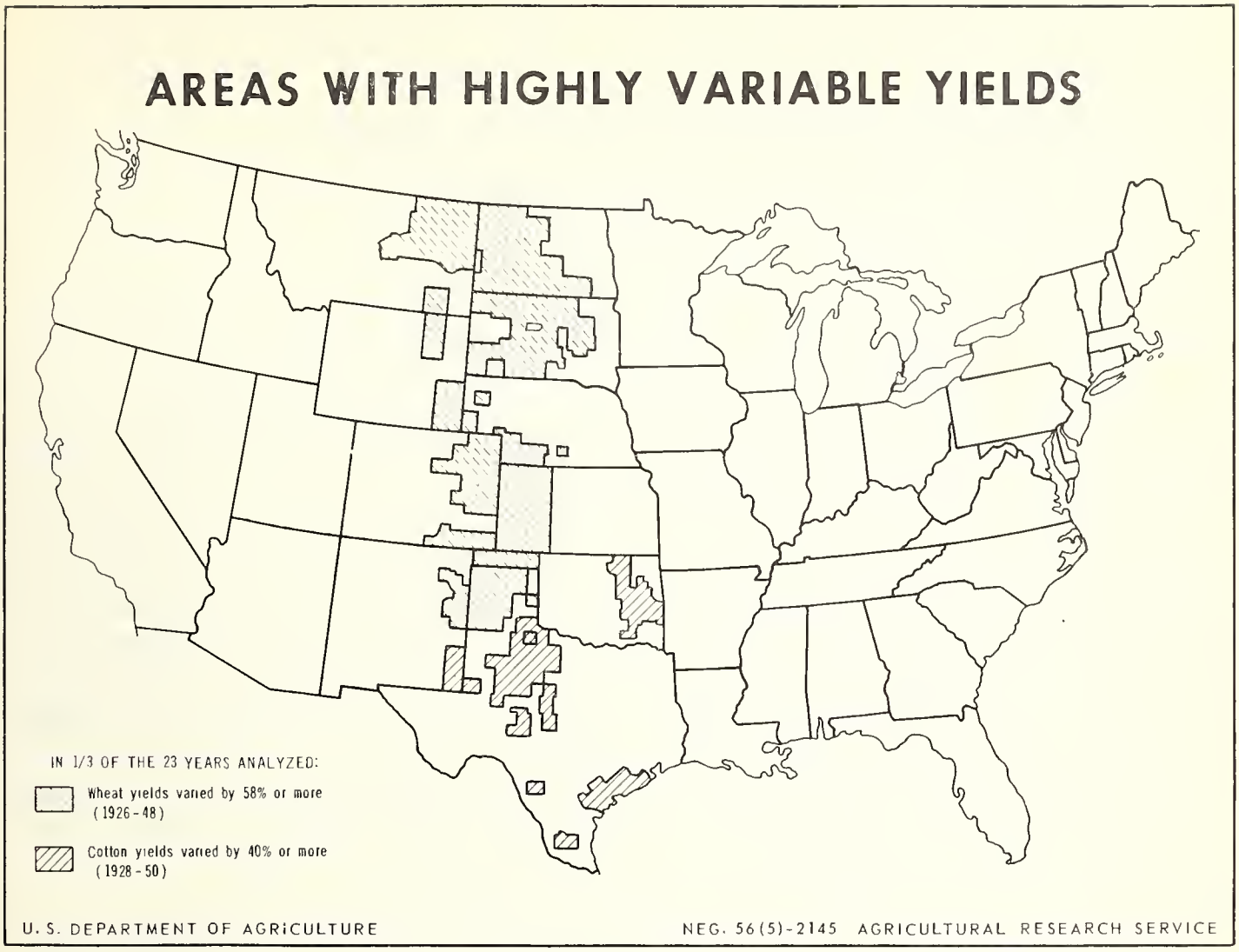

Figure 2. - In a number of the drier areas, crop production and farm incomes were affected more by weather than by acreage allotments and marketing quotas. In the cotton counties outlined, cotton yields varied by 40 percent or more, while in the wheat counties outlined, wheat yields varied by 58 percent or more from the average during a third or more of the 23 years analyzed.

variability for cotton of 40 to 77 percent in the 1928-50 period. In these counties, yields of cotton varied by at least 40 percent from their averages during a third of the time.

Yield variations this large cause greater variations in production of wheat or cotton than do acreage allotments. In such areas, acreage allotments have relatively little effect in reducing aggregate production in years of low yields - production would be low anyway. In years of high yields, the increase in yields more than offsets the reduction in acreage. During the last few years when surplus stocks of wheat accumulated, the 154 counties with high yield variability had about their usual percentage

of the wheat acreage in the United States but they had below-average yields and accounted for less than their usual proportion of the wheat produced in the country as a whole. They accounted for only 19 percent of all wheat produced in 1952-54, as compared with 28 to 32 percent of production during World War II. If, in these counties, yields had been up to average in recent years, the present stocks of wheat in the United States would be even larger.

Because of the variations in yield, acreage-allotment and price-support programs do not stabilize farm incomes in the Great Plains to the same extent that they do in most other areas. A farmer who has a crop failure gets no benefit in that year from price supports because he has nothing to sell. If his crop is large, the price-support benefits far exceed those expected with an average crop.

Many producers in these areas argue that wheat and cotton allotments should be based on the number of bushels of wheat and bales of cotton produced instead of acreage, and that growers should be permitted to store the excess production from good crop years and apply it against production allotments in lean years. Programs of this kind they contend, would tend to stabilize incomes of individual farmers. Moreover, farmers could be more flexible in their operations; they could take advantage of their production opportunities in good crop years and could conserve their resources in dry years.

Allotment programs also have a bearing on the problem of soil conservation in the Great Plains. A considerable acreage in cultivation is unsuited to cropping on a continuing basis, yet acreage allotments on cotton and wheat have been apportioned largely on recent acreage history. Some modification of such programs or some other type of program, such as the Soil Bank, might be more effective in encouraging the shifting of such lands to grass cover.

NATIONAL AND REGIONAL EFFECTS

Participation in Programs

Acreage-allotment programs have affected a large proportion of all farms during the last 2 years. In 1954, acreage allotments were established for corn on 1.7 million farms, for wheat on 1.6 million farms, and for cotton on 1.0 million farms. Most farms were in compliance with allotments for cotton (table 5). However, only 40 percent complied with allotments for corn and only 76 percent with allotments for wheat.

The proportion of farmers with corn allotments who complied with the allotments varied from about a third in some States to a little more than

Table 5. - Percentage of farmers complying with specified acreage allotments in 1954 and percentage of 1954 acreage located on farms whose operators were in compliance, by regions, United States 1/

Regions 2/	Percentage of farmers with acreage allotments who complied with these allotments			Percentage of total acreage planted on farms whose operators complied with allotments 3/	
	Corn	Wheat	Upland cotton	Corn	Wheat
	Percent	Percent	Percent	Percent	Percent
Northeast	40	70	---	22	70
Appalachian	46	65	99.3	27	56
Southeast	---	60	99.1	---	52
Lake States	38	79	---	29	79
Corn Belt	38	66	98.4	29	70
Delta States	53	47	99.6	31	61
Northern Plains	47	94	---	37	97
Southern Plains	---	87	99.8	---	97
Mountain	---	85	99.8	---	92
Pacific	---	81	98.5	---	96
United States	40	76	99.4	30	91

1/ Computed from unpublished data supplied by the Commodity Stabilization Service.

2/ States in each region are as follows: Northeast includes all States east of Ohio and north of Virginia; Appalachian includes West Virginia, Kentucky, Tennessee, Virginia, and North Carolina; Southeast includes South Carolina, Georgia, Florida, and Alabama; Lake States are Michigan, Wisconsin, and Minnesota; Corn Belt includes Ohio, Indiana, Illinois, Iowa, and Misscuri; Delta States are Mississippi, Louisiana and Arkansas; Northern Plains are North Dakota, South Dakota, Nebraska, and Kansas; Southern Plains are Oklahoma and Texas; Pacific Coast is the 3 coast States; and the Mountain States are all those between the Pacific Coast and the Great Plains States.

3/ Data indicate the percentages that planted acreages on compliance farms were of total planted acreage on all allotment farms.

half in others. Some farmers did not need to reduce their acreages of corn below those they had planned in order to comply with allotments. However, a substantial number of farmers, especially in the cash-grain areas, reduced their acreages of corn in order to be eligible for price supports. Farmers who complied with corn allotments had only 30

percent of the total planted acreage of corn on all corn-allotment farms. The acreage of corn per farm averaged much smaller for farmers who complied with allotments than for those who did not comply.

Fewer farmers complied with wheat allotments in the eastern regions than in the western regions where areas of specialized wheat farming are located. Many producers in the Eastern States had 15 or fewer acres of wheat and therefore were not subject to penalties for excess production. In the western areas, compliance farms contained 97 percent of the total acreage planted to wheat. The acreage of wheat per farm averaged larger on farms whose operators complied with allotments than on farms whose operators did not comply.

Information about compliance with allotments in 1955 was not available when this report was prepared, but the proportion of farmers who complied with allotments for corn, wheat, and cotton probably was about the same in 1955 as in 1954.

Changes in Land Use

National Changes

Important changes in acreages of various crops accompanied acreage-allotment programs during the last 2 years (fig. 3). The total planted acreage of corn, wheat, rice, and cotton decreased about 29 million acres from 1953 to 1955 (table 6). The acreage of corn changed very little, but the acreages of wheat and cotton decreased more than was called for by national allotments. As pointed out previously, because of unfavorable weather some farmers planted and harvested fewer acres of wheat and cotton than were called for by their acreage allotments. Most of the land shifted out of these allotment crops was used to grow other crops not covered by acreage allotments. The harvested acreage of other field crops increased by 16.3 million acres between 1953 and 1954, and by 21.3 million acres between 1953 and 1955. There was a reduction of 2.4 million acres in the harvested acreage of all field crops in 1954, and another 5.4 million acres in 1955. 5/

5/ "All crops" when referred to in this report means the total for 59 crops reported by the Crop and Livestock Reporting Board, Agricultural Marketing Service, U. S. Department of Agriculture, as shown in table 6. Acreages in tree fruits, small fruits, planted nut trees, and gardens are not included. These and other national and regional data are based on official estimates of the Crop and Livestock Reporting Board available through December 1955.

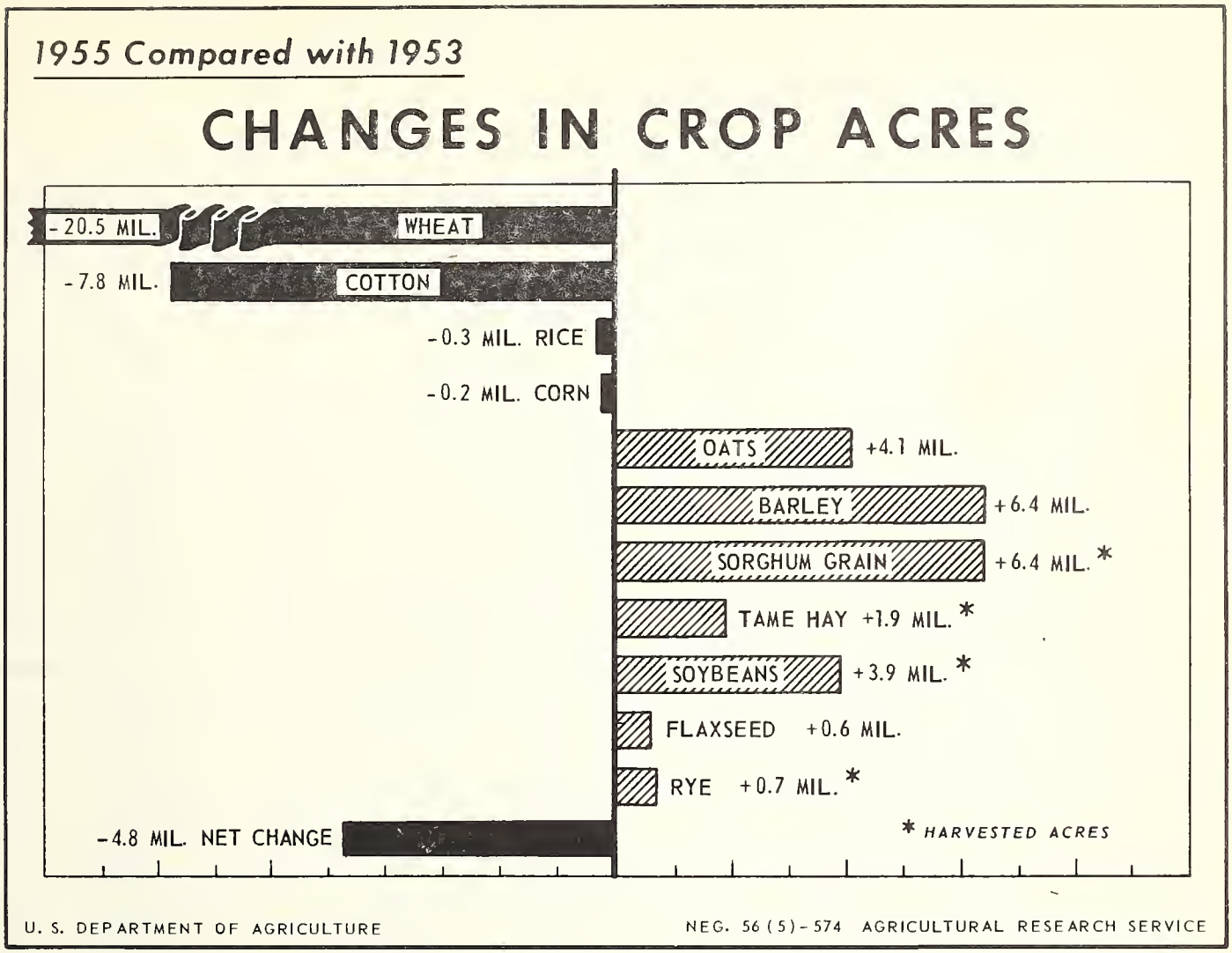

Figure 3. - The total planted acreage of the 4 allotment crops (wheat, cotton, corn, and rice) decreased about 29 million acres while that of other field crops increased about 27 million acres.

In addition to the reductions in wheat and cotton, there was also a reduction in rice from 1954 to 1955. The total harvested acreage of corn, wheat, cotton, and rice was nearly 29 million acres less in 1955 than in 1953. The harvested acreage of corn decreased by less than 1 percent. However, the acreage of wheat decreased by 30 percent, that of cotton by 31 percent, and that of rice by 14 percent.

Most of the land shifted out of these allotment crops was used to grow other crops. Land was diverted mainly to oats, barley, soybeans, sorghum, flaxseed, rye, and hay. A small part of this diverted acreage was shifted to pasture and to fallow.

Nationally, not much of the land diverted from wheat, cotton, and rice has been used to grow vegetables or potatoes. A few of the farmers

Table 6. - Changes in land use called for by acreage allotments for corn, wheat, cotton, and rice, and actual changes in harvested and planted acreages from 1953 to 1954 and 1955, United States

Crop	1953 to 1954			1953 to 1955		
	Changes called for by allotments 1/	Actual changes: Harvested acreage	Actual changes: Planted acreage	Changes called for by allotments 1/	Actual changes: Harvested acreage	Actual changes: Planted acreage
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
Corn	-9,128	-239	679	-5,959	-653	-153
Wheat	-8,631	-13,382	-16,220	-14,866	-20,439	-20,505
Cotton	-3,042	-5,090	-5,453	-6,227	-7,459	-7,755
Rice	0	413	426	-296	-307	-332
Total, 4 allotment crops	-20,801	-18,298	-20,568	-27,348	-28,858	-28,745
Oats	---	3,074	3,657	---	1,716	4,146
Barley	---	4,597	5,100	---	5,661	6,443
Soybeans for beans 2/	---	2,292	2,292	---	3,880	3,880
Sorghum, all	---	5,697	5,582	---	8,519	9,462
Flaxseed	---	1,133	1,229	---	466	552
Rye	---	333	722	---	682	1,710
All tame hay 3/	---	149	-162	---	1,932	981
Wild hay 2/	---	-1,441	-1,441	---	-1,947	-1,947
Peanuts 2/	---	-134	-134	---	157	157
Tobacco 2/	---	34	34	---	-123	-123
Beans, dry edible	---	160	257	---	170	224
Peas, dry field	---	7	8	---	30	43
Potatoes	---	-117	-123	---	-118	-97
Commercial vegetables 2/	---	-38	-38	---	-113	-113
Other crops 4/	---	104	157	---	123	131
Total, 55 other crops	---	15,850	17,140	---	21,035	25,449
Total, 59 crops	---	-2,448	-3,426	---	-7,823	-3,296

1/ Total of reductions for individual States, and in the case of corn for commercial areas within States, from 1953 to 1954 and 1955 required in order that the harvested acreage in each State not exceed the acreage allotment for each State.

2/ Change in harvested acreage shown in each column, as there is no estimate of the planted acreage.

3/ Change in harvested acreage, excluding peanuts for hay in harvested column and peanuts for hay and grains cut green for hay in the planted column.

4/ Includes sugar beets, sugarcane, sweetpotatoes, buckwheat, broomcorn, cowpeas for peas, sweetclover seed, and timothy seed.

interviewed said that they used some of their diverted acreage to grow vegetables or melons. But there was no evidence of any significant shift to vegetables such as accompanied the imposition of allotments in some areas back in 1950. For the country as a whole, the total harvested acreage of 29 commercial vegetables was 113,000 acres, or 3 percent less in 1955 than in 1953. The harvested acreage of vegetables for processing decreased by 106,000 acres, and that of vegetables for fresh market by 7,000. The acreage of potatoes harvested decreased by 118,000 acres, or 8 percent.

There were small increases in acreages of sweetpotatoes in the South and of dry edible beans and dry field peas in the West. A small part of the land diverted from wheat and cotton probably was used to grow these crops.

Regional Changes

Regional changes in acreages of allotment crops during the last 2 years are similar to those for the country as a whole. Harvested acreages of wheat, cotton, and rice were reduced as much as or more than was called for by allotments in most States. In some States, the harvested acreages of wheat and cotton decreased much more than was called for by allotments because of the crop failure that accompanied unfavorable weather. However, in no State where allotments for corn were in effect did the total harvested acreage of corn decrease as much as was called for by allotments. Reductions in acreages of corn by some farmers were offset by expansion by other farmers.

Regional changes in the acreage of major crops indicate that most of the acreage taken out of corn, wheat, cotton, and rice was used for oats, barley, sorghum, soybeans, flaxseed, rye, and hay. 6/ Reductions in the total acreage of the 4 allotment crops have been greatest in the Great Plains and Far Western regions where wheat accounts for a large part of the total crop acreage (fig. 4). In terms of percentages, reductions also were substantial in the southern regions, but they were relatively small in the Lake States and Corn Belt where reductions in allotment crops were more than offset by increases in acreages of soybeans and feed grains.

There have been important reductions in acreages of wheat in the Northeast, Lake States, and Corn Belt regions, where land shifted out

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6/ Regional changes called for by acreage allotments and actual changes in the harvested acreages of individual crops are shown in appendix tables 53 and 54.

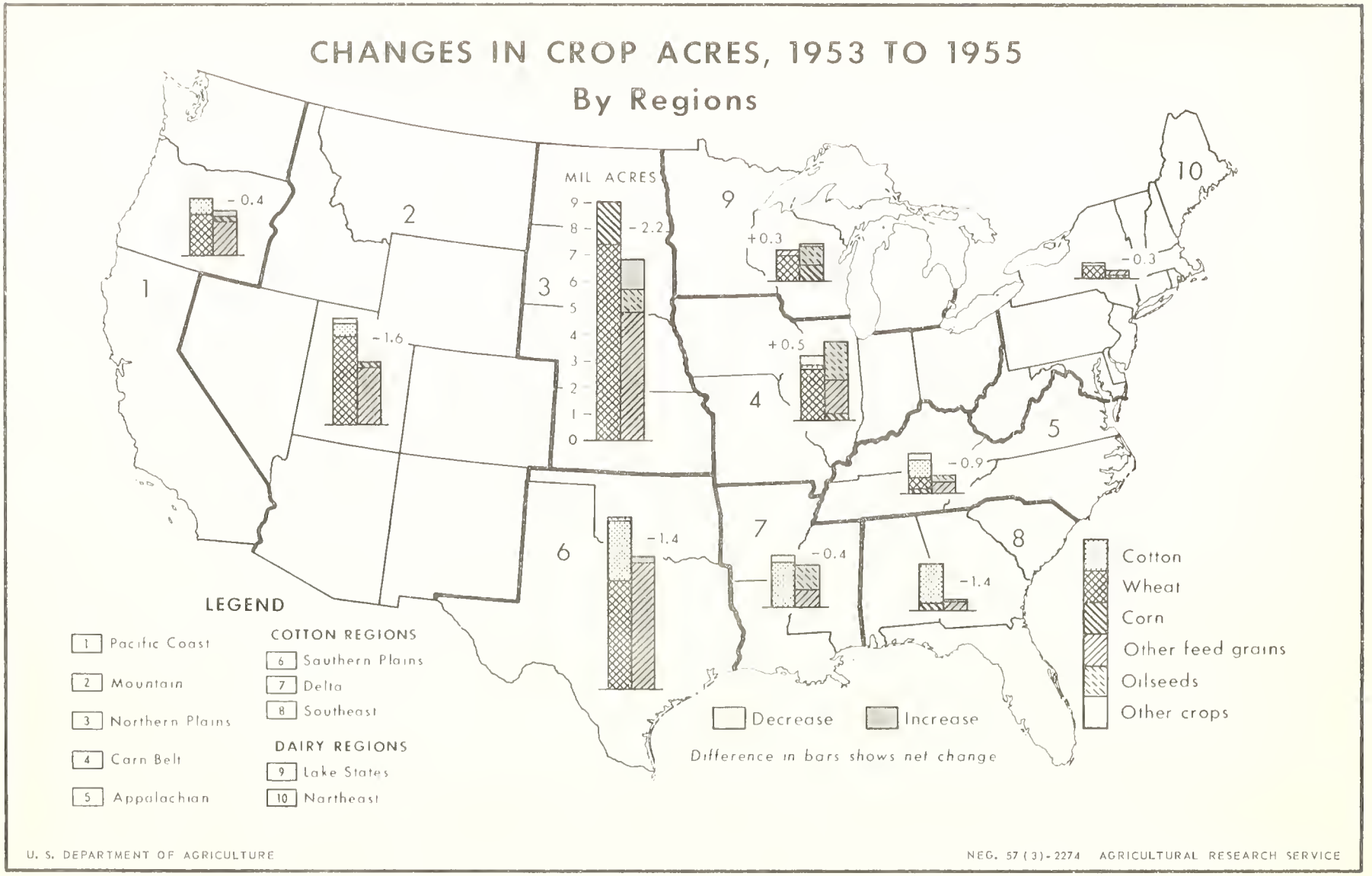

Figure 4. - The diversion of land from allotment to nonallotment crops varied between regions. Largest diversions were in the Great Plains and Western States. In the Corn Belt and Lake States, there were net increases in land used for crops.

of wheat has been used mainly to grow soybeans and barley. However, the total acreage in corn increased about 3 percent from 1953 to 1955.

In the Appalachian region, the harvested acreage of cotton decreased by nearly 40 percent, while that of wheat decreased by nearly 30 percent from 1953 to 1955. The acreage of corn also was reduced. Acreages of other feed grains and of soybeans increased although by less than the reduction in allotment crops, and the total acreage of harvested crops decreased by about 4 percent.

In the Southeast, the acreage of cotton harvested decreased by 36 percent from 1953 to 1955. Much of the diverted acreage apparently was not used to grow other crops, as the harvested area of all crops decreased by about 10 percent. Crop failure accompanying unfavorable weather caused some of the reduction in acreages of crops harvested, although there has been some shift of land to pasture.

In the Delta States, there were reductions of 31 percent in the acreage of cotton and 11 percent in that of rice from 1953 to 1955. Land diverted from cotton and rice was used to expand acreages of soybeans, oats, and sorghums. The harvested acreages of soybeans and oats doubled. The total harvested acreage of field crops decreased by 3 percent.

Harvested acreages of wheat and cotton in the Southern Plains have been reduced greatly. The total for these crops was about 30 percent less in 1955 than in 1953. The harvested acreage of wheat decreased by 48 percent and cotton by 23 percent. Much of the land diverted from these crops has been used to grow sorghum, barley, and oats. The harvested acreage of all field crops decreased by about 3 percent.

The largest reduction in acreage of allotment crops was in the Northern Plains where the harvested acreage of wheat decreased by 7.4 million acres, or 23 percent, from 1953 to 1955. The harvested acreage of corn decreased by 11 percent. Land was shifted to sorghum, barley, flaxseed, rye, hay, and oats. The harvested acreage of all crops decreased by some 2 million acres - a relatively small change for such a large region.

Large reductions have been made in the harvested acreages of wheat throughout the Mountain States and of cotton in Arizona and New Mexico. The harvested acreage of wheat decreased about 30 percent and cotton 46 percent from 1953 to 1955. Land diverted from these crops was used to expand acreages of barley and sorghum. The harvested acreage of all crops decreased by about 6 percent.

In the Pacific region, the harvested acreage of wheat decreased by 32 percent, cotton by 44 percent, and rice by 20 percent. Barley has been the main crop substituted for allotment crops but acreages of oats, sorghum, flaxseed, rye, and hay have increased also. The harvested acreage of all crops decreased by 4 percent.

Changes in Production and Value of Crops

Changes in Production

Total production of crops has not changed a great deal with the transfer of land from allotment to other crops, as reductions in allotment crops were offset by expansion in other crops. The total volume of production of 11 crops, including the 4 allotment crops (corn, wheat, cotton, and rice), and 7 other crops (oats, barley, sorghum grain, soybeans for beans, flaxseed, rye, and all tame hay) increased by 1 percent from 1953 to 1955 (table 7). Total production of corn, wheat, cotton, and rice decreased by 8 percent from 1953 to 1955. But this reduction was more than offset by a 22-percent increase in production of the 7 other crops.

Yields were higher for wheat, cotton, corn, and rice in 1955 than in 1953 or 1954, thereby offsetting in part the acreage reductions induced by allotments. Production of wheat was 20 percent less in 1955 than in 1953. An increase of 15 percent in the yield of wheat partially offset the 30-percent reduction in harvested acreage. Production of cotton was 11 percent less in 1955 than in 1953, but it was 14 percent higher than in 1954. Yield per acre of cotton increased by 28 percent from 1953 to 1955. Production of corn changed very little from 1953 to 1955.

Production of rice was a little larger in 1955 than in 1953, as a 19-percent increase in yield offset a 15-percent reduction in acreage. However, production of rice decreased by 17 percent from 1954 to 1955 with the imposition of acreage allotments and marketing quotas in 1955.

Production of oats, barley, sorghum, soybeans, flaxseed, rye, and tame hay increased with the transfer of land to these crops. But a part of the expansion in production of these nonallotment crops has been due to higher yields per acre on land previously used to grow them. In other words, with the favorable weather that prevailed in 1955 in most areas, production of the nonallotment crops would have been larger in 1955 than in 1953 even though there had been no diversion of land from allotment crops.

Table 7. - Percentage changes in harvested acreages, yields per acre, and production of selected crops, from 1953 to 1954 and 1955, United States 1/

Crop	1953 to 1954			1953 to 1955		
	Harvested acreage	Yield per acre	Production	Harvested acreage	Yield per acre	Production
	Percent	Percent	Percent	Percent	Percent	Percent
Corn	0	-5	-6	-1	1	0
Wheat	-20	5	-16	-30	15	-20
Cotton	-21	5	-17	-31	28	-11
Rice	19	2	22	-14	19	2
4 allotment crops 2/	-10	0	-11	-17	10	-8
Oats	8	15	24	4	25	30
Barley	54	0	53	66	-3	61
Sorghum grain	82	8	98	105	4	113
Soybeans for beans	16	10	27	26	9	38
Flaxseed	25	-11	11	10	1	11
Rye	24	8	34	49	8	61
All tame hay	0	1	1	3	3	7
7 other crops 2/	13	3	16	16	6	23
11 crops listed 2/	0	-3	-3	-3	4	1
All crops 3/	-1	-1	-2	-2	4	2

1/ Change in acreages times change in yields do not equal change in production in all instances because percentages have been rounded to whole numbers.

2/ Changes in yield per acre and total production of the crops listed as indicated by change in value of production per acre and total value of production when individual crops are valued at 1953 prices. Shifts in land use to more of the crops that have a low value of production per acre explain why yields per acre for the 11 crops increased only 4 percent from 1953 to 1955 although yields per acre for the 4 allotment crops increased 10 percent and those for the 7 other crops increased 6 percent.

3/ Change in total crop production as reported in Crop Production, Agricultural Marketing Service, USDA, December 19, 1955. Changes in yield per acre were computed from changes in harvested acreages and total production.

An important effect of the changes in land use that have taken place with allotment programs during the last 2 years is expansion in production of feed crops. Total production of 4 feed grains (corn, oats, barley, and grain sorghum) increased by 3 percent from 1953 to 1954 and by 10 percent from 1953 to 1955. As production of corn decreased slightly, all of the increase in production of feed grains was in oats, barley, and grain sorghum.

Production of tame hay was 7 percent greater in 1955 than in 1953. Both the harvested acreage and the field of tame hay increased by about 3 percent.

Changes in land use during the last 2 years have brought about an expansion in production of oil crops. Production of oil and protein feed from soybeans has increased more than enough to offset reductions in production of oil and protein feed from cottonseed. Production of soybeans was 38 percent larger and that of flaxseed 11 percent larger in 1955 than in 1953. 7/

Changes in Value of Crop Production

The farm value of production declined from 1953 to 1955, despite a slight increase in the volume of production. The value of nonallotment crops increased but not enough to offset both the decrease in the volume of allotment crops and the decline in prices. The total farm value of production of the 4 allotment crops decreased by 14 percent, while that of the 7 "alternative" crops increased by 6 percent (table 8).

Farm prices decreased in 1955. Seasonal average prices for the 4 allotment crops averaged 6 percent lower in 1955 than in 1953 mainly because of reductions in prices of corn and rice. Prices of the 7 nonallotment crops averaged 13 percent lower and those of the 11 crops about 9 percent lower in 1955 than in 1953.

In contrast to relatively stable prices for cotton and wheat, decreases in price of about 20 percent for oats, barley, and sorghum grain, and 23 percent for soybeans and flaxseed accompanied the expansion in production and the lowering of price supports for these crops between 1953 and 1955. Thus, incomes of farmers from these nonallotment crops were reduced because of the depressing effect the expansion in production of nonallotment crops had on prices of their products. However,

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7/ Changes in production and in the farm value of production of allotment and specified other crops are shown by regions in appendix tables 55 and 56.

Table 8. - Percentage changes in farm production, prices, and value of production of selected crops from 1953 to 1954 and 1955, United States 1/

Crop	1953 to 1954			1953 to 1955		
	Production	Farm price	Value of production	Production	Farm price	Value of production
	Percent	Percent	Percent	Percent	Percent	Percent
Corn	-6	-3	-9	0	-11	-12
Wheat	-16	4	-13	-20	-2	-22
Cotton	-17	4	-13	-11	2	-9
Rice	22	-12	7	2	-13	-11
4 allotment crops 2/	-11	1	-10	-8	-6	-14
Oats	24	-4	19	30	-20	4
Barley	53	-6	43	61	-19	31
Sorghum grain	98	-2	95	113	-22	66
Soybeans for beans	27	-10	15	38	-23	6
Flaxseed	11	-16	-6	11	-23	-14
Rye	34	-7	25	61	-25	21
All tame hay	1	-1	0	7	-6	1
7 other crops 2/	16	-3	12	22	-13	6
11 crops listed 2/	-3	-1	-4	1	-9	-8

1/ Change in production times change in price does not equal change in value of production in some instances because percentages have been rounded to whole numbers.

2/ Change in total production in the production columns as measured by changes in total value of production when individual crops are valued at 1953 average farm prices. Changes shown in the value-of-production column are actual changes. Changes in farm prices are computed from change in production and value of production.

diversion of land to these crops helped to reduce production and to maintain prices of the allotment crops.

Changes in Livestock Production

Significant changes have occurred also in the numbers and production of different classes of livestock and livestock products, but these changes

were due in small part only to allotment programs. Numbers of cattle and calves on farms, already at record levels on January 1, 1953, continued to increase through 1955 (table 9). Cattle feeding reached record levels in 1955. Numbers of stock sheep, numbers of chickens raised, and the size of the laying flock have declined slightly since 1953, but the broiler enterprise, and the pig crop increased significantly. Total numbers of grain-consuming animal units 8/ were increased by nearly 5 million in 1953-54 and by another 5 million during 1954-55. In contrast, total numbers of roughage-consuming animal units changed little.

Just how much of the increase in grain-consuming livestock should be attributed to the increase in production of feed and the decrease in prices of feed grains that were associated with acreage restrictions on allotment crops is a matter of conjecture. Much of this increase was represented by hogs, numbers of which increased from a relatively low level. Our pig crop in 1953 was the smallest since 1940. The increase in hog production was stimulated by the drop in cattle prices and by an abnormally favorable hog-corn ratio in 1953. This increase probably would have occurred without any increase in production of feed grains, though perhaps at a slower rate and to a smaller degree.

The increase in cattle numbers was initiated with an upswing of the cattle cycle in 1949. This increase too, probably would have occurred without any increase in production of feed grains. Larger supplies and lower prices of feed concentrates contributed to record cattle-feeding activities. Also, favorable milk- and egg-feed price ratios in 1955 encouraged increased feeding of concentrates to milk cows and laying flocks. But all of the increase in the production of livestock and livestock products since 1953 would have been possible if feed production had continued at the 1953 volume (table 10). However, stocks of feed grains would have decreased instead of increased as they did from 1953 to 1955. Continued production of feed concentrates at 1955 levels, would permit a further increase of some 2 percent in numbers of grain-consuming livestock without any change in stocks of feed grains. Numbers of these animals would have to increase even more to bring about any reduction in stocks of grain.

Some increase in numbers of roughage-consuming livestock also is probable if a diversion of cropland from allotment crops is continued. Farmers have been relatively slow to make the necessary investments to establish pastures on their diverted acreages. The diversion programs

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8/ A grain-consuming animal unit is one average (U.S.) milk cow, or its equivalent in other livestock, in terms of quantities of feed grains and other concentrates consumed.

Table 9.- Livestock numbers and production of livestock products on farms, United States, average 1949-53, annual 1953-56

Item	Unit	Average 1949-53	1953	1954	1955	1956
On farms January 1:						
All cattle and calves	1,000 head	83,838	94,241	95,679	96,592	97,465
Milk cows	do.	23,578	23,549	23,896	23,462	23,318
Stock sheep	do.	27,182	27,593	27,079	27,137	27,009
Hens and pullets	do.	398,548	373,013	370,970	368,595	359,696
On farms during year:						
Pigs saved	1,000 head	91,591	77,914	86,830	95,604	---
Chickens raised	do.	645,848	608,510	539,908	461,968	---
Broilers produced	do.	758,741	946,533	1,047,798	1,078,264	---
Milk produced	Mil. lbs.	116,456	120,227	122,094	123,454	---
Eggs produced	Mil. doz.	4,819	4,824	4,911	4,957	---
On farms (year beginning October 1):						
Grain-consuming animal units	Mil. units	163.0	156.7	161.5	164.9	---
Roughage-consuming animal units	do.	89.7	95.7	96.1	96.7	---

Table 10.- Supply and utilization of feed grains and hay, United States, average 1949-53, annual 1953, 1954, and 1955

Item	Average 1949-53	1953	1954 1/	1955 1/
	Mil. tons	Mil. tons	Mil. tons	Mil. tons
Feed grains: 2/				
Stocks 3/	27.4	27.0	31.8	39.0
Production	118.6	117.6	123.2	130.3
Other concentrates fed	26.8	28.0	26.2	26.7
Total	172.8	172.6	181.2	196.0
Feed grains fed 2/	101.9	99.8	99.8	106.6
Other centrates fed	25.5	26.1	25.5	26.0
Other 4/	17.7	16.2	18.8	20.1
Total utilization	145.1	142.1	144.1	152.7
Utilization adjusted to crop year	145.1	140.8	142.2	153.0
Stocks end of crop year	27.7	31.8	39.0	43.0
Hay:				
Stocks	14.7	14.7	15.2	14.8
Production	103.1	105.5	104.4	109.9
Supply	117.8	120.2	119.6	124.7
Disappearance	103.0	105.0	105.0	---

1/ Preliminary.
2/ Corn, oats, barley, sorghum grains.
3/ Stocks of corn and sorghum grains in all positions on October 1, and oats and barley on July 1.
4/ Seed, human food, industry, and exports.

have been on an annual basis and more than one year usually is required to develop and utilize improved pastures efficiently. In the more humid southern and eastern areas, a start in establishing more pastures is reflected in the report of farmers interviewed (see Changes in Selected Areas) but an even greater shift to pastures and to roughage-consuming livestock would be desirable in the interest of soil conservation and of shifting our production into forms that can be consumed.

Effects of Acreage Diversions

Changes in acreages, yields, and production during the last 2 years have resulted from other developments in addition to the acreage-allotment programs. In order to appraise the effects of allotment programs, we should consider what would have happened if there had been no programs. Production of the different crops in 1954 and 1955 undoubtedly would have been more like that in 1953 if there had been no acreage-allotment programs and if the 1953 pattern of price supports had prevailed. However, some increases in crop yields probably would have occurred because of more favorable weather generally and greater use of improved farming practices, including more fertilizer.

How production of the main crops would have differed from actual in 1954 and 1955 if 1953 volumes of production had continued in 1954 and 1955 is shown in table 11. Continuation of 1953 acreages would have meant larger additions to stocks of wheat, cotton, and rice, but stocks of feed grains would have been lower. Production of soybeans, flaxseed, and rye would have been smaller.

With continuation of the 1953 acreages and yields, production of cotton would have totaled 4.6 million bales more and that of wheat about 400 million bushels more in 1954 and 1955. If total disappearance had remained unchanged, carryover stocks of wheat and cotton would be about 40 percent larger than that expected at the beginning of the 1956 marketing year. Acreage allotments for rice did not go into effect until 1955, but continuation of the 1954 volume of production would have meant about 20 percent more rice than actually was produced in 1955. Thus, it is evident that the increase in carryover stocks of wheat, cotton, and rice was less than it would have been if no acreage-diversion programs had been in effect.

Production of oats, barley, and grain sorghum would have totaled about 23 million tons, or 30 percent less in 1954 and 1955 if land had not been diverted to them and their production had been maintained at 1953 levels. Production of corn would have been about the same in 1955 but about 6 percent less in 1954. Production of the 4 feed grains (corn, oats, barley, and grain sorghum) would have totaled 17.7 million tons less in 1954 and 1955. As stocks of feed grains increased about 12 million tons during the period, it is apparent that they would have decreased by about 5 million tons if 1953 production had continued and if disappearance of feed grains had remained unchanged.

Production of soybeans would have been about 25 percent less, that of flaxseed about 10 percent less, and that of rye about 30 percent less in 1954 and 1955 if 1953 levels of production had been continued.

Table 11. - How production of selected crops would have differed from actual production in 1954 and 1955 if 1953 volumes of production had continued, United States

Crop	Unit of production	Changes from actual production			
		Quantity changes		Percentage changes	
		1954	1955	1954	1955
		Millions	Millions	Percent	Percent
Corn	Bushel	182	8	6	0
Wheat	do.	185	231	19	25
Cotton, lint	Bale	2.8	1.8	20	12
Cottonseed	Ton	1.0	.7	18	12
Rice	Cwt.	-11.6	-.8	-18	-1
Total, 4 allotment crops 1/	--	---	---	12	9
Oats	Bushel	-288	-366	-19	-23
Barley	do.	-128	-148	-34	-38
Sorghum grain	do.	-107	-123	-49	-53
Total, 3 feed grains 2/	Ton	-10.4	-12.6	-27	-31
Total, 4 feed grains 3/	do.	-5.3	-12.4	-4	-10
Soybeans for beans	Bushel	-73	-103	-21	-28
Flaxseed	do.	-4	-4	-10	-10
Rye	do.	-6	-11	-25	-38
All tame hay	Ton	-1.3	-6.6	-1	-7
Total, 7 other crops 1/	---	---	---	-13	-18
Total, 11 crops 1/	---	---	---	3	0

1/ Data indicate how total farm value of production of the crops listed would have differed from actual value of production if 1953 production had continued in 1954 and 1955 and if farm prices had remained the same as they were in 1954 and 1955.

2/ Oats, barley, and sorghum grain.

3/ Corn, oats, barley, and sorghum grain.

Although the aggregate volume of farm production has been affected very little by allotment programs during the last 2 years, changes in the composition of farm production have helped to bring production of the different products into better balance with market outlets.

Transfer of land and other resources from wheat, cotton, and rice to feed and livestock production makes farm products available in forms that can be consumed more readily. As a consequence, stockpiles have not accumulated to the extent that they would have done had there been no acreage allotments. Estimates of additions to stocks of feed grains from 1954 and 1955 crops have a total value of about $500 million at 1953 prices while the total value of estimated additional accumulations of stocks of wheat and cotton from 1954 and 1955 crops, if 1953 levels of production had continued and if utilization had remained unchanged, is $1,700 million. With allotment programs in 1954 and 1955, production from fewer acres has gone into storage and more acres have been utilized to produce products for current use.

Transfer of land and other resources from allotment crops to soybeans and flaxseed also has helped to bring production into better balance with market outlets. Expansion in market outlets for soybeans and flaxseed has kept pace with expansion in output. Thus, carryover stocks of these crops have not increased.

These changes have not been achieved without a reduction in the total value of farm production. 9/ The total value of wheat, cotton, and rice produced would have been greater during 1954 and 1955 if production of these crops had not been reduced and if price-support levels had remained the same. Prices of feed crops also would have been higher if production of these crops had not been expanded. This is true also of soybeans, flaxseed, and rye. It is possible that the total value of production of these nonallotment crops would have been greater if less had been produced because of higher prices. But continuation of 1953 acreages and production for the different crops in 1954 and 1955 would have meant large additional accumulations of stocks of wheat, cotton, and rice. It would have meant also large additional government expenditures and investment in allotment crops.

However, the total value of farm production probably would have decreased much more if there had been no acreage-control and price-support programs in 1954 and 1955. Prices of wheat, cotton, and rice would have decreased greatly if production had been continued at the 1953 levels and if all the production had been marketed. Prices of feed crops, soybeans, flaxseed, and rye probably would have been higher with production continued at 1953 levels. But the total value of crop production would have been much less than that realized.

9/ As used here, value of production is total production of each commodity times farm price.

As previously mentioned, however, little progress had been made on the long-range adjustments in use of resources that appear to be needed to achieve a better balance between production and market outlets and to conserve resources. Relatively little cropland has been shifted to pasture and low-yielding and hazardous wheat and cotton lands have continued in cultivation.

These observations about the effects of acreage allotments apply to the national situation. The effects differ for specific farm situations in different regions as reported in the following sections.

CHANGES IN SELECTED AREAS

Cotton Areas

Cotton acreage allotments and marketing quotas were not in effect from 1944 through 1949 but they were reinstated for the 1950 crop. The national allotment in 1950 was about 21.6 million acres and about 18.6 million acres of cotton were in cultivation on July 1, a reduction of about 9.3 million acres from 1949 (table 12). Because of the small crop in

Table 12. - Cotton acreage, production, and disappearance, United States, 1949-55

Item	1949	1950	1951	1952	1953	1954	1955
	Mil. acres	Mil. acres	Mil. acres	Mil. acres	Mil. acres	Mil. acres	Mil. acres
In cultivation July 1	27.9	18.6	28.2	27.2	25.2	19.8	17.1
Acreage allotment	---	21.6	---	---	---	21.4	18.1
	Mil. bales	Mil. bales	Mil. bales	Mil. bales	Mil. bales	Mil. bales	Mil. bales
Production 1/	16.1	10.0	15.1	15.1	16.5	13.7	14.7
Total disappearance 2/ 3/	14.7	14.7	14.7	12.6	12.4	12.3	---
Net exports 3/	5.8	4.1	5.5	3.0	3.8	3.5	---
Carryover July 1 3/	5.3	6.8	2.3	2.8	5.6	9.7	11.1

1/ Bales of 500 pounds gross weight containing about 480 net pounds of lint.

2/ Beginning August 1, year indicated.

3/ Running bales.

1950, (10 million bales) and a disappearance of more than 14.6 million bales, the carryover of cotton in the United States on August 1, 1951, was down to about 2.3 million bales. Acreage allotments were not in effect from 1951 through 1953. By August 1, 1953, the carryover had risen to about 5.6 million bales; a crop of 16.5 million bales was produced in that season; and consumption of U. S. cotton was about 2 million bales less than consumption during the 1949-51 period.

In 1954, acreage allotments and marketing quotas were reimposed. The national allotment was set at about 21.4 million acres and 19.8 million acres were in cultivation on July 1, 1954, a reduction of about 5.5 million acres from the 1953 crop. On August 1, 1954, the carryover amounted to 9.7 million bales. The 1954 crop of 13.7 million bales caused a further increase in carryover to 11.1 million bales on August 1, 1955. The national allotment for 1955 was set at 18.1 million acres. About 17 million acres were in cultivation on July 1, 1955, a reduction of more than 8 million acres, or 32 percent, from the 1953 crop. This large reduction raises many problems of adjustment on farms whose operators grow cotton - problems that vary considerably by areas and production situations. A study of selected cotton areas was undertaken to obtain information on these problems.

Cotton Areas Studied

Five areas, which represent some of the more important cotton-production situations, were included in this study of the acreage reduction problem. (See inside front cover.) These areas are (1) Mississippi Delta of Mississippi, Arkansas, and Louisiana, (2) Clay Hills Area of Mississippi and Tennessee, (3) Southern Piedmont Area of South Carolina and Georgia, (4) Southern High Plains Area of Texas, and (5) Upper and Western San Joaquin Valley of California.

Although cotton is a major enterprise on most farms in all of these areas, farm size, tenure of operators, other crops grown, and production alternatives vary widely.

A random sample of farms whose operators grow cotton was drawn to represent the situation in each area. A brief description of the areas included and the farms selected for study follows. The average acreage per farm in the various land uses is given in appendix table 57.

Mississippi Delta. - This area is characterized by productive soil, generally adequate rainfall, and level topography which make it well suited to cotton production. Mechanization has made rapid progress in the area. In 1953, 57 percent of the cropland on the farms studied was in cotton.

In 1955, cotton continued as the major crop, but with only 34 percent of the cropland in this use. Soybeans, corn, and oats were important in the crop organization on the sample farms.

A total of 259 farms, located in Arkansas, Louisiana and Mississippi, were included in the study. In this group of farms, 33 percent were classed as "small", 44 percent as "medium", and 23 percent as "large". Sixty-three percent of the sample farms were operated by owners, 16 percent by part-owners, and 21 percent by tenants. (See footnote 1, table 58 for definition of size of farm).

Clay Hills. - Cotton is the chief source of cash income on most farms in this area. Soils are less productive than those in the Delta and the topography is less favorable for crop production. In general, farms are smaller and less mechanized and yields of cotton are lower. About 34 percent of the land in the sample farms was classed as cropland, compared with 68 percent in the Delta sample. About 40 percent of the cropland was in cotton in 1953 but this proportion was down to 23 percent in 1955. From the standpoint of acres grown, corn outranked cotton in 1955 when it accounted for 38 percent of the cropland use.

Forty-four percent of the 150 farms included in the sample were classified as small, 37 percent as medium and 19 percent as large. About 78 percent of the farms were operated by owners, 9 percent by part-owners, and 13 percent by tenants.

Southern Piedmont. - Farms in the Southern Piedmont have undergone drastic changes in the last decade. Industrial expansion has provided employment opportunities for both operators and croppers. Cotton, although still a major crop, is less important in the economy of the area than was the case 20 years ago. Livestock production is increasing and pasture and hay crops are becoming more important. However, cotton continues to form the core of the farming system on most farms in the area. About 47 percent of the land in the sample farms was in cropland, 30 percent of which was in cotton in 1953. By 1955, only 19 percent of the cropland was used to produce cotton. Corn, small grains, and cropland pasture were the other major uses made of cropland.

The sample included 247 farms in South Carolina and Georgia. About 45 percent of these farms were classified as small, 37 percent as medium, and 18 percent as large. Of the farms in the sample, 68 percent were operated by owners; part-owners accounted for 11 percent; and tenants made up the remaining 21 percent.

High Plains. - A high proportion of the farms in this area are specialized. Topography is level, and mechanization of cotton production has increased rapidly. Most of the land in farms in this area is cropland. Of the land in the sample farms, 93 percent is cropland. In 1955, cotton occupied about 43 percent and grain sorghum 54 percent of the cropland. Two-thirds of the farms included in the sample had some irrigated crops in 1955.

High Plains. - Of the 150 High Plains farms surveyed for the study of diverted acres, 25 percent were classified as small, 58 percent as medium, and 13 percent as large. Owners operated 26 percent of the farms, part-owners 27 percent, and tenants the remaining 47 percent.

San Joaquin Valley, California. - Diversified agriculture predominates in this area. However, individual farms tend to be highly specialized. Crop production depends on irrigation, and cotton is a major crop in both the upper and western parts of the valley. Farms in the western part of the valley are very large. They average nearly 2,000 acres for the sample. In contrast, in the upper valley, farms in the sample averaged a little more than 200 acres. In 1953, 70 percent of the cropland in the sample of farms in the upper valley was in cotton. This proportion was down to 37 percent in 1955. In contrast, 36 percent of the cropland in the western valley was in cotton in 1953 and 20 percent in 1955. Other major crops on the sample farms were feed grains (grain sorghum, corn, and barley), potatoes and hay in the upper valley and barley, melons, and alfalfa seed in the western valley. About 42 percent of the cropland in western valley farms was in barley in 1955.

In the California analysis 50 farms were used, 29 in the upper and 21 in the western San Joaquin Valley. In the upper San Joaquin Valley, 28 percent of the farms were small (80 acres), 24 percent were medium (160 acres), and 48 percent were large (320 acres). In the western part of the valley, 48 percent of the farms were classed as small (1,034 acres) and 52 percent of the farms were large (about 2,730 acres). The farms were not classified on the basis of tenure.

Participation

The acreage planted to cotton in 1955 averaged about the same as the allotment for the sample farms in the several production areas studied. Most farmers made an effort to plant their full allotments. A few farmers in all areas had apparently exceeded their allotments by small acreages, but they intended to get into compliance by plowing up any excess acreage.

Underplanting of allotments was also evident on some of the sample farms. This was particularly important in the Southern Piedmont Area. In most cases of underplanting, the acreages involved were small. Reasons given for underplanting were measuring errors, shortages of labor, planting on unmeasured fields, and "late announcement" of allotments.

An analysis of acreage planted in relation to allotment indicated no significant differences by size of farm or by tenure of operator.

Acreage-allotment programs for wheat had little effect on cotton farms in the areas studied. In the Southern Piedmont, acreage of wheat per farm was small and very few farmers harvested more than 15 acres. Only 7 percent of the sample cotton farms in the High Plains produced wheat in 1955.

Changes in Farm Organization and Practices

The cotton adjustment program resulted in changes in farm organization, practices, and labor force. Livestock numbers were not greatly affected partly because of the short time in which the program had been in operation. Cattle were a less attractive alternative in 1954 and 1955 than in the years immediately before the program because of lower cattle prices.

Changes in organization centered largely around land use, and included shifts from cotton to other cash crops. Reduction in the acreage of cotton presented farmers with the problem of finding alternative uses for their land. On farms whose operators were in position to take advantage of available alternatives, shifts were made to other cash crops. When opportunities to do this were limited, a considerable acreage was left idle. Available data also indicate that when possible some farmers tended to concentrate their cotton on the better land on the farm. Shifts to pasture were limited and whether the program had much permanent effect on conservation on the sample farms is doubtful. Principal changes in practices involved increased use of fertilizer and better pest control on cotton. A reduction in numbers of croppers and share tenants was the most significant change in the labor force.

Cropland use.- Reduction in acreage of cotton from 1953 to 1955 varied among the areas studied. The reduction was 46 percent for the San Joaquin Valley, 41 percent for the Clay Hills, 40 percent for the Delta, 36 percent for the Southern Piedmont, and 16 percent for the High Plains. However, in the High Plains, 1953 was a dry season, and the acreage planted to cotton in that year was considerably below the acreage that would have been planted if weather had been more normal. In relation

to the base acreage, the reduction was as great there as in any other area. Changes in cotton acreages between 1953 and 1955 in the other areas varied mainly because of differences in the relation of the 1953 acreage to the base period acreages used in establishing State allotments. For example, the 1953 acreage in the Southern Piedmont was less than the base period acreage, so the reduction required in 1955 from 1953 was relatively low. In the San Joaquin Valley, the acreage of cotton in 1953 was high in relation to the acreage in the base period. Therefore, the reduction was relatively great.

In the cotton areas surveyed other than the San Joaquin Valley, farmers were asked to indicate the acreages of various crops that would have been grown had there been no cotton allotments in 1955. From the answers obtained, it is apparent that on the average, these acreages would have been very close to the acreages for 1953. For this reason, it was considered that 1953, a year in which the acreage of cotton was not restricted, was a good indicator of farmers' reactions to no-program conditions. Therefore, in the statistical material presented for cotton farms, crop acreages planted in 1953 are used to represent what farmers would have been expected to plant in 1955 had there been nc program.

A summary of crops grown in 1953 and 1955 is shown in table 13. The most significant increase in feed grains occurred in the High Plains where the acreage of grain sorghum was 90 percent higher in 1955 than in 1953. The acreage of soybeans increased considerably on Delta farms and the acreage in specialty crops (alfalfa seed and melons) was higher in 1955 on farms in the western San Joaquin Valley. Idle land, in terms of percentage of cropland, increased significantly in the Southern Piedmont but the reverse was true in the High Plains where crop failure and idle cropland were quite high in 1953 because of severe drought. Several of the operators of farms surveyed in this area reported that they produced no cotton or grain sorghum from the acreage planted to these crops in 1953.

Crop organization was influenced by size of farm. (See appendix table 58.) The percentage reduction in cotton acreage from 1953 to 1955 was less for small farms than for large farms in all areas. 10/ For example, operators of small farms in the Delta planted 76 percent as much cotton in 1955 as they planted in 1953. This compares with 63 percent for medium farms and 59 percent for large farms. The pattern for farms in the Clay Hills and Southern Piedmont was similar. In the

10/ Because of the small number of farms in the San Joaquin Valley sample, no analysis was made by size groups.

Table 13. - Average acreage of cropland per farm in specified uses, survey farms, selected cotton areas, 1953 and 1955

Cropland use 1/	Delta (259 farms)		Clay Hills (150 farms)		Southern Piedmont (247 farms)		High Plains (150 farms)		Upper San Joaquin Valley (29 farms)		Western San Joaquin Valley (21 farms)	
	1953	1955	1953	1955	1953	1955	1953	1955	1953	1955	1953	1955
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Cotton	104	63	27	16	22	14	222	187	132	71	593	368
Corn	19	24	21	26	14	12	---	---	---	11	---	10
Grain sorghum for grain	---	1	---	---	---	---	125	237	1	19	5	36
Oats	6	15	---	---	10	11	---	---	---	---	---	---
Barley	1	4	---	---	---	---	---	---	3	23	626	769
Wheat	---	---	---	---	5	4	4	5	---	---	---	---
Soybeans	27	50	---	---	---	---	---	---	---	---	---	---
Potatoes	---	---	---	---	---	---	---	---	19	22	8	7
Melons	---	---	---	---	---	---	---	---	---	---	105	132
Alfalfa seed	---	---	---	---	---	---	---	---	---	---	17	120
All hay	4	5	6	6	1	1	4	8	25	32	1	16
Miscellaneous other crops	5	5	2	3	6	9	8	---	3	19	35	85
Cropland pasture	14	17	7	9	8	10	---	---	1	1	---	---
Total crops	180	184	63	60	66	61	363	437	184	198	1,390	1,543
Idle	5	8	6	9	11	17	70	---	4	4	290	317
Double cropped	3	5	---	---	3	4	---	---	---	9	10	33

1/ Annual crops on a planted acreage basis.

High Plains, operators of medium-sized farms reduced acreage relatively less than operators of small farms. In general, increases in acreages of feed grains and hay crops were greater for large farms than for the other sizes.

Tenure of operator had very little influence on the proportion of cropland diverted from cotton in 1955.

Farmers interviewed in the survey were asked to indicate the acreage of specific crops planted in 1955 on the acreage diverted from cotton. 11/ A summary of acreage diversions is shown in table 14. The average acreage diverted per farm varied by areas, ranging from 6 acres in the Southern Piedmont to 148 acres in the High Plains. In proportion of cropland diverted, the range was from 8 percent in the Southern Piedmont to 34 percent in the High Plains. In the Clay Hills and Delta areas, 12 and 22 percent, respectively, of the cropland was diverted from cotton in 1955.

Farmers in the High Plains and Delta planted other cash crops on most of the acreage diverted from cotton. In the High Plains in 1955, 97 percent of the land taken out of cotton was planted to grain sorghum. Soybeans were planted on 45 percent of the land diverted in the Delta. Alternative opportunities for use of the land taken out of cotton in the Southern Piedmont and Clay Hills were more limited than in the other areas. Farmers in these two areas did not make use of all the diverted land. For example, 40 percent of the acreage diverted by Southern Piedmont farmers remained idle in 1955 and 24 percent of the land taken out of cotton in the Clay Hills was not used for crop production. Very little of the diverted cotton land was seeded to pastures. The range was from none in the High Plains to 10 percent in the Southern Piedmont. Establishing productive pastures often requires more than one cropping season, and farmers are limited in their opportunities to shift cropland to this use in such a short period. In addition, farmers were uncertain as to future program provisions.

In some areas, the use made of diverted acreage varied by size of farm. (See appendix table 59.) In the Delta area, a higher percentage of the diverted acreage on large farms was used for soybeans and oats than on small farms. The small farms used a much higher percentage of their diverted acres for corn than did the large farms. In the Southern Piedmont and Clay Hills areas, a higher proportion of the diverted

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11/ Comparable data were not obtained from farmers in the San Joaquin Valley.

Table 14. - Cotton acreage diversions, averages per farm on survey farms in selected cotton areas, 1955

Item	Delta (259 farms)		Clay Hills (150 farms)		Southern Piedmont (247 farms)		High Plains (150 farms)	
	Acreage	Percentage of cropland	Acreage	Percentage of cropland	Acreage	Percentage of cropland	Acreage	Percentage of cropland
	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.
Cropland	187	---	69	---	74	---	438	---
Cotton:								
Base	1/	1/	23	33	20	27	336	77
Allotment	62	35	16	23	15	20	186	42
Planted	63	34	16	23	14	19	187	43
Diverted	41	22	8	12	6	8	148	34
	Acreage	Percentage of total diversion	Acreage	Percentage of total diversion	Acreage	Percentage of total diversion	Acreage	Percentage of total diversion
	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.
Cotton acreage diverted to:								
Corn	5	12	4	48	0.7	11	---	---
Grain sorghum for grain	1	2	---	---	---	---	144	97
Oats	6	15	---	---	1.3	21	---	---
Barley	1	2	---	---	---	---	---	---
Soybeans	18	45	---	---	---	---	---	---
Miscellaneous other crops	7	17	2	23	1.1	18	2	2
Cropland pasture	1	2	.4	5	.6	10	---	---
Idle cropland	2	5	2	24	2.5	40	2	1
Total	41	100	8.4	100	6.2	100	148	100

1/ Base acreage was not available for the Delta on a comparable basis with the other areas.

acres remained idle on small farms than on large farms. In the High Plains area, a very high percentage of the diverted acreage on all farms was used for grain sorghum.

Diversions from wheat were not significant for cotton farmers in the areas surveyed. For example, cotton farmers in the Southern Piedmont diverted an average of 2 acres from wheat per farm and 36 percent of this acreage was left idle in 1955.

Conservation. - Changes in land use (1953 compared with 1955) by Soil Conservation Service land-capability classes were obtained for the sample farms in one county in the Clay Hills and two counties in the Southern Piedmont. These changes are shown in appendix table 60. Farmers in the Clay Hills sample county retained a larger acreage of the cotton planted in 1955 on land of higher use capability. In 1953, 64 percent of the cotton planted on these farms was on land in capability classes I, II, and III, the land best suited to row crops, but in 1955, 72 percent of the cotton was planted on land in these 3 classes. Shifts that can be made by individual farmers are limited by the acreages of suitable land on their farms, but these averages indicate that farmers were attempting to concentrate their reduced acreage of cotton on the most suitable land. In 1953, on the Southern Piedmont farms in the sample, operators planted 49 percent of their cotton on land in capability classes I and II as compared with 54 percent in 1955. In both the areas studied, a higher proportion of the corn planted in 1955 was on land of lower use capability than was the case in 1953.

Considering the use made of all land on these specific farms, it can be concluded that the cotton-allotment program contributed very little to conservation. Not much of the diverted acreage went into pasture and concentration of cotton on land of higher use capability was often at the expense of putting corn on land less suitable for continuous row cropping.

Practices. - Increased use of fertilizer and better pest control were the only important changes in cotton production practices reported by the farmers interviewed. In all areas, except the High Plains, practically all of the crop was fertilized in 1955. Outside the High Plains, proportion of planted acres fertilized in 1953 ranged from 92 percent in the Delta to 100 percent in the Southern Piedmont and Western San Joaquin Valley. A summary of fertilizer use is shown in table 15. No fertilizer was applied to cotton on the dryland farms in the High Plains sample, and only 34 percent of the farmers on irrigated farms in this area reported this practice.

Table 15. - Use of fertilizer on cotton on survey farms, averages per farm, selected cotton areas, 1953 and 1955

Cotton production areas	Cotton planted		Percentage of planted acreage fertilized		Total nutrients (N, P, and K) used per acre planted	
	1953	1955	1953	1955	1953	1955
	Acres	Acres	Percent	Percent	Pounds	Pounds
Delta	104	63	90	92	83	98
Clay Hills	27	16	97	97	108	111
Southern Piedmont	22	14	100	100	132	137
High Plains 1/	222	187	4	17	3	40
Upper San Joaquin Valley	132	71	95	98	86	109
Western San Joaquin Valley	593	368	84	100	100	130

1/ Fertilizer used only on irrigated cotton.

Although a higher proportion of the cotton crop was fertilized in 1955 than in 1953, the increase in number of pounds of total nutrients (N, P, and K) used per acre planted was the most significant change. Outside the High Plains, where total nutrients used per acre of cotton planted increased from 3 pounds in 1953 to 40 pounds in 1955, the highest proportional increases were in the San Joaquin Valley and the Delta. The increase (1955 compared with 1953) in total nutrients used per planted acre was about 30 percent on farms in the San Joaquin Valley and 18 percent in the Delta. In the Clay Hills and Southern Piedmont, the increase was 3 and 4 percent, respectively.

In all the areas studied, the average quantity of all nutrients used on cotton in 1955 was probably below the average quantity that could have been applied profitably with similar weather. Farmers who reported on yield expectancy from increased use of fertilizer were in general agreement that this practice would result in higher production per acre in 195

The use of insecticides on cotton in 1955 was considerably above 195 in most of the sample areas. Improved insect-control practices undoubtedly resulted in some increases in yields of cotton in 1955.

Labor force. - The cotton program had considerable influence on the labor force, particularly in areas where croppers and share tenants are important. A third or more of all farmers in the Delta, Clay Hills, and Southern Piedmont areas had cropper or share-tenant labor, or both, in 1955. Fewer farms in each of these areas had cropper or share-tenant labor, or both, in 1955 than was the case in 1953. Many cropper and share-tenant families left cotton farms from 1953 to 1955. The percentages of cropper or share-tenant families, or both, who left these farms during the 3 years amounted to 17 percent in the Southern Piedmont, 21 percent in the Clay Hills, and 34 percent in the Delta. Cropper and share-tenant families left for various reasons, but the chief reason given by operators of the farms surveyed was the reduction in cotton acreage required by the cotton program. Nearly half of the Delta farms had lost cropper or share-tenant families, or both, as a result of cotton acreage reductions, and by mid-1955, 32 percent of all the cropper and share-tenant families on the sample farms had left for this reason. In the Clay Hills and Southern Piedmont area, about one-fourth of the farmers reported that croppers or share tenants, or both, had left because of the smaller acreage of cotton. The croppers or share tenants, or both, who left these two areas because of the cotton program made up nearly a fifth of all workers in these categories in 1953.

The number of resident workers in operator families per farm remained relatively stable from 1953 to 1955 (table 16). Resident wage hands per farm increased in the Delta but remained about the same in other areas.

Even with a large reduction in the number of sharecropper workers, the acreage of cotton per worker in 1955 was only about three-fourths the acreage in 1953. This percentage change was about the same in the Delta, Clay Hills, and Southern Piedmont areas. However, in each of these areas, the reduction in cotton acreage per operator and wage worker was greater than that for sharecropper workers.

Livestock. - Livestock numbers changed very little on the sample farms except for some increase in number of beef cattle on the farms surveyed in the Delta, Clay Hills, and Southern Piedmont areas. However, these trends have been underway for some time, and the small increases may be unrelated to the diverted acreage program (table 17). Shifts to pasture and grazing livestock generally cannot be undertaken on a year-to-year basis. Such adjustments require a longer period of time than that covered by this survey. If the diverted acreage program continues, it is probable that livestock numbers, and particularly numbers of beef cattle, will be increased on many cotton farms.

Table 16. - Labor force, and acreages of cotton and corn per worker on survey farms, averages per farm, selected cotton areas, 1953 and 1955

Item	Delta		Clay Hills		Southern Piedmont	
	1953	1955 as a percentage of 1953	1953	1955 as a percentage of 1953	1953	1955 as a percentage of 1953
	Number	Percent	Number	Percent	Number	Percent
Resident workers:						
Members of operators' families	2.2	99	2.2	100	2.3	96
Croppers and share tenants	8.8	67	3.9	79	3.0	80
Wage hands	.8	137	.1	100	.1	100
Cotton acreage per worker:						
Members of operators' families and wage hands	14.9	65	3.9	59	3.4	71
Croppers and share tenants	7.2	74	4.7	72	4.6	74
Corn acreage per worker:						
Members of operators' families and wage hands	4.0	130	5.3	118	2.3	100
Croppers and share tenants	.8	159	2.3	161	2.6	104

Effect of Cotton Acreage Diversion on Individual Farm Incomes

Farm budgets for typical farms are used to illustrate some of the effects of the cotton-allotment program on individual farm incomes in selected areas. Budgets for the 1953 cropland organization represent the situation without cotton acreage allotments and marketing quotas and budgets for the 1955 cropland organization represent conditions with cotton acreage allotments and market quotas.

Table 17. - Numbers of livestock per farm, survey farms in selected cotton areas, 1953 and 1955

Kind of livestock	Delta		Clay Hills		Southern Piedmont		High Plains	
	1953	1955	1953	1955	1953	1955	1953	1955
	No.	No.	No.	No.	No.	No.	No.	No.
Dairy cows	2	2	3	3	3	2	2	1
Beef cows	15	17	8	9	2	3	4	3
Calves, under 1 year	9	10	4	4	2	2	3	4
Other cattle	1	1	2	2	---	---	1	1
Pigs raised	7	10	4	4	4	3	6	6

Two sets of income comparisons are presented. In the first, actual yields and prices were used in making estimates of net farm incomes. In the second set of comparisons, normal yields and 1955 prices were used. Summary comparisons of estimated income and expenses for specified farm situations in the selected areas are presented in table 18. More details for the several farming systems are shown in appendix tables 61 through 68.

Income comparisons assuming actual yield and prices. - Estimates were made of incomes for typical farms as organized in 1953, using 1953 yields and prices and as organized in 1955 using 1955 yields and prices. This provides a comparison of estimated incomes which takes into account all of the factors that may have affected farm incomes in 1953 and in 1955. Estimated net incomes were higher in 1955 than in 1953 for all farms budgeted, except those in the San Joaquin Valley of California. In general, the cost rates and prices of cotton were slightly higher in 1955 than in 1953, whereas prices of most other farm products grown on cotton farms were lower in 1955 than in 1953. The net income in favor of 1955 varied from about 4 percent for large-scale Delta farms to 25 percent for Southern Piedmont farms. On the nonirrigated farm in the High Plains, the estimated net income was about $3,000 in 1955 compared with a loss of $600 incurred in 1953. However, because of the severe drought in 1953, comparisons based on incomes on nonirrigated farms in 1953 are of little significance.

The extent of change in incomes between 1953 and 1955 is related primarily to 3 factors: (1) The relative yield of cotton in the 2 years; (2) the relative reduction in the acreage of cotton; and (3) the use made of

Table 18. - Summary of differences in income and expenses between typical 1953 and 1955 farming systems, with specified yields and prices, selected cotton areas

Area and kind of farm	Changes from 1953 to 1955							
	With actual yields and season average prices				With normal yields and 1955 prices and costs			
	Total net income 1/		Gross income from cotton	Total expenses	Total net income 1/		Gross income from cotton	Total expenses
	Dol.	Pct.	Dol.	Dol.	Dol.	Pct.	Dol.	Dol.
Mississippi Delta:								
Small commercial family-operated cotton farm	138	7	-184	-31	-114	-7	-466	-227
Large-scale cotton farm	1,018	4	-15,890	-9,000	-4,214	-22	-19,155	-10,240
Clay Hills:								
Average cotton farm	459	20	173	-119	-268	-18	-1,092	-642
Southern Piedmont:								
Commercial family-operated cotton farm	440	26	207	-260	-180	-12	-848	-581
High Plains:								
Commercial family-operated irrigated cotton farm	1,549	20	-650	-992	-3,914	-34	-5,772	-672
Commercial family-operated nonirrigated cotton farm	3,652	2/	3,883	-1,673	-1,574	-28	-3,134	-564
Upper San Joaquin Valley:								
80-acre cotton-potato farm	3/	3/	3/	3/	-794	-10	-7,070	-2,427
Western San Joaquin Valley:								
Large cotton farm	3/	3/	3/	3/	-29,863	-24	-75,403	-27,845

1/ Return to land, other capital and labor, and management of the operator and his family.

2/ This farm had a net loss in income in 1953.

3/ Data not available.

diverted acres in 1955. Weather was more favorable for production of cotton in 1955, and farmers increased their use of improved production practices. Selection of land also was important in increases in yield in some areas. Because of the higher yields of cotton, the gross value of cotton lint and seed in some situations was higher in 1955 than in 1953 despite reductions in acreage. Yields of cotton on the Southern Piedmont farm were 66 percent higher in 1955 than in 1953, with a 32-percent reduction in the acreage of cotton. Only limited use was made of the diverted acres, but net farm income was 25 percent higher. On the large Delta farm, cotton yields were about 15 percent higher in 1955 than in 1953. The reduction in cotton acreage was about 33 percent, but a large percentage of the diverted acreage was planted to soybeans, yields of which were above average. Total farm expenses were considerably less in 1955 than in 1953 because of the smaller acreage of cotton. These changes resulted in a 4-percent increase in estimated net income in 1955 compared with 1953.

Except for the nonirrigated farm in the High Plains, the extent of change in income for the other farm situations was between those for the Southern Piedmont and the large Delta farm (table 18).

Income comparisons assuming normal yields and 1955 prices.- In order more nearly to isolate and appraise the effects of the changes associated with the cotton acreage-allotment and quota programs, estimates were made of incomes for typical farm situations in 1953 and in 1955, assuming normal yields and the same (1955) commodity prices and cost rates for both years. Farmers interviewed during the study were asked to estimate the difference between the cotton yield expectancy with 1953 organization and practices, and with 1955 organization and practices, assuming average weather. These data were used along with data on average yields during recent years in establishing normal yields for each of the 2 years. Normal yields for crops other than cotton represent average yields for recent periods adjusted for trends. In most instances, the normal yields assumed for crops other than cotton are the same for the 1953 and 1955 cropland organizations.

Estimated incomes, based on normal yields and 1955 prices, are considerably lower for the 1955 cropland organization than for the 1953 cropland organization for all farms budgeted. The differences in income ranged from about 7 percent for the small Delta farm to 34 percent for the irrigated farm in the High Plains Area.

The chief factors that affected the relative differences in net incomes among farms for 1955 and 1953 organizations were: (1) The relative importance of cotton in the farming system; (2) the relative reduction of

cotton acreage; and (3) the relative profitability of the use of diverted acreage compared with its use for cotton.

On a typical irrigated farm in the High Plains Area, the percentage decrease in acreage of cotton from 1953 to 1955 was high, the proportion of income from cotton was high, and per acre incomes from grain sorghum were considerably less than from cotton. Estimated net income is 34 percent less with the 1955 cropland organization than with the 1953 organization. On the Delta farms, the percentage reduction in acreage of cotton between 1953 and 1955 was less than on most of the other farm situations included in this analysis. Apparently, this is because the acreage of cotton in 1953 was low in relation to the entire base period, whereas for most other farm situations, the acreage of cotton in 1953 was high in relation to the entire base period.

With normal yields and 1955 prices, the production of cotton would be a more profitable use of the resources than the uses to which they were diverted in all farms situations budgeted.

Estimates were made to determine, for selected typical farm situations, the price of cotton that without allotments (the 1953 organizations) would have given the same net farm incomes as would the 1955 organization with 1955 cotton prices. These estimates are based on the assumption that yields and cost rates, as well as the prices of other farm products, would remain unchanged. The estimated prices necessary to equalize income, along with estimates of associated changes in cotton production, are presented in table 19.

The estimated reduction in price that would equalize 1955 incomes varied from 5 percent for the small Delta farm, where production was 20 percent greater for the 1953 situation than for the 1955 situation, to 18 percent for the High Plains irrigated farm where production of cotton was 33 percent higher for the 1953 organization.

Production of soybeans, grain sorghum, and oats was considerably higher in 1955 than in 1953. This was due, at least partly, to wheat, cotton, and corn acreage-diversion programs. The prices of these products were lower in 1955 than in 1953. If this were taken into account, the necessary price of cotton to equalize incomes would be somewhat lower than is indicated, assuming that prices of these commodities would be the same for both situations.

This analysis indicates that the larger volume of cotton associated with no allotment program could be produced at lower unit costs than the smaller volume associated with the allotment program. However,

Table 19. - Estimated price of cotton that would have provided the same net income from either the 1953 or the 1955 organization, with normal yields, selected farming systems and areas

Area and kind of farm	Difference in net income (1953 minus (1955)	Price of cotton per pound, 1955	Estimated price of cotton for 1953 that would have equalized incomes		Cotton production	
			Per pound	Percentage reduction from 1955 price	From 1955 organization	1953 as a percentage of 1955
	Dollars	Cents	Cents	Percent	Bale	Percent
Mississippi Delta:						
Small commercial---	114	34.4	32.8	5	12.2	120
Large-scale --------	4,214	34.6	31.1	10	212.4	147
Clay Hills:						
Area average cotton farm ----------	268	34.4	31.1	10	10.4	156
Southern Piedmont:						
Commercial family-operated cotton farm ----------	180	32.9	29.8	9	10.9	140
High Plains:						
Commercial family-operated (irrigated) ----------	3,914	30.4	24.8	18	106.0	133
Commercial family-operated (nonirrigated) ----------	1,574	30.4	24.7	18	36.0	154
Western San Joaquin Valley:						
Large-scale cotton farm ----------	29,863	35.0	30.3	13	880.0	145

in the absence of price supports, it is likely that the reduction in the price received for cotton associated with increases in production similar to those shown in table 19 would be considerably greater than the estimated reduction in price that would equalize incomes from the "with" and "without" allotment-program situations.

Income to cropper families. - Although detailed information on the income received by cropper families was not obtained in the survey, a rough approximation has been made of the difference in value of the croppers' share of production and expenses for the major crops grown by croppers on the large farm in the Delta area (table 20).

Table 20. - Crop acreage, estimated value of production, and expenses per cropper family, large-scale cotton farm, Mississippi Delta, with specified yields and prices, 1953 and 1955

Item	Unit	Actual yields and prices		Normal yields and 1955 prices and costs	
		1953	1955	1953	1955
Crops:					
Cotton planted	Acre	15.0	12.0	15.0	12.0
Corn planted	do.	2.0	2.9	2.0	2.9
Production (cropper share):					
Cotton lint	Pound	3,550	3,480	3,222	2,837
Corn	Bushel	50	116	55	80
Value of production	Dollar	1,389	1,402	1,265	1,130
Crop expenses (cropper share)	Dollar	386	389	355	355
Net returns from specified crops	do.	1,003	1,013	910	755

On this farm, net returns per cropper family from crops were about the same in 1955 as in 1953 under conditions of actual yields and prices. However, with normal yields and with 1955 prices applied to both years, the net returns to the cropper family for cotton and corn would have been considerably less with the 1955 than with the 1953 organization.

The estimates shown in table 20 do not represent the total income to the cropper family. No doubt, most cropper families earned some money from work for the farm operator or from nonfarm work. Also, some sharecroppers had a few head of livestock and all of them had some perquisites from the farm.

Wheat Areas

Four important wheat-producing areas, having different characteristics, were selected for special study (see inside front cover). West-central Kansas produces hard red winter wheat and is representative of the Central Plains; grain sorghum is an important alternative cash crop. It is frequently planted where wheat seedings have failed. North-central North Dakota produces hard red spring and durum wheat and is representative of the Northern Plains; flax, feed grains, and livestock are important enterprises. North-central Montana produces both hard winter and hard spring wheat, predominantly under a wheat-fallow system, barley is an important alternative. On the average, farms are large and range cattle are important on some of them. The Palouse area of Washington produces mainly soft white winter and some spring wheat; barley and dry peas are important crops in the farming system.

Numbers of farms surveyed in the areas, classified by size and type of farm, are shown in table 21. Wheat producers were randomly sampled in each area. These interviews were the chief source of data and information used in the analysis.

Participation in Allotment Program

Marketing quotas and accompanying penalties for noncompliance induced most commercial wheat farmers to comply with their wheat acreage allotments. 12/ Among the growers interviewed in the survey, all were in compliance in 1955, in both the North Dakota and Washington-Palouse areas.

Among those interviewed in the Kansas area, 402 were in compliance and 15 were not in compliance in 1955. Operators of noncompliance farms

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12/ Marketing quotas and penalties applied only to growers of more than 15 acres of wheat. In order to obtain a marketing-quota certificate, which would permit him to market his wheat, a noncompliance grower had to do one of three things: (1) Pay a penalty amounting to 45 percent of the support price per bushel on the excess production, (2) seal the excess production in storage, or (3) deliver the excess wheat to the Government. Excess wheat was calculated as the normal production on the excess acreage. If yield were below normal, a grower could appeal for an adjusted excess production. If his total production did not exceed normal production on his allotted acreage, he was not subject to penalty.

Table 21. - Number of wheat farms, by size and type of farm, whose operators were interviewed, selected areas, summer 1955

Item	West-central Kansas	North-central North Dakota	North-central Montana	Washington-Palouse
	Number	Number	Number	Number
All farms	417	376	134	93
Crop acres per farm:				
Under 400	231	162	26	29
400-799	143	172	41	45
800 and over	43	42	67	19
Type of farm:				
Cash grain	117	66	61	69
Grain and minor livestock	251	120	29	24
Grain and major livestock	34	190	44	0

in the Kansas area on the average had 80 percent more cropland and about the same ratio of allotment to crop acres but seeded a third more wheat than their allotments. From 1953 to 1955, operators of noncompliance farms increased their acreages of grain sorghum by fewer acres and reduced the acreages in fallow, whereas operators of the compliance farms increased the acreages in fallow (table 22).

Among the Montana growers interviewed, 115 were in compliance and 19 were not. Noncompliance farms on the average had 45 percent more cropland but had the same ratio of allotments to cropland as compliance farms. Operators of noncompliance farms overseeded their allotments by 60 percent; in fact, they seeded substantially more than the base acreage in 1955. Between 1953 and 1955, these farmers made a smaller increase in barley acreage and decreased slightly the land in fallow, whereas operators of compliance farms increased the acreage in fallow by about 8 percent.

Among the reasons given by farmers for noncompliance were: Wheat most profitable crop despite penalty; allotment too small for efficient enterprise; lacked physical facilities for growing or storing other crops; 1955 wheat yield low enough to escape penalty; 1955 wheat yield high enough, could ignore penalty; 1955 crop too good to destroy. Apparently,

Table 22. - Comparison of compliance and noncompliance survey farms, selected wheat areas, 1953 and 1955 1/

NORTH-CENTRAL MONTANA

Item	Unit	Compliance farms		Noncompliance farms	
		1953	1955	1953	1955
All farms	Number	115	115	19	19
Farms overplanted allotment	do.	---	13	---	19
Farms underplanted allotment	do.	---	33	---	---
Averages per farm of:					
Land operated	Acre	1,610	1,638	2,796	2,860
Cropland	do.	829	856	1,176	1,239
Wheat base acreage	do.	---	378	---	575
Wheat allotment	do.	---	256	---	386
Percentage of base	Percent	---	68	---	67
Winter wheat planted	Acre	245	199	260	346
Spring wheat planted	do.	183	57	287	280
Total acreage	do.	428	256	547	626
Percentage of allotment	Percent	---	100	---	162
Barley planted	Acre	36	100	41	55
Fallow	do.	367	398	577	569

WEST-CENTRAL KANSAS

All farms	Number	402	402	15	15
Farms overplanted allotment	do.	---	48	---	15
Farms underplanted allotment	do.	---	101	---	---
Land operated	Acre	655	671	985	1,002
Cropland	do.	439	451	806	823
Wheat base acreage	do.	---	281	---	419
Wheat allotment	do.	---	184	---	270
Percentage of base	Percent	---	66	---	64
Winter wheat planted	Acre	247	180	402	358
Percentage of allotment	Percent	---	98	---	133
Grain sorghum planted	Acre	51	97	50	85
Fallow	do.	97	121	287	250

1/ Compliance relates to the 1955 allotment program; wheat allotments were not in effect in 1953. Operators of compliance farms harvested no more than the allotted acreage, although some overplanted the allotment and came into compliance before harvesttime. Operators of noncompliance farms overplanted and harvested more than the allotted acres.

growers in some localities were more aware of the alternatives under the program than growers in other localities.

In the Kansas area, 33 growers overplanted their allotments but came into compliance before harvest, and 101 growers underplanted their allotments. In the Montana area, 13 growers overplanted their allotments but came into compliance and 33 growers underplanted their allotments.

Changes in Farm Organization and Practices

A reduction of about a third in the acreage of wheat was required by the 1955 allotment program, compared with the base acreage. The average wheat allotment in 1955 ranged from 66 percent of the base in the Washington-Palouse area to 68 percent in the Kansas area. This meant an average reduction from the base wheat acreage per farm as follows:

Area	Acres
West-central Kansas	97
North-central North Dakota	72
North-central Montana	131
Washington-Palouse	97

The actual reductions from 1953 were less than those figures in the Kansas and North Dakota areas because the 1953 acreage was lower than usual.

The actual changes in acres of wheat and in other crops and land use from 1953 to 1955 were recorded on the farms surveyed in the 4 wheat-producing areas (table 23). These data only partially indicate the influence of acreage allotments for wheat; not all the change between 1953 and 1955 can be attributed to allotments; changes also were made for other reasons. 13/ Thus, comparisons between 1953 and 1955 sometimes overstate or understate the influence of allotment programs. Also, the magnitude of change was influenced slightly because survey farms increased slightly in size. While this affects the change in acreage per farm, it does not affect the overall pattern in the aggregate.

13/ In some instances, a shift occurred in the relative market prices of alternative crops. In the Kansas area, less than the usual acreage of wheat was seeded in 1953 because of the dry fall of 1952. In North Dakota, the competitive position of barley and flax has improved relative to wheat because of rust damage to wheat. In the Washington-Palouse area, the yield response to fertilizer and sweetclover is revolutionizing previous systems of cropping.

Table 23.- Average acreage per farm in specified uses, survey farms, 4 wheat areas, 1953 and 1955

Item	417 farms in west-central Kansas 1/			376 farms in north-central North Dakota			134 farms in north-central Montana 4/			93 farms in Washington-Palouse		
	1953 2/	1955		1953 2/	1955		1953 2/	1955		1953 2/	1955	
		Actual 2/	Without program 3/		Actual 2/	Without program 3/		Actual 2/	Without program 3/		Actual 2/	Without program 3/
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Land operated:												
Cropland	452	464	464	477	492	492	878	910	910	595	605	605
Other land	215	219	219	167	169	169	901	901	901	38	38	38
Total	666	683	683	644	661	661	1,779	1,811	1,811	633	643	643
Wheat base	---	284	---	---	213	---	---	405	---	---	295	---
Wheat allotment	---	187	---	---	141	---	---	274	---	---	198	---
Cropland use:												
Winter wheat	253	186	259	0	0	0	247	220	5/	277	194	5/
Spring wheat	0	0	0	146	118	163	198	89	5/	18	2	5/
Subtotal	253	186	259	146	118	163	445	309	427	295	196	293
Durum	0	0	0	48	25	22	0	8	8	---	---	---
Barley	3	7	3	44	80	62	37	114	27	34	81	25
Other small grain	2	3	2	37	44	44	12	18	4	11	17	11
Grain sorghum	51	96	50	0	0	0	0	0	0	0	0	0
Flax	0	0	0	49	75	59	0	1	1	0	0	0
Dry peas	0	0	0	0	0	0	0	0	0	78	105	78
Mustard	0	0	0	0	0	0	7	17	7	---	---	---
Forage crops	44	51	50	39	48	41	26	34	28	32	36	32
Miscellaneous crops	3	5	3	1	1	1	6/	1	6/	13	21	17
Fallow and idle	138	147	128	113	106	105	397	422	421	95	85	86
Green manure 7/	---	---	---	---	---	---	---	---	---	37	63	63
Total	494	495	495	477	497	497	924	924	923	595	605	605
Double cropped	42	31	31	---	5	5	46	14	13	0	0	0

1/ Includes 402 farms in compliance, 15 farms not in compliance with wheat allotments in 1955.
2/ As reported by growers interviewed in survey, summer 1955.
3/ Estimates based largely on diversion reported in table 4.
4/ Includes 115 farms in compliance, 19 farms not in compliance with wheat allotments in 1955.
5/ Not designated separately.
6/ Less than 0.5 percent.
7/ Plowed under. This item reported separately in the Washington area only.

In the four areas studied, most of the land that came out of wheat from 1953 to 1955 went into feed grains, other annual crops, and fallow. The shift to perennial hay or pasture was small. Farmers did not make the longer term commitments associated with an expansion of forages and livestock. A 2-year period is too short a time in which to establish any substantial acreage of perennial grass seedings in the Great Plains. Also, farmers were retaining acreage flexibility in case of program changes.

Some shifts were made in types of wheat grown. The North Dakota area produces both hard spring wheat and durum (a macaroni-type wheat). Durum was in short supply in 1955 because of rust damage in previous years. Consequently, acreage restrictions on durum wheat were removed. Despite this incentive, the acreage of durum was about half that in 1953. This reduction is partly explained by the fear of rust damage and by a shortage of rust-resistant varieties. The reduction in acreage of durum wheat was particularly noticeable among the typical durum wheat farms, but it also took place on the hard spring wheat farms on which some durum is grown (table 24).

Along with the removal of acreage restrictions on durum wheat, growers were permitted to use their entire allotments for hard spring wheat in 1955. Even so, the seeded acreage of hard spring wheat on the average was 16 percent below the wheat allotments and was sharply below the 1953 acreage (table 23). Most of the reduction came on the typical hard wheat farms. On typical durum wheat farms, acreages of hard spring wheat were actually increased from 1953 to 1955; still the total acreage was only slightly more than half the allotment in 1955.

In the Montana area in 1953, 40 percent of the acreage was planted to hard spring wheat and 60 percent to winter wheat. From 1953 to 1955, 80 percent of the total reduction in the acreage of wheat was in spring wheat and only 20 percent in winter wheat. In fact, the 1955 acreage of spring wheat was about half the 1953 acreage. Durum wheat was not under acreage allotments. Survey farmers seeded an average of 8 acres per farm, whereas before they had seeded no durum.

In the Washington-Palouse area, 94 percent of the acreage of wheat in 1953 was planted to winter wheat and 6 percent to spring wheat. In 1955, the acreage of spring wheat was down to 1 percent of the total acreage of wheat; spring wheat was practically eliminated. Spring wheat usually yields less than winter wheat, but it is also less conducive to erosion. 14/

14/ Fall tillage in connection with winter wheat may leave the soil in an erosive condition at the beginning of the winter rainy season. With spring wheat, preparation of the land usually takes place after the rainy season has passed.

Table 24. - Use of cropland on spring-wheat farms and durum farms, average per farm, survey farms, north-central North Dakota, 1953 and 1955

Item	298 spring-wheat farms 1/			78 durum farms 2/		
	1953	1955	Change 1953-55	1953	1955	Change 1953-55
	Acres	Acres	Acres	Acres	Acres	Acres
Land operated	654	667	13	606	636	30
Cropland	482	501	19	455	478	13
Wheat allotment	---	141	---	---	142	---
Spring wheat	176	127	-49	29	86	57
Durum	19	14	-5	160	67	-93
Barley	43	77	34	46	90	44
Other small grains	36	45	9	40	36	-4
Flax	51	77	26	39	67	28
Forage crops	41	51	10	29	37	8
Miscellaneous	1	3/	3/	1	2	1
Fallow and idle	114	110	-4	110	92	-18
Total	481	501	20	454	477	23

1/ Farms on which more than half the 1953 wheat acreage was hard spring wheat.

2/ Farms on which more than half the 1953 wheat acreage was durum.

3/ Less than 0.5 percent.

Use made of diverted land in 1955. - As an additional measure of the effect of the program, growers interviewed in the summer of 1955 were asked to report acreages in specified crops that would have been in wheat that year had there been no acreage allotments. In North Dakota, the question was limited to hard spring wheat as allotments did not apply to durum wheat.

In 3 of the 4 wheat areas studied, 65 to 85 percent of the diversion was to feed grains (table 25). In the North Dakota area, 42 percent went to feed grains and 36 percent to flax. In the Washington-Palouse area, 27 percent went to dry peas. West-central Kansas was the only 1 of the 4 areas that made any substantial diversion to fallow or idle - 26 percent. Diversion to forage crops was minor, even on farms with livestock enterprises. (See appendix table 69.) These data, along with the data on actual land use in 1955 on the survey farms, were used to estimate what the distribution of crop acreage would have been in 1955 had there been

Table 25. - Use of land diverted from wheat on survey farms, average per farm, 4 selected wheat areas, 1955

Item	West-central Kansas	North-central North Dakota	North-central Montana	Washington-Palouse
	Number	Number	Number	Number
Farms	417	376	134	93
	Acres	Acres	Acres	Acres
Cropland	464	492	910	605
Total diversion	73	45	118	97
	Percent	Percent	Percent	Percent
Use of diverted land:				
Durum	---	5	---	---
Barley and other grains	6	40	85	65
Grain sorghum and corn	63	2	1	---
Flax	---	36	---	---
Dry peas	---	---	---	27
Forage crops	1	3	3	3
Fallow or idle	26	3	1	1
Other	4	11	10	4
Total	100	100	100	100

no acreage allotments on wheat. These estimates are summarized for the 4 study areas in table 23.

Land use with no wheat allotments in 1955. - Farmer interviews indicated that without allotments, the acreage of wheat would have been substantially higher in all 4 areas than it was in 1955. This event was to be expected in the Kansas, Montana, and Washington areas where on the average seedings were equal to or above the allotments. But in the North Dakota area, where on the average allotments of spring wheat were underplanted, it might seem inconsistent that farmers would have seeded more wheat in the absence of allotments. The fact is, many farmers felt restricted by allotments.

Comparisons of the acreages farmers would have seeded in 1955 without allotments with the base and 1953 acreages are interesting. The 1955 acreage would have depended on the acreage of land available for seeding in that year, which in turn would have depended partly on the acreage in fallow and partly on the acreage of sorghum or corn grown the previous year. Sorghum and corn usually are harvested too late to permit fall seedings of wheat to follow. Thus, the acreage of wheat in 1955 would not necessarily have been the usual acreage, assuming no program restrictions.

In both the Kansas and North Dakota areas, the 1955 acreage of wheat in the absence of allotments probably would have been about equal to the 1953 acreage but about 10 percent below the base acreage. In the Kansas area, a combination of not enough fallow and large plantings of sorghum in 1954 on land diverted from wheat limited the acreage of land available for wheat in 1955. In the North Dakota area, the fear of a recurrence of the previous 3 to 4 years of rust damage, was the dominant factor. In the Montana area, the 1955 acreage of wheat would have been almost as large as in 1953 - about 10 percent above the base acreage. For several years, this area has had unusually good weather with high yields of wheat. In addition, growers now have the equipment to put more of their land into a fall crop. In the Washington-Palouse area, the 1955 acreage of wheat in the absence of allotments would have been about the same as the base acreage and the acreage in 1953.

Had there been no acreage allotments on wheat in 1955, the acreage of feed grains would have been lower than it was in all areas, but not so low as in 1953 in the North Dakota area, about the same as 1953 in the Kansas area, and less than 1953 in the Montana and Washington areas (table 23). In other words, not all the change between 1953 and 1955 was due to the allotments on wheat.

Even without wheat allotments in 1955, the North Dakota area would have seeded 20 percent more flax than in 1953. Farmers in the Kansas area would have increased the acreage of forage crops with or without allotments; they needed more forage because of the drought. Without wheat acreage allotments, farmers in the North Dakota and Montana areas would have made somewhat smaller increases in acreages of forage crops. The Washington-Palouse area would have maintained its acreage of dry peas at the 1953 level.

Changes in livestock. - Thus far, wheat allotments have affected livestock numbers in the wheat areas very little (table 26). In specific

Table 26. - Numbers of specified livestock per farm on survey farms in 4 selected wheat areas, 1953 and 1955

Item	West-central Kansas		North-central North Dakota		North-central Montana		Washington-Palouse	
	1953	1955	1953	1955	1953	1955	1953	1955
	No.	No.	No.	No.	No.	No.	No.	No.
Survey farms	417	417	376	376	134	134	93	93
Beef cows, all farms 1/	20	17	9	10	23	25	7	8
Compliance farms 1/	20	18	9	10	23	26	7	8
Noncompliance farms 1/ 2/	13	9	---	---	20	18	---	---
Stock sheep 1/	2	3	4	5	16	16	5	6
Total animal units 1/	29	27	24	28	30	35	14	15
Pigs raised	3/	3/	5	7	4	5	9	11
Lambs fed	0	0	15	3	0	0	1	1

1/ Number on farms January 1.
2/ No noncompliance farms were found among the sample in the North Dakota and Washington areas.
3/ Less than 0.5 percent.

farming situations, farmers are expanding livestock to increase the volume of business and to make better use of family labor, but no marked trend is evident. (See appendix table 70.) These adjustments are consistent with the longer term interest of many areas in the Great Plains.

Changes in farming practices. - Two changes were noted in the four wheat areas - increased use of fertilizer and an increase in fallow. The acreage of wheat fertilized increased in all areas from 1953 to 1955 (table 27). As the total acreage of wheat was less in 1955, the proportion of wheat fertilized increased significantly. However, the proportion fertilized was still small in the Kansas area (about 2 percent). It was moderate in the North Dakota area (14 percent) and in the Montana area (23 percent). In the Washington-Palouse area, about two-thirds of the acreage of wheat was fertilized in 1955 compared with 40 percent in 1953, and the average rate of application increased from 40 to 48 pounds of nutrients per acre. In the Palouse area, barley was fertilized almost as heavily as was wheat. (See appendix table 71.)

Table 27. - Use of fertilizer on wheat on survey farms in 4 selected wheat areas, 1953 and 1955

Area	Acres fertilized		Average nutrients used				Percentage of acreage fertilized	
			Per acre fertilized		Per farm 1/			
	1953	1955	1953	1955	1953	1955	1953	1955
	Acres	Acres	Pounds	Pounds	Pounds	Pounds	Percent	Percent
West-central Kansas	1,017	1,969	33.6	28.1	82	133	1	2
North-central North Dakota	6,954	7,393	22.2	20.2	411	397	9	14
North-central Montana	6,624	9,912	12.6	13.8	622	1,018	11	23
Compliance farms	5,295	5,848	13.0	14.9	685	759	11	19
Noncompliance farms	1,329	4,064	11.0	12.0	773	2,578	13	34
Washington-Palouse	11,695	12,001	39.9	48.3	5,018	6,237	43	66

1/ Average of all farms whether or not fertilizer was used.

The proportion of wheat seeded on fallow increased from 1953 to 1955 in the Kansas, Montana, and Washington areas (table 28). In the Kansas area, farmers seeded the same acreage on fallow in both years and reduced the acreage of wheat seeded on stubble land. In the Montana area, farmers seeded virtually all their winter wheat on fallow in both years. Operators of compliance farms also seeded most of their spring wheat on fallow; they had seeded 70 percent of it on fallow in 1953. (See appendix table 72.) Operators of noncompliance farms sharply increased their actual acreages of winter wheat and seeded all of the wheat on fallow. They reduced slightly the acreage of spring wheat and reduced sharply the proportion seeded on fallow. Compliance farmers used about 100 acres of fallow for barley in 1955, whereas noncompliance farmers used virtually all of their fallow for wheat. In the Washington-Palouse area, farmers increased the proportion of wheat seeded on fallow and sweetclover land from 48 percent in 1953 to 66 percent in 1955. Nevertheless, there was a substantial reduction in the total acreage of wheat so seeded.

Change in Volume of Production

Shifts in crop acreages had a considerable effect but in some areas yields had even more effect on changes in crop production from 1953 to 1955. In some areas, production of wheat increased despite a reduction in acreage under the allotment program. To eliminate the influence of abnormal yields on production of various crops, production was also calculated using normal yields. Both estimates make useful comparisons (table 29).

Production of wheat. - Production of wheat per farm was larger in 1955 than in 1953 in the Kansas and North Dakota areas. It was down only 8 percent in the Montana area despite reduced acreages under allotments. 15/ The increases in Kansas and North Dakota were not due to exceptionally high yields in 1955, but rather to very poor yields in 1953 - the base year. Because of severe drought, the Kansas area had only half of a normal crop in 1953, and stem rust reduced the yield in North Dakota. Weather is the main determinant of wheat yields in both areas.

15/ Acreage was down 26 percent in the Kansas and North Dakota areas and 29 percent in the Montana area.

Table 28. - Average acreage of wheat per farm seeded after fallow and after stubble or other crops, survey farms, selected wheat areas, 1953 and 1955

Item	Acreage seeded		Percentage seeded	
	1953	1955	1953	1955
	Acres	Acres	Percent	Percent
West-central Kansas:				
Winter wheat after fallow	96	97	38	52
Winter wheat after stubble	156	89	62	48
North-central Montana:				
Winter wheat after fallow	242	216	98	98
Winter wheat after stubble	5	4	2	2
Spring wheat after fallow	143	72	72	81
Spring wheat after stubble	55	16	28	19
All wheat after fallow	385	288	86	94
All wheat after stubble	60	20	14	6
Washington-Palouse:				
Winter wheat after fallow and sweetclover	172	129	48	66
Winter wheat after grain and other crops	105	65	52	34

In Montana, yields of wheat in both 1953 and 1955 were above average but they were relatively higher in 1955 than in 1953. Somewhat more fertilizer is used in this area, but in view of the limited acreage fertilized this practice could not have affected yields substantially in the aggregate. Weather in this area has been exceptionally favorable for production of wheat for several years. Moisture is the most important factor in this area where wheat is seeded on fallow land.

In the Washington study area, production of wheat per farm was about 28 percent lower in 1955 than in 1953, compared with a 34-percent

Table 29. - Estimated production per farm, with and without program and with both actual and normal yields, of wheat, feed grains and special crops, survey farms, selected wheat areas, 1953 and 1955

Item	1953	1955		Difference	
		Actual	Without program	Actual, 1955 as percentage of 1953	Without program as percentage of actual, 1955
	Bushel	Bushel	Bushel	Percent	Percent
With actual yields:					
West-central Kansas: 1/					
Wheat	2,147	2,625	3,652	122	139
Feed grains	1,052	841	445	80	53
North-central North Dakota:					
Wheat	1,683	2,181	2,851	130	131
Feed grains	2,117	3,205	2,772	151	86
Flax	373	624	493	167	79
North-central Montana: 1/					
Wheat	8,832	8,095	10,801	92	133
Feed grains	1,623	5,280	1,240	325	23
Washington-Palouse:					
Wheat	10,568	7,654	11,213	72	146
Feed grains	1,487	3,369	1,314	226	39
Dry peas, cwt.	980	943	706	96	75
With normal yields:					
West-central Kansas: 1/					
Wheat	3,385	2,495	3,471	74	139
Feed grains	819	1,540	811	188	53
North-central North Dakota:					
Wheat	2,324	1,720	2,238	74	130
Feed grains	1,829	2,710	2,352	148	87
Flax	354	541	428	153	79
North-central Montana: 1/					
Wheat	8,037	5,964	7,885	74	132
Feed grains	1,407	3,635	855	258	23
Washington-Palouse:					
Wheat	12,100	8,218	12,012	68	146
Feed grains	1,606	3,512	1,325	219	38
Dry peas	1,004	1,341	1,005	135	75

1/ Includes both compliance and noncompliance farms, as defined in footnote, table 22.

reduction in acreage. Wheat yields per acre averaged somewhat higher in the latter year. Contributing to the higher yields were increased use of fertilizer and a higher proportion of the wheat seeded on fallow and sweetclover land. Use of fertilizer began to increase rapidly several years ago. The response of yield to fertilizer is dramatic whether the wheat follows wheat, fallow, or sweetclover plowed under. Plowing under sweetclover green manure as an alternative to fallow is a yield-increasing practice that is gaining favor.

With normal yields in both 1953 and 1955, a reduction in production of wheat would have approximated the reduction in acreage already discussed.

Production of feed grains. - Associated with the diversion of land from wheat to feed grains were marked increases in production of feed grains from 1953 to 1955, except in the Kansas area (table 29). In this area, production of feed grains was a fifth lower in 1955 largely because of poor yields of grain sorghum. The acreage of sorghum was 90 percent above the 1953 acreage. Production of feed grains was about 20 percent higher in 1955 than in 1953 in the North Dakota area. Production was more than three times as high in 1955 as in 1953 in the Montana area, partly because the acreage of barley was larger, but also because yields of barley were exceptionally good in 1955. In the Washington-Palouse area, production in 1955 was more than twice than in 1953. Acreage was up by a corresponding amount.

With normal yields in both years, production of feed grains would have increased somewhat in all areas in line with the changes in acreage already discussed.

Production of flax and dry peas. - Production of flax in the North Dakota area was about 50 percent higher in 1955 than in 1953, an increase comparable to the change in acreage. Production of dry peas in the Washington-Palouse area in 1955 was slightly less than in 1953, although the acreage planted was a third larger. Unfavorable weather in the spring of 1955 resulted in the poorest yield in many years.

Estimated production with no allotments in 1955. - In one sense, a comparison between 1955 with, and 1955 without, allotment programs is a better measure of the effect of such programs on production than comparison between 1953 and 1955. The influence of nonrelated changes in crop organization and of variations in yield is thereby eliminated or

minimized. Nevertheless, one should recognize that the comparison is valid only for the year 1955 and should not assume that the level of production in 1955 without allotments could be continued in subsequent years. The availability of land for seeding wheat was below normal in some areas and above normal in others, and yields were not normal in all areas.

Had there been no acreage allotments on wheat in 1955, it is estimated that production of wheat would have been from 30 to 45 percent higher than it was in the areas studied (table 29). This estimate is based on the acreages farmers said would have been in wheat. Also, production of wheat would have been larger in all 4 areas than it was in 1953; average yields were much higher in 1955 than in 1953 in both Kansas and North Dakota and somewhat higher in Montana and Washington-Palouse. With normal yields and without acreage allotments in both years, production of wheat per farm in 1953 would have been slightly larger in the Kansas area and slightly lower in the other 3 areas than in 1953.

Had there been no wheat acreage allotments in 1955, production of feed grains would have compared with actual production in the 4 areas as follows:

Area	Percentage
Kansas	53
North Dakota	86
Montana	23
Washington	75

As it is assumed that yields would have been about the same with or without allotments, these percentages reflect also the differences that would have occurred in acreages as already discussed.

Effects on Farm Income

The effects of acreage allotments on wheat and of price-support programs on farm incomes in wheat areas are indicated by budgets of typical farms. Net farm income was compared under three circumstances: (1) As the farm was organized and operated in 1953 when acreage allotments were not in effect; (2) as it was organized and operated in 1955 when such programs were in effect; and (3) as farmers said they would have organized their farms in 1955 if there had been no acreage allotments. Not all of the change in farm income, as previously stated, was due to the programs. Differences in weather and hence crop yields, and the changes farmers made for other reasons also affected incomes. Two

budgets were developed for each of these three situations, one with actual yields and one with normal yields - the latter to eliminate the effect of weather.

In the Palouse area and the north-central North Dakota area, budgetary data were available from the costs and returns series of "Commercial Family-Operated Farms." In these series, the costs and returns for the average commercial family-operated farm in the area are estimated year by year. In addition, budgets were prepared for various farming situations within these areas, and similar budgets were prepared for the Kansas and Montana areas where costs and returns series are not available.

To focus on changes in income associated largely with acreage allotments, the additional budgets are for only the "wheatland" part of the farm. Wheatland is defined as the land in wheat plus associated land in fallow or green manure in 1953 before allotments were in effect. Because some of this land was diverted to other crops, the budgets for 1955 with allotments include income from those crops, but only the portion that represents the diversion. The budgets include only direct operating expenses and exclude general overhead, deprectiation, and management. Thus, the budgets show net returns above direct expenses on the wheatland on the farms, and not net farm income as in the costs and returns series. The budgets are based on actual prices received in 1953 and 1955, respectively, the 1955 price being used for 1955 budgets both with and without acreage allotments on wheat.

West-central Kansas area. - Drought has hit this area hard for several years. Although in general yields have been low, local showers have helped some localities and yields have been spotty. Wheat on fallow survived the drought better than wheat on stubble. Thus, in the central and southern parts of the area, where most wheat is seeded on stubble, yields were more seriously affected then in the northwestern part, where most wheat is seeded on fallow. Abandonment of wheat seedings has been high and growers have replanted with sorghum when feasible. Also, farmers have seeded less than the usual acreages of wheat and have planted grain sorghum on land that normally would have been in wheat.

Four typical farming situations are analyzed (table 30). The 320-acre farm in Rush County typifies the situation on "hard" lands, where yields of wheat were unusually low in 1953 and considerably above average in 1955. On farms like this, net returns above direct expenses were about $1,500 higher in 1955 than in 1953, despite a reduction in the acreage of wheat. Had yields been normal in both years, net returns would have been about $800 lower in 1955 than in 1953.

Table 30. - Change in net returns per farm above direct expenses on wheatland, selected wheat farms, 1953 to 1955

Area and type of farm	With actual crop yields and prices 1/		With normal crop yields and 1955 prices 1/	
	Dollars	Percent	Dollars	Percent
West-central Kansas:				
320-acre hard land farms	1,546	183	-818	-25
480-acre sandy land farms	-2,147	-62	-608	-13
480-acre specialized wheat farms	-3,408	-65	-239	-6
960-acre wheat farms	-2,931	-61	-151	-4
North-central North Dakota: 2/				
650-acre hard wheat farms	1,829	83	-354	-11
600-acre durum farms	2,796	198	-54	-2
North-central Montana:				
520-acre wheat-fallow farms	57	1	-539	-13
1,080-acre wheat-fallow farms	-1,953	-9	-2,469	-19
Washington-Palouse: 3/				
220-acre wheat-fallow farms	-505	-10	-1,608	-24
980-acre wheat-fallow farms	-3,082	-11	-11,831	-32
520-acre wheat-conserving farms	-2,512	-20	-3,784	-26
520-acre wheat-recropping farms	-4,483	-28	-8,276	-35

1/ Change in gross receipts less expenses including all labor but excluding land charge, general overhead, depreciation, and management. Represents change in net returns from wheatland on the farm defined as land in wheat and associated fallow and sweetclover in 1953.

2/ Hard wheat farms are those on which 50 percent or more of the 1953 acreage was in hard spring wheat. Durum farms are those on which more than 50 percent of the 1953 acreage was in durum wheat.

3/ Farming situations classified as follows:

	Cropland in recropped wheat	Cropland in soil-conserving crops
	(percent)	(percent)
Wheat-fallow farms	Less than 25	Less than 16-2/3
Wheat-conserving	Less than 25	More than 16-2/3
Wheat-recropping	More than 25	Less than 16-2/3

The 480-acre farm in Pratt County typifies the situation on "sandy" lands where yields of wheat following grain (wheat on stubble) were below average in both years, but were considerably lower in 1955 than 1953. On such farms, net returns in 1955 were about $2,100 lower than in 1953. With normal yields in both years, net returns would have been about $600 lower in 1955 than in 1953 (see appendix table 73.)

The 480-acre farm in Cheyenne County typifies the medium-sized wheat-specialty farm. Yields of wheat were substantially above average in 1953 and substantially below average in 1955. Most of the land diverted from wheat under allotments was planted to sorghum in 1955 and it made about a third of an average crop. As a result of this combination of events, net returns on the 480-acre specialized wheat farm were about $3,400 less than in 1953. With normal yields in both years, returns in 1955 would have been only about $240 lower. This analysis indicates that with normal yields and with the price relationships that existed, grain sorghum is a close alternative to wheat in this area.

The 960-acre farm in Cheyenne County typifies the less specialized wheat farms in the area. These farms have fewer acres in wheat, but the wheat enterprise is managed in the same way and the alternative of grain sorghum is the same as on the smaller but specialized 480-acre wheat farm. Net returns on these farms were about $2,900 lower in 1955 than 1953, whereas with normal yields returns would have been only about $150 lower than in 1953. (See appendix table 73.)

North-central North Dakota. - Wheat growers in this area have been plagued with recurring outbreaks of black stem rust, which can ruin good prospects for a crop. In a season of normal rainfall, rust may so damage the crop that yields are lower than in a year of less-than-average rainfall. This is discouraging. "If drought doesn't ruin the crop, the rust will," is a common remark. Farmers interviewed said they would have seeded fewer acres of wheat in recent years, except that they wished to maintain a high wheat base acreage. Wheat and other crop yields were substantially higher in 1955 than in 1953 in this area. Consequently, incomes were not reduced as in most other wheat areas.

Average net income on commercial family-operated wheat-small grain-livestock farms in this area increased by $1,857 between 1953 and 1955 despite a decrease of 25 percent in the acreage of wheat. (See appendix table 74.) As reported in the costs and returns series, these farms average 509 acres of cropland, or slightly more than the average survey farm. The cost and returns budgets cover the entire business of the farm

and reflect the changes found on survey farms from 1953 to 1955.

Additional budgets were prepared for farms that specialize in hard spring wheat and those that specialize in durum wheat. The changes in the use of land on these farms were noted in table 24. As the budgets for these farms pertain only to the wheatland part of the farm - the acreage in wheat and associated fallow in 1953 - they relate more directly to the changes that result from allotments. Net returns on the specialized hard wheat farms were about $1,800 higher in 1955 than in 1953; on the durum farms, net returns were about $2,800 higher in 1955. (See appendix table 75.) Returns were higher in 1955 mainly because increases in wheat yields more than offset reductions in acreage. With normal yields in both years, net returns in 1955 would have been 10 percent lower than in 1953 on the hard wheat farms and about 2 percent lower on the durum farms.

North-central Montana. - The most significant factor in appraising the situation in this area is the unusually good yield of both wheat and barley during the last several years, which was due mainly to favorable weather. This favorable weather was in contrast to the drought experienced in parts of the Central Plains during the same period. In this Montana area, wheat yields of 30 bushels per acre were common in 1955, compared with around 25 bushels in 1953 and a historical average of about 19. As a result, the decline in net farm income did not correspond to the decline in acreage of wheat from 1953 to 1955. Relative yields differed from farm to farm as did the proportionate reduction in the acreage of wheat. These variations are revealed in budgets for small- and medium-sized wheat farms (table 30).

On typical 520-acre wheat farms, where the acreage of wheat was reduced about 30 percent on the average, and where yields in 1955 were about 5 bushels higher than in 1953, net returns from the wheatland were about 2 percent higher in 1955 than in 1953. (See appendix table 76.) Barley seeded on the acres diverted from wheat helped to maintain incomes. With normal yields in both years, net returns would have been about 10 percent lower in 1955 than in 1953.

On typical 1,080-acre wheat farms, where the acreage of wheat averaged about 34 percent less and yields averaged about 6 bushels higher than in 1953, the net returns in 1955 were nearly $2,000, or 9 percent lower than in 1953. These farms had an unusually large acreage in wheat in 1953 and this accounts for the greater reduction under allotments and the sizable reduction in income. Also, these farms put only a part of

the diverted acreage into barley and the rest into fallow. Had they used all the diverted land for barley, the reduction in net returns from 1953 to 1955 would have been less.

With normal yields in both years and with farm organization as it was, net returns on the 1,080-acre wheat farm would have been about 20 percent lower in 1955 than in 1953.

Washington-Palouse. - Improved varieties and use of fertilizer have increased the average yields of wheat in this area remarkably in recent years. Nor has the potential been reached. This is the most significant factor in this specialized wheat-producing area.

Total net income on the average commercial family-operated wheat-pea farms was reduced about $4,500, or 29 percent below 1953. (See appendix table 77.) This change in the economic position of the average wheat-pea farm was not all due to acreage allotments. Other changes were taking place, and they too are reflected in these budgets for the entire farm business. For example, the returns from peas were low because the crop was very poor in 1955. However, prices received for peas were higher than they would have been with normal yields and the large acreage that was planted that year.

Additional budgets were prepared for farms having different cropping systems (table 30). Typical systems are (1) wheat-fallow, (2) wheat-fallow-conserving crops, and (3) wheat-recropping. The chief variation is the proportion of fallow and conserving crops - mainly sweetclover plowed under. The budgets pertain only to the wheatland part of the farm, that is, the land in wheat and associated fallow and cover crop in 1953.

To illustrate changes in income associated with wheat-fallow farming systems, budgets were prepared for the wheatland on 220- and 980-acre farms. On farms of both sizes, net incomes above direct expenses were about 10 percent lower in 1955 than in 1953. (See appendix table 78.) Net returns would have been reduced even more except that yields of wheat were considerably higher than in 1953, partly because of weather and partly because more wheat was seeded on fallow in 1955. With normal yields, net returns would have been about a fourth lower in 1955.

To compare income changes for farming systems that emphasize the conserving of crops in the wheat rotation with systems that feature more acres of recropped wheat, budgets were prepared for the wheatland on 520-acre

farms having these characteristics in 1953. (See appendix table 79.) The conserving farms had 75 percent of the wheat seeded on sweetclover or fallow in 1953 and 93 percent in 1955. In contrast, 40 percent of the wheat seeded in 1953 and 48 percent of that seeded in 1955 on the recropping farms was seeded after sweetclover or fallow. Net incomes above direct expenses in 1955 were about $2,500 lower than in 1953 on the conserving farms and about $4,300 lower on the wheat-recropping farms. Although the reduction was greater, the total net returns on the recropping farms averaged about $3,500 higher in 1953 and $1,600 higher in 1955 than on the conserving farms. This would suggest that yields of wheat are maintained at less cost with commercial fertilizer than with soil-building crops - at least in the short run.

Net Returns in 1955 Without Allotments

The preceding section compared net returns in 1953 and 1955 as an indication of the effect of acreage allotments. As noted, the effect of changes other than reduction in the acreage of wheat was incorporated in such estimates. There were also changes in yields, and in production and prices of commodities other than wheat. The 1955 incomes also were compared with the incomes that would have been derived from these farms had they been organized as farmers indicated they would have been without acreage allotments. In these budgets, actual 1955 prices were used. That is, no account was taken of the possible effect on prices, or on accumulation of stocks, if more wheat and less feed grains and other crops had been produced in the absence of wheat allotments. As price supports place a floor under wheat prices, the prices realized by farmers might have been affected very little. However, stocks of wheat would have increased substantially. Prices of feed grains, which would have been in smaller supply, might have been somewhat higher.

Without allotments, net returns above direct expenses would have been higher in all instances, except the 480-acre farms on sandy land in west-central Kansas (table 31). These farmers had very poor yields of wheat in 1955, so they would have been worse off with more land in wheat. Among the other farming situations studied, net returns would have been from 6 to 54 percent higher than they were. The largest percentage increases would have occurred in areas of west-central Kansas, typified by Cheyenne County, in which yields of wheat were fair, but yields of grain sorghum were low. These farms got very little return from the wheatland they diverted to sorghum in 1955. Farms in north-central Montana would have had net returns from 25 to 30 percent higher without allotments, again because yields of wheat were relatively higher than those of alternative crops. In north-central North Dakota, the increase in net returns would have been slightly larger on the hard wheat farms

Table 31. - Net returns per farm above direct expenses on wheatland, with 1955 prices and with and without acreage allotments, selected wheat farms, 1955 1/

Area and type of farm	With allotments 1/	Without allotments 1/	Difference
	Dollars	Dollars	Dollars
West-central Kansas:			
320-acre hard land farms	2,392	2,613	221
480-acre sandy land farms	1,337	1,320	-17
480-acre specialized wheat farms	1,844	2,845	1,001
960-acre wheat farms	1,854	2,605	751
North-central North Dakota: 2/			
650-acre hard wheat farms	4,043	4,616	573
600-acre durum farms	4,205	4,471	266
North-central Montana:			
520-acre wheat-fallow farms	6,333	7,876	1,543
1,080-acre wheat-fallow farms	19,349	25,112	5,763
Washington-Palouse: 3/			
220-acre wheat-fallow farms	4,587	5,083	496
980-acre wheat-fallow farms	24,470	27,021	2,551
520-acre wheat-conserving farms	10,039	11,234	1,195
520-acre wheat-recropping farms	11,520	13,264	1,744

1/ Gross receipts less expenses, including all labor but excluding land charge, general overhead, depreciation, and management, which are assumed to be the same. Represents return on wheatland portion of the farm, defined as land in wheat and associated fallow and sweetclover in 1953.

2/ Hard wheat farms are those on which 50 percent or more of the 1953 acreage was hard spring wheat. Durum farms are those on which more than 50 percent of the 1953 acreage was in durum wheat.

3/ Farming situations classified as follows:

	Cropland in recropped wheat	Cropland in soil-conserving crops
	(percent)	(percent)
Wheat-fallow farms	Less than 25	Less than 16-2/3
Wheat-conserving	Less than 25	More than 16-2/3
Wheat-recropping	More than 25	Less than 16-2/3

than on the durum wheat farms. In the Washington-Palouse area, net returns would have been about 10 to 15 percent higher.

Prices of Wheat Necessary Without Allotments to Give Same Net Returns as in 1955

In most of the study areas, prices of wheat could have been reduced in 1955 without decreasing farm incomes, if there had been no acreage restrictions. The larger acreage and the larger volume of wheat that farmers would have produced without acreage allotments and marketing quotas would have been produced more efficiently than was possible with the restricted levels of production. However, a fifth to a half more wheat would have been produced, thereby accentuating the surplus problem. Prices of wheat ranging from $1.47 to $2.16 a bushel, or from 76 to 100 percent of those received, would have given the same net returns for the farming situations studied (table 32).

The necessary prices were lowest in those areas in which 1955 yields of wheat were higher than usual and high relative to alternative crops, for example, in western Kansas and north-central Montana. In the North Dakota and Washington study areas, the necessary price would have been around 90 to 95 percent of the prices actually received. The wide variation in necessary prices reinforces the point that acreage-allotment and price-support programs affect different farming situations differently.

Commercial Corn Areas

Acreage allotments were in effect in 1954 and 1955 on two major crops grown by farmers in the commercial corn area - corn and wheat. Corn producers in the area had to comply with their corn acreage allotments to be eligible for price-support loans and purchase agreements for their 1954 and 1955 corn crops. Compliance with individual wheat acreage allotments was also a condition of eligibility for price support on wheat, and on those farms on which the wheat acreage allotment was more than 15 acres, marketing quotas and penalty payments also were in effect.

Information on the activities and opinions of farmers relating to acreage allotment and price-support programs on corn and wheat was obtained in 3 sample areas of the commercial corn area that differed in type of farming - cash grain, livestock, and dairy-poultry (see inside front cover).

The cash-grain area is in east-central Illinois where a large proportion of the level, fertile land is used for growing corn, small grain, and soybeans with large-scale machinery on large farms. Hay crops and pastures are relatively less productive in this area.

Table 32. - Prices of wheat necessary without acreage allotments to give same net returns on wheatland as with allotments, selected wheat farms, 1955

Area and type of farm 1/	Necessary price	Percentage of price received
	Dollars	Percent
West-central Kansas:		
320-acre hard land farms	1.95	95
480-acre sandy land farms	2.06	100
480-acre specialized wheat farms	1.56	76
960-acre wheat farms	1.66	81
North-central North Dakota:		
650-acre hard wheat farms	1/ 1.93	1/ 90
600-acre durum farms	1/ 2.16	1/ 94
North-central Montana:		
520-acre wheat-fallow farms	1.56	84
1,080-acre wheat-fallow farms	1.47	79
Washington-Palouse:		
220-acre wheat-fallow farms	1.81	93
980-acre wheat-fallow farms	1.80	92
520-acre wheat-conserving farms	1.79	92
520-acre wheat-recropping farms	1.78	91

1/ Average of hard wheat and durum.

The livestock (cattle-feeding and hogs) area in east-central Iowa is characteristically rolling. A relatively high percentage of the cropland, although it produces good yields of corn, requires careful soil management because of its slope and susceptibility to erosion. This means a cropping system that includes relatively large acreages of grasses and legumes for protective cover and to maintain organic matter in the soil.

In southeastern Pennsylvania, dairying and poultry raising are combined with production of feed grains and wheat. Fruit, truck crops, potatoes, tobacco, and canning crops are important on many farms.

Corn producers, which include practically all farmers, were randomly sampled in the cash-grain and livestock areas. All operators of commercial farms were randomly sampled in the Pennsylvania dairy-poultry area.

In this area, records were obtained on the same commercial farms studied in 1954. 16/ Commercial farms are those on which sales of farm products amounted to $1,200 or more in 1953. In 1955, 90 percent of the commercial farmers who were interviewed in the dairy-poultry area grew corn and 73 percent grew wheat. In the cash-grain area of Illinois, 27 percent of the farmers who were interviewed grew wheat. Wheat was not commonly grown in the Iowa livestock area.

Compliance With Corn Allotments

Slightly less than half of the farmers in each of the three sample areas complied with their corn acreage allotments in 1955. (See appendix table 80.) Participation in the program was more closely related to type of farm than to size or tenure. Participation was greater on cash-grain farms than on livestock farms. Farmers who fed their corn had little incentive to comply with their corn acreage allotments. As they do not sell their corn, they are not directly concerned with the cash price. As indicated earlier, they had no marketing quotas and hence no penalties to pay for exceeding their allotments. On dairy farms, where corn is a smaller part of the total ration than on hog-beef cattle farms, participation was somewhat greater. This was particularly noticeable in southeastern Pennsylvania.

Sixty-five percent of the farmers in the Illinois cash-grain area who complied with their 1955 corn allotments said they did so in order to be eligible for price support. (See appendix table 81.) Only a third of those in the Iowa livestock area who complied gave interest in price support as a reason. The dominant reason given by Iowa and Pennsylvania farmers who were in compliance was that their allotments were equal to or greater than the acreages of corn they had planned to plant in 1955. The next most important reasons for compliance were a desire to cooperate in making the program successful, a desire to aid in a soil-improvement program, and a desire to accommodate landlords who wanted to put their shares of the crop under loan.

Many livestock farmers who planted more than their corn allotments did so primarily because the allotted acreages would not produce enough corn to permit them to continue their livestock programs. (See appendix table 82.) Even on cash-grain farms, many tenants use all their shares of the corn crop for feed. At planting time in 1955, the expected value

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16/ For a report on the 1954 study, see Effects of 1954 Acreage Restrictions on Crop Production in Southeastern Pennsylvania. Pa. Agr. Expt. Sta. Prog. Rpt. 128.

of a bushel of corn fed on the farm was greater than the support price for corn. Interference with an established and satisfactory crop rotation was another important reason given for noncompliance, especially in Iowa and Pennsylvania. Many farmers object to the basing of allotments largely on the cropping history of the farm. They believe that the method discriminates against farms on which soil-conserving and soil-building programs are already followed. Another large group of Illinois and Iowa farmers, particularly tenants, said they needed their usual acreages of corn - their highest-profit crop - to maintain their farm income.

Compliance With Wheat Allotments

The proportion of wheat producers who complied with their wheat acreage allotments in 1955 was 71 percent in the cash-grain area in Illinois and 74 percent in the dairy-poultry area in Pennsylvania. (See appendix table 83.) As farmers who grew 15 acres or less of wheat were not penalized for exceeding their allotments, there was little incentive for them to comply. Compliance by those farmers who grew more than 15 acres was virtually complete.

The outstanding reason for complying with wheat allotments was the price incentive, that is, to be eligible for price support and to avoid payment of a penalty. One in six of the farmers in Illinois who were classed as having complied with allotments grew no wheat in 1955 as they believed that their acreage allotments were too small for profitable production on their farms. (See appendix table 84.) Many farmers in Pennsylvania stated that they complied because the acreages they had planned in 1955 were equal to or less than their allotments.

Most of the noncompliance with wheat acreage allotments was on farms whose operators grew 15 acres or less of wheat, and hence were not subject to penalty payments. Major reasons given for not complying with wheat acreage allotments were that the operators did not want to disrupt established rotations and they could grow up to 15 acres without penalty. A number of Pennsylvania farmers mentioned that they needed their usual acreages of wheat for feed and straw for bedding for their dairy herds.

Quality of Land Used for Corn and Wheat in Illinois

An analysis of data for 38 of the farms in the Illinois sample that were participants in the Soil Conservation District program shows that the acreage-allotment program did not cause significant shifts of corn and wheat to more productive cropland. As this area has a relatively high proportion of productive land, the opportunities for and the advantages from such a shift would not be as great as for areas and farms with wider variations in productivity.

Of the 233 farmers interviewed in Illinois, 10 reported that productivity of the land influenced the location of the acreages of corn or wheat (table 33). The 38 farms in the survey for which land-capability class

Table 33. - Effect of land productivity on the location of corn and wheat acreages on compliance and noncompliance farms, cash-grain area, Illinois

Item	Farms in compliance with corn allotment	Farms not in compliance with corn allotment
	Number	Number
Farms in sample	102	131
Cornland:		
Productivity an influence	10	0
Productivity not an influence	66	16
Wheatland:		
Productivity an influence	4	1
Productivity not an influence	20	26

and other data are available from plans developed in the Soil Conservation District program showed no shift for either compliance or noncompliance farms from 1953 to 1955 of corn acreage to the more productive lands (table 34). Farmers generally felt that retention of a planned rotation was more important in the long run than disruption of an established rotation by growing the corn on the most productive land. Too, there is a relatively high proportion of class I or II land in this area. Land on the compliance farms was limited to classes I, II, and III. Thus, neither the advantage nor the opportunity for such a shift would be as marked as for areas where the fields in individual farms differ more in productivity.

Noncompliance farms grew corn on classes IV and VII lands, which for physical reasons are not recommended for crop production. (See appendix table 85.) In the Soil Conservation District plans, meadow is planned for the classes IV and VII land now in corn. The 1955 corn allotment was about a third of the farm acreage for both compliance and noncompliance farms, although compliance farms had a higher proportion of the more productive land. Historical land use as the chief basis for determining the acreage allotment on corn tended to detract from any close relationship between corn allotments and land use capabilities.

Table 34. - Percentage of corn acreage by class of land, 24 farms complying and 14 farms not complying with 1955 corn-allotment program, Soil Conservation District cooperating farms, cash-grain area, Illinois, 1953 and 1955

Land capability class	Complied with allotment		Did not comply	
	1953	1955	1953	1955
	Percent	Percent	Percent	Percent
I	91	90	58	54
II	7	9	23	25
III	2	1	10	10
IV	---	---	2	3
VII	---	---	7	8

Changes in Farm Organization and Practices

The general effect of the allotment programs on compliance farms in the areas studied in Illinois and Iowa was to reduce the acreages of corn and to increase the acreages of soybeans and oats. On noncompliance farms, the acreage of corn increased. In Pennsylvania, the programs decreased acreages of both corn and wheat while acreages of other small grains and hay rotation pasture were increased by a like amount. The significant changes in livestock were increases in numbers of hogs on both compliance and noncompliance farms in Iowa and of dairy cattle and poultry on noncompliance farms in Pennsylvania. There was a general increase in the use of fertilizer in all three areas from 1953 to 1955. Changes in other practices as well as the increase in use of fertilizer were generally attributable to improved farming methods that would have occurred regardless of the program.

Land use. - The Illinois farmers who complied with their corn acreage allotments reduced their acreages of corn by 20 percent in 1955 compared with 1953, while those in Iowa reduced acreages of corn by about 12 percent. This acreage diverted from corn was planted largely to soybeans in Illinois with small additions to hay and rotation pasture. In Iowa, the acreage diverted from corn was planted to soybeans and oats (table 35). The 3-acre reduction in the acreage of wheat in Illinois was replaced by oats. For noncompliance farms in Illinois and Iowa, there were moderate

Table 35. - Average acreage per farm in specified land uses, by compliance or noncompliance with corn acreage allotments, survey farms, selected commercial corn areas, 1953 and 1955

Crop	Illinois cash-grain area			Iowa livestock area			Pennsylvania dairy-poultry area		
	1953	1955		1953	1955		1953	1955	
		Planted	Without a program 1/		Planted	Without a program 1/		Planted	Without a program 1/
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Farms in compliance with corn acreage allotments in 1955:	(102 farms)			(57 farms)			(105 farms)		
Cropland:									
Corn	92	74	86	65	57	64	18	15	16
Soybeans	34	50	39	9	13	10	---	---	---
Wheat	9	6	9	---	---	---	13	9	11
Oats	31	34	32	28	34	33	4	6	6
Barley	---	---	---	---	---	---	4	5	4
Hay and rotation pasture	25	28	27	54	46	48	25	26	26
Other	3	2	---	---	5	---	3	3	1
Total	194	194	---	156	155	---	67	64	---
Permanent pasture	13	13	---	41	41	---	13	13	---
All land in farm	219	219	---	220	220	---	92	95	---
Farms not in compliance with corn acreage allotments in 1955:	(131 farms)			(79 farms)			(109 farms)		
Cropland:									
Corn	86	94	93	59	64	64	27	29	30
Soybeans	33	37	36	6	8	7	1	1	1
Wheat	9	6	9	---	---	---	18	14	18
Oats	34	32	32	31	27	29	5	8	7
Barley	---	---	---	---	---	---	5	6	5
Hay and rotation pasture	25	21	22	35	36	36	25	27	25
Other	3	2	---	2	1	---	5	5	4
Total	190	192	---	133	136	---	86	90	---
Permanent pasture	15	15	---	29	28	---	15	15	---
All land in farm	219	219	---	179	180	---	115	120	---

1/ Acreages of crops farmers said they would have grown in 1955 if there had been no acreage allotments on corn and wheat.

increases in acreages of corn and soybeans and reductions in the acreage of oats and, in Illinois, reductions in acreages of hay, pasture, and wheat.

Pennsylvania farmers who complied with the corn program showed reductions in acreages of wheat and corn, with comparable increases in acreages of hay and pasture, barley, and oats. For farms that were not in compliance with the corn program, acreages of corn, oats, hay, and pasture were increased and the acreage of wheat was decreased. At the same time, the total crop acreage was increased by 4 acres. Pennsylvania farmers who complied with the wheat-allotment program reduced their acreages of wheat and increased those in small-grain and sod crops (table 36). Farmers who did not comply with the wheat program made only minor changes in crop acreages.

Production of feed. - In the cash-grain area of Illinois, farmers who complied with the program reduced production of feed grains and made no change in production of hay. They said they would have maintained production of hay and increased production of feed grains if there had been no acreage-allotment programs. Those who did not comply with the program increased production of feed grains and decreased production of hay. In the livestock area of Iowa, farmers who complied with 1955 corn allotments reduced production of feed grains by 7 percent from production in 1953 (table 37). These farmers said that without corn acreage allotments, they would have produced 3 percent more feed grains than in 1953. Those who did not comply with their corn acreage allotments produced about the same quantity of feed grains as in 1953. Production of hay was greater in 1955 than in 1953 on both groups of farms, but the increase was greater on farms whose operators did not comply with acreage allotments. Farmers who complied with allotments said they would have reduced production of hay if no program had been in effect.

Farmers in southeastern Pennsylvania who complied with their 1955 corn acreage allotments, and who reduced production of feed grains, said they would have made a similar reduction if there had been no allotment program. Production of hay was 18 percent larger than in 1953, mainly because of the increase in the acreage of alfalfa hay. Farmers who did not comply with allotments increased production of feed grains and hay. These farmers, also, indicated that acreage allotments had had little effect on production.

Total production of feed grains decreased slightly in the Iowa area but it increased in both the Illinois and the Pennsylvania areas.

Table 36. - Average acreage per farm in specified uses by compliance or non-compliance with wheat acreage allotment, survey farms, Pennsylvania dairy-poultry area, 1953 and 1955

Item	1953	1955	
		Planted	Without a program 1/
	Acres	Acres	Acres
Farms in compliance with wheat acreage allotment in 1955:			
Cropland:			
Corn	24	25	25
Soybeans	1	1	1
Wheat	19	13	17
Oats	5	8	6
Barley	6	7	6
Hay and rotation pasture	26	30	29
Other	5	3	2
Total	86	87	---
Permanent pasture	17	17	---
All land in farm	118	120	---
Farms not in compliance with wheat acreage allotment in 1955:			
Cropland:			
Corn	21	21	20
Soybeans	---	1	1
Wheat	15	14	16
Oats	4	6	6
Barley	3	3	3
Hay and rotation pasture	21	23	23
Other	4	1	---
Total	68	69	---
Permanent pasture	9	9	---
All land in farm	87	87	---

1/ Acreages of crops farmers said they would have grown in 1955 if there had been no acreage allotments on corn and wheat.

Table 37. - Production of feed crops per farm, survey farmers who complied and those who did not comply, with 1955 corn acreage allotments, selected commercial corn areas, 1953 and 1955

Area, compliance, and crop	Production in 1953	Production in 1955 -		Percentage 1955 production is of 1953 production -	
		With program	Without program 1/	With program	Without program
	Tons	Tons	Tons	Percent	Percent
Illinois cash-grain area:					
Complied (102 farms):					
Feed grains	179	173	194	97	108
Hay	28	28	28	100	100
Did not comply (131 farms):					
Feed grains	168	206	204	122	121
Hay	32	28	28	88	88
Iowa livestock area:					
Complied (57 farms):					
Feed grains	144	134	148	93	103
Hay	92	96	79	105	87
Did not comply (79 farms):					
Feed grains	133	133	133	100	100
Hay	53	60	59	112	111
Pennsylvania dairy-poultry area:					
Complied (105 farms):					
Feed grains	31	30	30	97	97
Hay	34	41	41	118	118
Did not comply (109 farms):					
Feed grains	44	50	50	114	112
Hay	36	44	42	123	118

1/ Based on acreages of crops farmers said they would have grown in 1955 if there had been no acreage-allotment program.

Livestock. - The number of pigs weaned per farm on Iowa farms in compliance with the corn-allotment program was increased by 38 from 1953 to 1955, while the increase for noncompliance farms was 57 (table 38). The net increase for both compliance and noncompliance farms was some 40 percent. No relevant change in livestock numbers was noted for compliance farms in Illinois or Pennsylvania. For farms not in compliance with the 1955 corn-allotment program, the only changes of note were increases in numbers of hogs in Iowa and of poultry in Pennsylvania. Of the farmers who replied in the survey, less than 10 percent in any study area stated that changes in livestock numbers from 1953 to 1955 were made because of acreage allotments (table 39). Apparently, price relationships influenced livestock numbers more than did allotments and other agricultural programs.

The fact that corn was worth more as feed for hogs in 1954 than could be obtained by selling it to the Commodity Credit Corporation was probably an important reason why so many livestock farmers stayed out of the corn-allotment program in 1955 and for the marked increases in hog numbers in Iowa.

Practices. - Farmers generally applied more fertilizer on allotment crops in 1955 than in 1953 (table 40). More farmers were using fertilizer, more acres per farm were fertilized, and more fertilizer was used per acre. This increase in use of fertilizer was greater on compliance than on noncompliance farms in Iowa and Pennsylvania. In Illinois, farmers who did not comply with 1955 corn allotments increased the use of fertilizer more than did farmers who complied. There was a marked decline in that State in the quantity of phosphate used on corn, oats, and soybeans from 1953 to 1955, because of the discontinuance of Agricultural Conservation Program payments for that practice and the change from rock to superphosphate.

A relatively large number of the farmers surveyed in Illinois and Iowa reported changes from 1953 to 1955 in such practices as rate of seeding, spraying for insect and weed control, and installation of various soil and water conservation measures (table 41). However, very few reported that either these changes or those made in livestock practices were made because of the allotment program. (See appendix tables 86 and 87.) Rather, they attributed most of the changes in practices to routine adoption of new and improved technological developments. They indicated that they were merely trying to keep up with the times.

Table 38. - Numbers of livestock per farm on survey farms in selected commercial corn areas, 1953 and 1955

Kind of livestock	Illinois cash-grain area		Iowa livestock area		Pennsylvania dairy-poultry area	
	1953	1955	1953	1955	1953	1955
	No.	No.	No.	No.	No.	No.
Farms in compliance with corn acreage allotments in 1955:						
Number on farm January 1:						
Dairy cows	4	4	8	8	12	11
Beef cows	6	5	9	9	---	1
Calves under 1 year	7	6	10	12	---	---
Other cattle	3	3	4	4	---	---
Hens	83	86	168	168	240	285
Number during year:						
Feeder cattle put on feed	5	5	8	6	1/3	1/2
Spring pigs weaned	31	26	71	90	1/7	1/8
Fall pigs weaned	15	19	26	45		
Farms not in compliance with corn acreage allotments in 1955:						
Number on farm January 1:						
Dairy cows	5	5	5	5	10	11
Beef cows	5	6	8	8	1	1
Calves under 1 year	7	7	8	8	---	1
Other cattle	2	2	4	3	---	---
Hens	111	117	122	113	315	385
Number during year:						
Feeder cattle put on feed	7	6	16	17	1/12	1/13
Spring pigs weaned	30	29	93	114	1/12	1/13
Fall pigs weaned	13	18	45	81		

1/ Sold.

Table 39. - Percentage of farmers surveyed who complied with acreage allotments in 1955 who made specified changes in numbers of livestock from 1953 to 1955 because of acreage allotments, selected commercial corn areas

Change	Illinois cash-grain area (102 farmers)	Iowa livestock area (57 farmers)	Pennsylvania dairy-poultry area	
			84 farmers who produced 1 to 15 acres	40 farmers who produced more than 15 acres
	Percent	Percent	Percent	Percent
Made no change	95	86	96	95
Culled dairy cows because of shortage of bedding or grain	---	---	3	---
Increased number of cows to use oats and barley	---	---	1	---
Increased number of cattle	3	7	---	---
Decreased number of hogs	---	5	---	---
Decreased number of dairy cattle	2	---	---	---
No report	---	2	---	5
Total	100	100	100	100

A relatively small proportion of the farmers surveyed in Illinois participated in the Agricultural Conservation Payment programs (22.5 percent of those who complied with 1955 corn allotments and 9.1 percent of those who did not comply) and their payments received were relatively insignificant as a source of farm income. (See appendix table 88.) A larger proportion of compliance than of noncompliance farmers participated in the program in both 1954 and 1955. The numbers of compliance and noncompliance farmers who participated in the ACP program declined from 1954 to 1955.

Of 234 tenants interviewed in the 3 States, only 8 reported changes from 1953 to 1955 in the rental share received by landlords. Of the reasons given for changes, only one was attributed to the acreage-allotment program.

Table 40. - Number of farmers surveyed who used fertilizer, and quantity of plant food elements (N-P_2O_5, and K_2O) used per acre and per farm, selected commercial corn areas, 1953 and 1955

Crop	Farmers using fertilizer on each crop		Acres fertilized per farm where fertilizer used		Nutrients per acre fertilized (N-P_2O_5-K_2O)		Total nutrients per farm in area (N-P_2O_5-K_2O)	
	1953	1955	1953	1955	1953	1955	1953	1955
	Number	Number	Acres	Acres	Pounds	Pounds	Pounds	Pounds
ILLINOIS CASH-GRAIN AREA								
102 farms in compliance on corn in 1955:								
Corn	56	65	61	50	118	125	3,952	3,983
Soybeans	7	10	32	45	382	74	839	326
Wheat	18	25	40	20	112	117	791	574
Oats	24	30	29	25	112	115	666	846
Hay	4	7	25	19	361	352	357	268
131 farms not in compliance on corn in 1955:								
Corn	84	81	62	74	108	117	4,294	5,353
Soybeans	20	15	35	35	114	59	609	236
Wheat	16	21	31	20	66	82	250	263
Oats	34	35	33	29	192	134	1,644	1,038
Hay	10	8	21	18	204	329	326	368
IOWA LIVESTOCK AREA								
57 farms in compliance on corn in 1955:								
Corn	22	36	77	51	54	63	1,604	2,038
Oats	20	17	38	41	57	60	761	736
79 farms not in compliance on corn in 1955:								
Corn	36	38	58	58	63	67	1,669	1,874
Oats	18	19	28	26	57	57	365	354
PENNSYLVANIA DAIRY-POULTRY AREA								
159 farms in compliance on wheat in 1955:								
Corn	122	128	24	26	79	93	1,568	2,144
Wheat	122	119	20	15	72	88	1,194	1,083
54 farms not in compliance on wheat in 1955:								
Corn	40	38	21	22	95	88	1,566	1,493
Wheat	45	48	15	13	63	66	842	844

Table 41. - Survey farmers who made specified changes in production practices on corn from 1953 to 1955, selected commercial corn areas

Item	Illinois cash-grain area	Iowa livestock area		Pennsylvania dairy-poultry area	
	Adopted	Adopted	Discontinued	Adopted	Discontinued
	Number	Number	Number	Number	Number
Farmers in compliance on corn in 1955:	(102 farms)	(57 farms)		(105 farms)	
Planted improved variety	---	10	3	---	---
Increased rate of seeding	44	15	6	15	---
Planted on contour	---	5	1	---	---
Drained	---	10	---	---	---
Made borer count	---	1	1	---	---
Sprayed for insect control	11	12	4	---	---
Sprayed for weed control	2	10	5	9	10
Constructed terraces	---	8	---	---	---
Made no change	45	---	---	---	---
Farmers not in compliance on corn in 1955:	(131 farms)	(79 farms)		(109 farms)	
Planted improved variety	---	11	---	---	---
Increased rate of seeding	37	18	7	11	---
Planted on contour	---	3	1	---	---
Drained	---	11	---	---	---
Plowed deeper	---	2	---	---	---
Plowed under fertilizer	---	3	---	---	---
Pulverized stalks	---	---	1	---	---
Made borer count	---	2	---	---	---
Sprayed for insect control	18	23	4	---	---
Sprayed for weed control	3	19	6	12	10
Constructed terraces	---	3	1	---	---
Made no change	73	---	---	---	---

Effects on Farm Income

The effects of corn and wheat acreage-allotment and price-support programs on farm income in the commercial corn area were estimated through budget analysis for typical cash-grain, livestock, dairy, and poultry farms whose operators complied with acreage allotments. Six budgets were developed for each typical farm. Net income was compared for three situations: (1) As the farm was organized and operated in 1953 when acreage allotments were not in effect, (2) as it was organized and operated in 1955 in compliance with acreage-allotment programs, and (3) as compliance farmers said they would have organized their farms in 1955 if there had been no acreage-allotment and marketing-quota programs on corn and wheat. Two budgets were developed for each of these three situations. (See appendix tables 89 to 94.) First, actual yields and prices were used. Second, normal yields and 1955 prices were used more nearly to isolate and appraise the effect of acreage changes by removing the effects of variations in weather and market prices for farm products between 1953 and 1955. 17/ Data for the budgets were obtained in the farm survey and from other available sources, particularly from farm-account records that had been kept by farmers in the areas in cooperation with the State agricultural experiment stations and extension services.

Illinois cash-grain area. - Two of the most usual types of farms in the Illinois cash-grain area are 200-acre cash-grain farms and 160-acre dairy farms. Of the farms surveyed, 74 percent were cash-grain and 11 percent were dairy farms. (See appendix table 80.) The dairy farms are located mainly in the Chicago milkshed. Net incomes on these two types of farms in this area were lower in 1955 than in 1953 irrespective of whether the operator complied with the 1955 acreage-allotment program for corn. They would have been higher in 1955 than in 1953, however, if normal yields and 1955 prices had prevailed in both years. For both cash-grain and dairy farms in compliance with the corn-allotment program, the land taken out of corn in 1955 was used almost entirely to produce soybeans. Livestock numbers on these farms were affected very little by the allotment program.

Analysis of farming operations for typical cash-grain farms indicate that those who stayed within their corn acreage allotments and received the support price for corn made nearly $2,300 more net income from

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17/ Normal yields for 1953 and 1955 are described as the yield per acre the operator could expect with average weather on the acreage planted, with production practices used in the respective years.

their 1955 farming operations than would have been the case had there been no program (table 42). This advantage may be attributed to the higher price for corn and to a larger acreage and production of soybeans.

Table 42. - Estimated difference between net incomes from farming 1/ in compliance with acreage-allotment programs and from farming with no programs, 2/ typical farms, Illinois, Iowa, and Pennsylvania, 1955 3/

Area and type of farm	Income under allotment program compared with income without program			
	Current crop yields		Normal crop yields	
	Amount of difference	Percentage	Amount of difference	Percentage
	Dollars	Percent	Dollars	Percent
Illinois cash-grain area:				
200-acre cash-grain farm--	2,285	57	1,965	79
160-acre dairy farm-------	1,421	29	1,119	34
East-central Iowa:				
200-acre cash-grain farm--	640	12	595	11
200-acre hog-beef fattening farm ----------	-1,379	-25	-1,389	-24
Southeastern Pennsylvania:				
132-acre dairy farm-------	-310	-14	-307	-11
80-acre pountry farm-----	-36	-1	-67	-3

1/ Returns to land, other capital, and labor and management of operator and his family. Does not include value of house rent or garden products used in the home.

2/ Based on acres farmers who complied said they would have grown if there had been no acreage-allotment program in 1955, with numbers of livestock adjusted to the production of feed crop where appropriate.

3/ See appendix tables for more detailed data.

The compliance farmers produced 13 percent less corn than if they had not complied; however, the support price they received was 59 percent higher than the market price. The differences would have been slightly less with normal crop yields. The net farm income of a typical cash-grain farm in compliance with the corn-allotment program was only $327 less in 1955 than in 1953, whereas a $2,612 reduction in income would have occurred had there been no program (table 43).

Table 43. - Change in net income, 1/ typical farms, Illinois, Iowa, and Pennsylvania, 1953 to 1955

Area and type of farm	With allotment program				Without allotment program 2/			
	Actual crop yields and prices		Normal crop yields 1955 prices		Actual crop yields and prices		Normal crop yields 1955 prices	
	Amount of change	Percentage	Amount of change	Percentage	Amount of change	Percentage	Amount of change	Percentage
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Illinois cash-grain area:								
200-acre cash-grain farm	-327	-5	311	7	-2,612	-40	-1,654	-40
160-acre dairy farm	-168	-3	788	22	-1,589	-24	-331	-9
East-central Iowa:								
200-acre cash-grain farm	-600	-9	162	3	-1,240	-19	-433	-7
200-acre hog-beef fattening farm	-3,523	-46	57	1	-2,144	-28	1,446	33
Pennsylvania dairy-poultry area:								
132-acre dairy farm	-1,935	-50	-194	-7	-1,625	-42	113	4
80-acre poultry farm	-1,200	-33	-340	-12	-1,164	-32	-273	-9

1/ Returns to land, other capital, and labor and management of operator and his family. Does not include value of house rent or garden products used in the home.

2/ Based on acres farmers who complied said they would have grown if there had been no acreage-allotment program in 1955, with numbers of livestock adjusted to production of feed crop where appropriate.

If crop yields that the farmers considered normal had prevailed in 1953 and 1955, and if prices had remained unchanged at 1955 levels, typical cash-grain farmers who complied with the program would have had an increase of about $300 in net income, compared with a decrease of some $1,654 that would have occurred had there been no program (table 43). Part of the increase in income was due to higher "normal" yields of corn, soybeans, and oats in 1955 than in 1953, which came primarily from increased use of fertilizer, weed and insect sprays, improved planting practices, and changes in the rotation. But this was more than offset by the assumed 58-cent decrease in the price of corn which the compliance farmers would have suffered in 1955 had there been no program. 18/

Data from the series on "Commercial Family-Operated" farms indicate the same general net income relationships between compliance and noncompliance farms as described above for the cash-grain farms surveyed (appendix table 95). A 230-acre cash-grain farmer was about $2,250 better off if he complied in 1955 compared with a $2,285 advantage indicated by the survey data.

A similar analysis of a typical dairy farm indicates that dairy farmers who complied with the corn acreage-allotment program in 1955 were some $1,400 better off financially than if there had been no program (table 42). This resulted from the much higher price received for sealed corn than if it had been sold on the market. The dairy farmer's income in 1955 was only $168 less than in 1953 if he complied with the corn-allotment program. However, if he did not comply, his income was $1,589 less than 1953. The dairy farmer who did not comply with the corn-allotment program in 1955 fared much better than the grain farmer, as the price of fluid milk remained relatively stable during this period. When crop yields are normalized and 1955 prices used for both years, the dairy farmer had an advantage in 1955 over 1953 of $788 if he complied. His income would have declined about $331 if he did not comply. This was because of increased yields of corn and oats, increased acreage and production of soybeans, an increase in milk production, and economies in production.

Iowa livestock area. - Although livestock (hogs and cattle-feeding) farms predominate in east-central Iowa, cash-grain farms are also fairly common in the area. Typical sizes for both types are about 200 acres.

18/ Based on the spread between the prevailing market price and the support price.

Net incomes in this area were somewhat lower on cash-grain farms and much lower on livestock farms in 1955 than in 1953, regardless of whether the operator complied with the 1955 corn acreage-allotment program (table 43). They would have been higher in 1955 than in 1953, however, if normal yields and 1955 prices had prevailed in both years. The farmers who were interviewed reported considerable advance in normal yield per acre for corn and oats between 1953 and 1955.

Typical cash-grain farmers in east-central Iowa who complied with their corn acreage allotments in 1955 had higher incomes than they would have had with the farming systems they said they would have followed if there had been no acreage-allotment program (table 42). The difference was about $650. With normal yields, the difference would have been about $600.

Twelve acres were diverted from corn, mainly to soybeans. The gross value of an acre of soybeans was about $20 less than the value of an acre of corn. But the 35-cent margin between market and support prices per bushel for corn in eastern Iowa was obtained for all the corn sold. This represented production from about 37 acres of corn on a typical cash-grain farm. Farm expenses under compliance were about $175 less than they would have been with the production program that would have been followed without acreage allotments.

Typical livestock farmers in east-central Iowa who complied with their corn acreage allotments had net incomes that were lower than they would have been with the systems of farming these farmers said they would have followed if there had been no acreage-allotment program (table 42). The difference was about $1,400. With normal yields, the difference would have been about the same.

In 1955, 9 acres were diverted from corn to hay. The decrease in production of corn because of compliance was about the same as the quantity of corn sold from the typical farm in 1953. Hence, production of hogs was about maintained at the 1953 level. These farmers said they would have increased both acreages of corn and production of hogs if there had been no acreage-allotment program. The increase in production of hogs would have been about 30 percent. The numbers of fattening cattle also would have been increased about 25 percent. Even with this increase in production, however, net income still would have been below the 1953 level by about $2,150.

Pennsylvania dairy-poultry area. - Dairy and poultry farms constituted about 60 percent of the commercial farms in the area surveyed in southeastern Pennsylvania. There were about twice as many dairy farms as poultry

farms. The typical dairy farm selected for analysis contained 132 acres. The poultry farm contained 80 acres. This is typical of the poultry farms on which sizable acreages of corn and wheat were grown.

A typical dairy farmer who complied with his corn and wheat acreage allotments in 1955 obtained a lower net income than he would have realized with the system of farming he said he would have followed if there had been no acreage-allotment programs. The difference amounted to about $300 (table 42). The difference would have been about the same with normal yields.

Four acres were diverted from corn and 6 acres from wheat. The acreage of alfalfa hay was increased by 8 acres and the acreage of oats and barley was increased by 2 acres. The shift in crop production did not affect livestock production, but sales of grain were reduced. As the typical southeastern Pennsylvania wheat producer feeds a considerable part of his wheat and sells the rest at the current market price, his reduction in output through compliance was not offset by taking advantage of the loan rate, which was higher than the market price. Farm expenses were affected very little by compliance.

A typical poultry farmer who complied with his corn and wheat acreage allotments obtained a lower income than he would have obtained from his 1953 production program with normal yields and 1955 prices. The difference was about $350 (table 43). If he had followed the farming system he said he would have followed in 1955 if there had been no acreage allotments and had obtained normal yields, his income would have differed from the income he obtained under compliance by only about $67 (table 42).

Farmers' Comments

At the conclusion of the interview, each farmer was asked to comment on the effect of corn acreage-allotment and price-support programs on the prices of hogs and other livestock, and on "how the acreage-allotment program is working out from the viewpoint of your farm and farming operations." Of the farmers who expressed an opinion as to the effect of programs on livestock prices, 43 percent in the cash-grain area of Illinois, 52 percent in the livestock area of Iowa, and 70 percent in Pennsylvania thought they had had no effect. The range of comments and the proportions of farmers who made each comment as to how the allotment program was working on their farms are shown in table 44. Critical comments were more numerous in the dairy-poultry and livestock areas

Table 44. - Percentage of farmers surveyed who made specified comments on acreage-allotment and price-support programs, selected commercial corn areas

Comment	Illinois cash-grain area 1/	Iowa livestock area 1/	Pennsylvania dairy-poultry area
	Percent	Percent	Percent
No comment	14	18	26
Critical comments:			
Western and large farmers gain most from program	6	19	11
Supply and demand is best regulator	7	---	15
Too much regimentation	6	4	16
Disrupts crop rotations	4	---	5
Support prices are too high	---	8	2
Not effective in supporting prices	---	20	---
Livestock prices should be supported	---	28	6
Suggested change in program:			
Base allotments on land capabilities	36	35	---
More stress on soil conservation	8	9	---
Change to soil-bank plan	28	1	---
Make program compulsory - cross compliance - rigid supports	16	13	---
More flexibility in allotments and loans	6	2	---
Sell more surplus at bargain prices	6	---	---
Do not push fertilizer and ACP practices so much	5	5	---
Favorable comments:			
Thinks present program is effective	---	12	---
Is working out well for him	---	14	---
Stabilizes prices of grain	---	7	---
Needed to reduce surpluses and maintain prices	---	22	14
Other	11	46	5
Total	153	263	100

1/ Many farmers in Illinois and Iowa made more than one comment.

than in the cash-grain area. Roughly, the comments by half the Pennsylvania farmers, a third of the Iowa farmers, and a fifth of the Illinois farmers were critical.

Many farmers suggested changes in the program. The change most frequently proposed by Illinois and Iowa farmers was to give more consideration to the capabilities of the land in each farm in establishing acreage allotments for corn. Closely related proposals were to put more stress on soil conservation and to change to the soil-bank plan. Next in order of frequency was the proposal to make the program compulsory through cross compliance and change to rigid price supports. Among other proposals were: Make allotments and loans more flexible, sell more surplus at bargain prices, and push fertilizer and ACP practices less. Six Pennsylvania farmers said the allotment programs should not apply to farmers who feed all of a crop on the farm.

Although farmers apparently were more prone to criticize or to offer suggestions for improving the programs, several Iowa farmers thought the present program was effective, it was working out well for them, or it stabilized the price of grain.

Plans for Participation in 1956

Many of the Illinois and Iowa farmers surveyed said they would comply with a corn acreage-allotment program in 1956 if the 1955 program were continued (table 45). No doubt, the subsequent enactment of the Agricultural Act of 1956, which terminated corn acreage-allotments for 1956 and, in effect, substituted base acreages at a somewhat higher level, will encourage still greater compliance.

Illinois and Pennsylvania farmers in the study areas expressed similar views as a group regarding compliance with acreage allotments for wheat in 1956. Slightly more than 80 percent of those who complied with allotments in 1955 in both States indicated that they would comply the following year if given the opportunity. Almost a fourth of the farmers who did not comply with allotments in 1955 indicated that they would comply in 1956. The net result of these changes would be a small increase in compliance in Illinois and no significant change in Pennsylvania. Because of the penalties for not complying with allotments, essentially all farmers who grew more than 15 acres of wheat in 1955 complied with them, and they expected to do so again in 1956.

According to the farmers interviewed, a cross-compliance feature in a 1956 allotment program would not have affected compliance with wheat allotments but it would have detracted from compliance with corn allotments had they been discontinued at the 1955 level (table 46).

Table 45. - Percentage of farmers surveyed who gave specified answers when asked if they would comply in 1956 if acreage allotment and price-support programs were continued as in 1955, selected commercial corn areas

Answer	Corn allotment			Wheat allotment	
	Illinois cash-grain area	Iowa livestock area	Pennsylvania dairy-poultry area	Illinois cash-grain area	Pennsylvania dairy-poultry area
	Percent	Percent	Percent	Percent	Percent
Farmers who complied in 1955:	(102 farms)	(57 farms)	(105 farms)	(51 farms)	(145 farms)
Yes	88	82	46	80	81
No	8	18	53	20	17
Uncertain	4	---	1	---	2
Total	100	100	100	100	100
Farmers who did not comply in 1955: 1/	(131 farms)	(79 farms)	(109 farms)	(21 farms)	(51 farms)
Yes	27	38	17	22	25
No	73	59	79	78	75
Uncertain	---	3	4	---	---
Total	100	100	100	100	100

1/ Most of the farmers who did not comply with their wheat acreage allotments grew less than 15 acres of wheat and were not subject to penalty payments for overplanting.

Rice Areas

Acreage allotments for rice were in effect in 1950 for price-support purposes, but marketing quotas were not in effect. The national allotment for rice was about 1,593,000 acres and about 1,636,000 acres were planted in that year. This was about 13 percent below the acreage of the previous year. Acreage allotments were not in effect from 1951 through 1954. From 1950 to 1954, the area planted to rice increased by approximately 1 million acres, or 60 percent (table 47).

Table 46. - Percentage of farmers surveyed who gave specified answers when asked if they would comply in 1956 if the 1955 program were continued and if cross compliance were required, selected commercial corn areas

Answer	Corn allotment		Wheat allotment	
	Illinois cash-grain area	Pennsylvania dairy-poultry area	Illinois cash-grain area	Pennsylvania dairy-poultry area
	Percent	Percent	Percent	Percent
Farmers who complied in 1955:				
Yes	59	46	80	81
No	16	53	20	17
Uncertain	---	1	---	2
No report	25	---	---	---
Total	100	100	100	100
Farmers who did not comply in 1955:				
Yes	19	19	22	25
No	58	77	78	75
Uncertain	---	4	---	---
No report	23	---	---	---
Total	100	100	100	100

In 1955, acreage allotments for rice were reimposed and marketing quotas were put into effect. The 1955 national allotment was approximately 1,928,000 acres, and about 1,852,000 acres were planted that year. This represents a reduction of about 624,000 acres, or 25 percent, from the 2.5 million acres planted in 1954.

The rice area of southwestern Louisiana and the Sacramento Valley Area of California were selected for study of the effects of the rice acreage-diversion program. (See inside front cover.) The analysis of the situation in the Louisiana area is based partly on information obtained in a special survey conducted in 1955 and partly on previous studies. The analysis of the situation in the Sacramento Valley Area is based on current studies of the Division of Agricultural Economics, University of California. 19/

19/ A more detailed analysis of the impacts of the rice acreage-allotment program is being made by the Division of Agricultural Economics, University of California.

Table 47.- Rice, rough: Acreage seeded, yield, and production, United States, 1949-55 1/

Year	Acreage seeded	Yield per seeded acre	Production	Price per cwt.
	1,000 acres	Pounds	1,000 cwt.	Dollars
1949	1,886	2,162	40,784	4.10
1950	1,636	2,369	38,757	5.09
1951	2,001	2,292	45,853	4.82
1952	2,014	2,396	48,260	4.87
1953	2,183	2,417	52,761	5.19
1954	2,476	2,389	59,151	4.57
1955	1,852	2,725	50,460	4.53

1/ The Wheat Situation, Agricultural Marketing Service, October 1955.

Southwest Louisiana Area

In the 10 southwestern Louisiana parishes, about 5,500 farmers produce rice as their principal cash crop. Four of these parishes - Acadia, Vermilion, Jefferson Davis, and Calcasieu - comprised the sample parishes used in this study. These four parishes include about 70 percent of the rice farmers in southwestern Louisiana. Their allotments for 1955 accounted for about 75 percent of the total for the State. In this area of specialized production, farmers grow about 9 acres of rice to each acre of other crops.

Cooperating in the study were 133 farmers. Almost 50 percent of the farmers grew no crops other than rice. Lespedeza was reported by 26 percent of the operators, cotton by 15 percent, clover by 13 percent, sweetpotatoes by 11 percent, and corn by 10 percent.

Thirty-eight percent of the farmers were classified as operators of small farms, 42 percent as operators of medium-sized farms, and 20 percent as operators of large units. 20/ A fourth of the farmers owned

20/ Small farm, less than 80 acres of rice; medium-sized farm, 80 to 259 acres of rice, and large farm, 260 or more acres of rice.

all the land they operated, 39 percent were part-owners, and 36 percent were tenants.

Rice farmers participated almost 100 percent in the 1955 acreage-allotment program. Around a fifth of the farmers surveyed overplanted their allotments, but ordinarily the overplanting was attributable to errors in estimating the acreage of land prepared for rice. Three-fourths of those in excess were overplanted by less than 10 percent and at the time of the survey, all except 1 of these farmers indicated that they intended to get in compliance.

Changes in Farm Organization and Practices

The farmers interviewed increased the size of their units by an average of 3 percent between 1954, the preallotment year, and 1955. However, as the same operators increased their units by 2 percent between 1953 and 1954, this change can be attributed only partly to allotments. The change occurred almost entirely in the acres of cropland. As a rule, it represented additional land rented by part-owners and tenant operators.

Use of cropland. - By far the most important change in use of cropland was the reduction in the acreage of rice (table 48). Crops other than rice were grown by a somewhat larger number of the farmers in 1955 than in 1954. A larger number of the farmers interviewed reported cotton, corn, sweetpotatoes, lespedeza, clover, and rye grass in 1955 than in 1954. Soybeans, grain sorghum, and Sudan grass were reported by some farmers in 1955 but none of these farmers grew these crops in 1953 or 1954. Wheat and oats were reported in 1955 but by fewer farmers than grew them in 1953.

During the base period (1950-54), an average of 202 acres of rice was planted per farm and the average allotment for 1955 was 170 acres, or 84 percent of the established base (table 49). Farmers planted an average of 165 acres to rice in 1955, thus diverting 37 acres to other uses. Of the total acreage taken out of rice, 85 percent was idle and mostly pastured, 6 percent was seeded to wheat, 4 percent to lespedeza (primarily for pasture), and 5 percent to several miscellaneous crops. Operators of small farms seeded about 92 percent of their allotments, compared with 97 and 98 percent, respectively, for operators of medium-sized and large farms.

Changes in livestock numbers. - Only a very slight increase in livestock numbers on the farms surveyed was indicated. The number of beef cows per farm averaged 44 in 1954 and 45 in 1955. The average number of other cattle, and of pigs raised, increased by only 0.1 to 0.3 per

Table 48. - Land use and crop organization, averages for rice farms surveyed, Louisiana, 1953-55

Land use and crop organization	Average acreage per farm		
	1953	1954	1955
	Acres	Acres	Acres
Land operated:			
Cropland	424	434	445
Open pasture	17	17	18
Woodland	61	61	63
Other land	17	17	17
Land rented from others	(362)	(372)	(385)
Total	513	524	538
Cropland use:			
Rice	197	205	165
Lespedeza	6	5	5
Clover	2	2	4
Cotton	2	1	1
Rye grass	5	5	5
All other crops	3	7	7
Idle land (pastured)	209	209	258
Total	424	434	445

farm (table 50). As livestock numbers remained about the same and 85 percent of the diverted acres was idle land that was grazed, the acreage of grazing land available for each animal unit of cattle was increased from 3.9 to 4.7.

Changes in farm practices. - About 50 percent of the operators indicated that for the 1955 season they had in some way changed their cultural practices in growing rice. Two-fifths of the operators changed their fertilizer treatments, usually by applying larger quantities of plant nutrients per acre. The application of plant nutrients per acre of rice planted increased from 58 pounds in 1953 to 63 pounds in 1954 and to 68 pounds in 1955 (table 51). Applications of fertilizer on small farms were only about 70 percent as high as the average for all farms, whereas the operators of large farms applied about 20 percent more units of plant nutrients per acre than the average. On rice that is irrigated from

Table 49. - Rice acreage (base, allotment, planted and diverted), and use of land diverted from rice, averages for rice farms surveyed, Louisiana, 1955

Item	Average acreage per farm	
	Acres	Percent
Rice:		
Base	202	---
Allotment	170	---
Planted	165	---
Diverted	38	---
Use of land diverted:		
Idle land (pastured)	32	85
Wheat	2	5
Lespedeza	2	5
All other crops	2	5

Table 50. - Numbers of livestock per farm, rice farms surveyed, Louisiana, 1953-55

Kind of livestock	Average per farm		
	1953	1954	1955
	Number	Number	Number
Dairy cows	3	3	3
Beef cows	44	44	45
Calves, under 1 year	21	21	21
Other cattle	3	3	4
Pigs raised	2	3	3

canals, in recent years, some water companies have initiated the policy of paying one-fifth of the cost of fertilizer used as topdressing to induce farmers to use more fertilizer. Allotments may encourage a further expansion of this program.

Table 51.- Fertilizer used on rice, averages for rice farms surveyed, Louisiana, 1953-55

Item	Unit	Average per farm		
		1953	1954	1955
Rice:				
Acreage planted	Acre	198	206	165
Acreage fertilized	do.	194	202	161
Percentage fertilized	Percent	98	98	98
Total nutrients used per planted acre	Pound	58	63	68

About 40 percent of the operators changed one or more practices other than fertilizer treatments. Those most frequently mentioned were land leveling, improved seedbed preparation, and heavier seeding rates. A higher percentage of operators of medium-sized and large farms than of small farms changed their cultural practices. Practically no changes in management of livestock or in treatment of pastures were mentioned by the farmers interviewed.

The Sacramento Valley Area

About two-thirds of the acreage of rice in the Sacramento Valley is operated by tenants who are highly specialized rice farmers. Many of these farmers grow no other crops. When other crops are grown, the shares of the expenses and receipts tend to be on the same one-third and two-thirds basis as used for rice. Some landlords have tried to persuade tenants to grow other crops on land diverted from rice, but in general, tenants have tended to remain strictly rice farmers. In the more concentrated rice areas, the most usual land use pattern includes rice and fallow or idle, or both. However, some farmers have increased their acreages of barley; others are growing more milo, and in one part of the area, the acreages of dry beans have been increased. But it is estimated that more than half of the land taken out of rice as a result of acreage allotments is fallowed or remains idle.

Better preparation of seedbeds will result from the reduced proportion of total cropland in rice. Weather is a major hazard in preparing land for rice. The greater the proportion of the total acreage of rice that is seeded on fallow land, the more time is available during the dry months for land preparation. Little change in the use of irrigation is expected,

as there is little opportunity to increase yields of rice through using more irrigation water per acre.

Acreage allotments have affected very little the quantity of fertilizer used per acre on rice. The amount of nitrogen used per acre increased sharply from about 40 pounds in 1950 to a range of 60 to 80 pounds in 1954. Farmers' experiences during the last 4 seasons have indicated that 60 to 80 pounds of nitrogen per acre is at or close to the maximum it is safe to apply. Excessive nitrogen delays maturity and tends to cause lodging.

The Effect of Acreage Diversion on Farm Incomes

The analysis of the effect of the rice acreage diversion on individual farm incomes is based largely on comparisons of estimated incomes from typical farming systems in 1955, and in 1954, a year when allotments were not in effect.

In one set of situations, estimated incomes from typical farms without acreage allotments and with actual yields and prices in 1954 are compared with estimated incomes from typical organizations in 1955, with actual 1955 yields and prices. This provides a comparison of incomes that takes into account all the factors that may have affected income.

In another set of situations, normal yields are substituted for actual yields and 1955 prices are used in estimating incomes from both organizations. This comparison gives an indication of the difference between incomes on typical farms with and without rice acreage allotments, with normal yields and with the price relationships that prevailed in 1955.

The Louisiana area. - The estimated net income from the 480-acre rice-fallow-beef system of farming was about 9 percent higher in 1955 than in 1954 (table 52). Although the acreage of rice was reduced by 20 percent in 1955 as compared with 1954, yields were about 9 percent higher in 1955, resulting in a reduction in production of only 12 percent. (See appendix table 96.) In 1955, the price of rice was up about 9 percent above 1954. With the higher yields and prices prevailing in 1955, gross income from rice was only 4 percent below that of 1954. Production expenses declined about 10 percent in 1955 as compared with 1954.

The situation was different when normal yields and 1955 prices were used in computing the estimated income from the two cropland organizations. Production of rice was down 15 percent in 1955 as compared with 1954 and estimated net income was about 11 percent lower for the 1955 organization.

Table 52. - Summary of differences in income and expenses between typical 1954 and 1955 farming systems, with specified yields and prices, selected rice areas

Area and kind of farm	Changes from 1954 to 1955, with actual yields and prices			
	Total net income 1/		Gross income from rice	Total expenses
	Dollars	Percent	Dollars	Dollars
Louisiana:				
Medium-sized rice farm	734	9	-887	-1,381
Sacramento Valley, Calif.:				
Rice-fallow farm	12,908	82	9,957	-1,951
Rice-barley-fallow farm	12,933	64	9,957	-1,576
Rice-bean-fallow farm	15,169	63	9,957	-792

Area and kind of farm	Changes from 1954 to 1955, with normal yields and prices			
	Total net income 1/		Gross income from rice	Total expenses
	Dollars	Percent	Dollars	Dollars
Louisiana:				
Medium-sized rice farm	-956	-11	-3,088	-1,914
Sacramento Valley, Calif.:				
Rice-fallow farm	-7,804	-20	-11,261	-3,457
Rice-barley-fallow farm	-6,358	-15	-11,261	-3,083
Rice-bean-fallow farm	-3,633	-8	-11,261	-2,298

1/ Represents returns to land, other capital, and operator's labor and management.

The Sacramento area. - With actual yields and prices, the estimated net income was considerably more for 1955 than for 1954 for all systems of farming included in the analysis (table 52). The difference ranged from about $13,000, or 82 percent, on the rice-fallow system to about $15,000, or 63 percent, on the rice-bean-fallow system. (See appendix

table 97.) Yields were considerably higher in 1955 than in 1954, resulting in an increase in production of 20 percent on 15 percent fewer acres. Thus, most of the differences in net incomes were due to a 42-percent increase in yields of rice in 1955.

With normal yields and 1955 prices, the estimated net income was lower for the 1955 organization than for those followed in 1954. The decrease in estimated income ranged from 8 percent for the rice-beans-fallow system to 20 percent for the rice-fallow system.

With normal yields and 1955 prices, the estimated net income on the rice-fallow farm in 1955 was only 80 percent of the 1954 income. For the farm operator, the net income in 1955 was 77 percent of 1954 and for the landlord it was 84 percent of 1954. On the rice-barley-fallow farm, the net income in 1955 was 85 percent of 1954; for the operator it was 83 percent and for the landlord 88 percent. Total net farm income in 1955 was 92 percent of 1954 income on the rice-bean-fallow farm - 91 percent for the operator and 93 percent for the landlord.

Table 53. - Changes in land use called for by acreage allotments and actual changes in harvested acres of allotment and other crops from 1953 to 1954, by regions, United States 1/

Crop	North-east	Appa-lachian	South-east	Lake States	Corn Belt	Delta States	North-ern Plains	South-ern Plains	Moun-tain	Pacific	United States
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
Changes called for by acreage allotments: 2/											
Corn	-286	-415	---	-1,587	-5,665	---	-1,175	---	---	---	-9,128
Wheat	-301	-312	-85	-470	-1,797	-47	-2,121	-652	-1,816	-1,030	-8,631
Cotton	---	-427	-733	---	-92	-833	---	-181	-372	-404	-3,042
3 crops	-587	-1,154	-818	-2,057	-7,554	-880	-3,296	-833	-2,188	-1,434	-20,801
Actual changes:											
Corn	87	227	-139	139	-346	176	-385	-135	31	106	-239
Wheat	-376	-331	-89	-785	-1,730	-40	-5,189	-638	-2,986	-1,218	-13,382
Cotton	---	-545	-1,180	---	-104	-1,162	---	-1,260	-381	-457	-5,089
3 crops	-289	-649	-1,408	-646	-2,180	-1,026	-5,574	-2,033	-3,336	-1,569	-18,710
Oats	105	196	166	20	871	326	648	639	-27	130	3,074
Barley	77	52	1	138	326	7	1,420	316	1,179	1,081	4,597
Sorghum, all	---	70	8	-3	156	45	2,235	2,690	439	57	5,697
Soybeans for beans	15	124	11	724	906	519	7	-14	---	---	2,292
Flaxseed	---	---	---	-102	2	---	1,147	-15	84	17	1,133
Rye	13	9	1	-26	178	---	100	14	31	13	333
Hay, all	-85	-375	-148	46	-282	-269	439	-82	-509	-21	-1,286
Rice	---	---	---	---	---	285	---	63	---	65	413
8 crops	125	76	39	797	2,157	913	5,996	3,611	1,197	1,342	16,253
11 crops	-164	-573	-1,369	151	-23	-113	422	1,578	-2,139	-227	-2,457
48 other crops	-41	3	-75	44	-19	-28	27	-70	36	120	-3
59 crops	-205	-570	-1,444	195	-42	-141	449	1,508	-2,103	-107	-2,460

1/ See footnote 2, table 5, page 15, for States included in each region.

2/ Total of reductions for individual States, and in the case of corn for commercial areas within States, required from 1953 to 1954 in order that harvested acreage in each State not exceed the acreage allotments for the State.

Table 54. - Changes in land use called for by acreage allotments and actual changes in harvested acres of allotment and other crops from 1953 to 1955, by regions, United States 1/

Crop	North-east	Appa-lachian	South-east	Lake States	Corn Belt	Delta States	North-ern Plains	South-ern Plains	Moun-tain	Pacific	United States
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
Changes called for by acreage allotments: 2/											
Corn	-175	-219	---	-899	-3,665	---	-1,001	---	---	---	-5,959
Wheat	-652	-434	-134	-751	-2,502	-75	-4,947	-1,123	-2,782	-1,466	-14,866
Cotton	---	-629	-1,378	---	-155	-1,581	---	-1,434	-489	-561	-6,227
Rice	---	---	---	---	---	-140	---	-87	---	-69	-296
4 crops	-827	-1,282	-1,512	-1,650	-6,322	-1,796	-5,948	-2,644	-3,271	-2,096	-27,348
Actual changes:											
Corn	100	-199	-272	650	237	77	-1,623	-16	184	209	-653
Wheat	-498	-421	-74	-958	-1,948	-46	-7,440	-4,139	-3,375	-1,540	-20,439
Cotton	---	-691	-1,533	---	-161	-1,735	---	-2,275	-469	-595	-7,459
Rice	---	---	---	---	---	-130	---	-94	---	-83	-307
4 crops	-398	-1,311	-1,879	-308	-1,872	-1,834	-9,063	-6,524	-3,660	-2,009	-28,858
Oats	91	231	212	-387	586	524	177	209	0	73	1,716
Barley	109	81	1	199	560	23	2,128	243	1,206	1,111	5,661
Sorghum, all	---	146	105	-3	162	121	2,555	4,371	967	95	8,519
Soybeans for beans	34	224	90	1,026	1,447	931	138	-10	---	---	3,880
Flaxseed	---	---	---	-252	-10	---	749	-92	35	36	466
Rye	17	-8	2	-21	161	---	527	-43	33	14	682
Hay, all	-9	-102	-49	-48	-501	-145	643	323	-240	116	-12
7 crops	242	572	361	514	2,405	1,454	6,917	5,001	2,001	1,445	20,912
11 crops	-156	-739	-1,518	206	533	-380	-2,146	-1,523	-1,659	-564	-7,946
48 other crops	-131	-118	121	91	-8	-25	-22	70	5	127	110
59 crops	-287	-857	-1,397	297	525	-405	-2,168	-1,453	-1,654	-437	-7,836

1/ See footnote 2, table 5, page 15, for States included in each region.

2/ Total of reductions for individual States, and in the case of corn for commercial areas within States, required from 1953 to 1955 in order that harvested acreages in each State not exceed acreage allotments for the State.

Table 55. - Percentage changes in production of selected crops from 1953 to 1954 and 1955, by regions 1/

Region 2/	1953 to 1954			1953 to 1955		
	4 allotment crops 3/	7 other crops 4/	Total 11 crops	4 allotment crops 3/	7 other crops 4/	Total 11 crops
	Percent	Percent	Percent	Percent	Percent	Percent
Northeast	-2	3	1	-7	3	-1
Lake States	-2	10	3	-2	16	6
Corn Belt	-6	22	2	-1	30	8
Appalachian	-13	2	-8	0	21	7
Southeast	-28	-12	-26	4	9	4
Delta States	-14	19	11	0	90	8
Southern Plains	-6	48	2	-12	64	-1
Northern Plains	-8	29	3	-20	24	-7
Mountain	-24	11	-14	-21	22	-9
Pacific	-13	23	-2	-25	20	-11
United States	-11	16	-3	-8	23	1

1/ Changes in the physical volume of total production as indicated by changes in total value of production when individual crops are valued at 1953 farm prices.
2/ See footnote 2, table 5, for list of States included in each region.
3/ Corn, wheat, cotton, and rice.
4/ Oats, barley, sorghum grain, soybeans for beans, flaxseed, rye, and all tame hay.

Table 56. - Percentage changes in farm value of production of selected crops from 1953 to 1954 and 1955, by regions

Region 1/	1953 to 1954			1953 to 1955		
	4 allotment crops 2/	7 other crops 3/	Total 11 crops	4 allotment crops 2/	7 other crops 3/	Total 11 crops
	Percent	Percent	Percent	Percent	Percent	Percent
Northeast	-4	2	-1	-17	-4	-9
Lake States	-8	6	-2	-12	-2	-7
Corn Belt	-9	12	-3	-11	1	-7
Appalachian	-12	0	-8	-11	2	-6
Southeast	-24	-11	-22	-4	-1	-4
Delta States	-14	15	-12	-4	50	0
Southern Plains	-1	43	5	-15	26	-9
Northern Plains	-7	21	1	-23	1	-15
Mountain	-22	17	-10	-23	16	-10
Pacific	-11	18	-2	-25	23	-10
United States	-10	12	-4	-14	6	-8

1/ See footnote 2, table 5, page 15, for States included in each region.
2/ Corn, wheat, cotton, and rice.
3/ Oats, barley, sorghum grain, soybeans for beans, flaxseed, rye, and all hay.

Table 57. - Average acreage per farm in specified land uses, survey farms, cotton-production areas, 1953 and 1955

Land use	Delta		Clay Hills		Southern Piedmont	
	1953	1955	1953	1955	1953	1955
Total land operated	271	277	201	200	158	156
Cropland	182	187	69	69	74	74
Open pasture	19	19	36	36	20	19
Woodland	59	60	89	88	62	61
Other land	11	11	7	7	2	2
Rented from others	(77)	(77)	(27)	(28)	(38)	(38)

Land use	High Plains		Upper San Joaquin Valley		Western San Joaquin Valley	
	1953	1955	1953	1955	1953	1955
Total land operated	468	470	208	214	1,761	1,921
Cropland	433	437	188	193	1,670	1,827
Open pasture	30	27	---	---	---	---
Woodland	---	---	---	---	---	---
Other land	5	6	20	21	91	94
Rented from others	(259)	(259)	(66)	(68)	(779)	(878)

Table 58. - Average acreage of cropland per farm in specified uses, by size of farm, survey farms, selected cotton areas, 1953 compared with 1955 1/

Cropland use	Delta						Clay Hills					
	Small farms		Medium farms		Large farms		Small farms		Medium farms		Large farms	
	1953	1955 as percent of 1953	1953	1955 as percent of 1953	1953	1955 as percent of 1953	1953	1955 as percent of 1953	1953	1955 as percent of 1953	1953	1955 as percent of 1953
	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.
Cotton	15.7	76	48.7	63	338.8	59	4.9	73	21.6	57	86.9	58
Corn	6.6	129	12.2	127	50.8	125	9.6	100	20.7	117	48.7	134
Grain sorghum for grain	0	---	0	---	.6	---	0	---	0	---	0	---
Oats	.8	250	3.1	213	20.9	238	0	---	0	---	0	---
Barley	0	---	0	---	3.4	573	0	---	0	---	0	---
Soybeans	8.8	116	14.5	190	75.9	198	0	---	0	---	0	---
All hay	2.0	110	3.1	123	8.1	122	3.1	90	6.7	128	10.1	169
Miscellaneous other crops	1.6	69	2.0	150	15.5	105	.7	214	2.3	248	6.5	406
Cropland pasture	3.0	100	6.2	127	43.5	125	1.8	106	10.8	69	15.4	121
Idle	2.5	132	2.9	117	13.1	181	4.6	128	4.1	163	11.2	175
Total crops	41.0	104	92.7	108	570.6	103	24.7	100	66.2	101	178.8	110
Double crops	.3	233	4.8	219	0	---	0	---	0	---	6.8	---
Total cropland	40.7	102	87.9	106	570.6	101	24.7	100	66.2	101	172.0	100

See footnote at end of table.

- Continued

Table 58. - Average acreage of cropland per farm in specified uses, by size of farm, survey farms, selected cotton areas, 1953 compared with 1955 1/ - Continued

Cropland use	Southern Piedmont						High Plains					
	Small farms		Medium farms		Large farms		Small farms		Medium farms		Large farms	
	1953	1955 as percent of 1953	1953	1955 as percent of 1953	1953	1955 as percent of 1953	1953	1955 as percent of 1953	1953	1955 as percent of 1953	1953	1955 as percent of 1953
	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.
Cotton	6.3	73	18.1	66	64.6	60	97.5	71	201.5	84	589.5	65
Corn	7.5	84	12.7	88	31.6	98	1.0	100	.1	100	.3	100
Grain sorghum for grain	.3	233	0	---	.7	228	43.5	192	119.4	174	238.4	214
Oats	3.2	134	9.7	115	23.6	107	0	---	0	---	0	---
Barley	0	---	0	---	0	---	0	---	0	---	0	---
Soybeans	.4	125	.1	100	.5	140	0	---	0	---	0	---
All hay	.6	100	1.2	100	2.6	104	.1	200	2.2	100	2.4	258
Miscellaneous other crops	5.0	96	7.9	94	27.7	117	0	---	0	---	0	---
Cropland pasture	4.3	112	6.1	113	18.9	149	0	---	0	---	0	---
Idle	10.2	85	10.5	171	15.6	175	13.2	33	58.8	9	92.1	35
Total crops	37.8	100	66.3	103	185.8	101	155.3	100	382.0	100	922.7	101
Double crops	1.7	59	.5	200	3.4	271	0	---	0	---	0	---
Total cropland	36.1	102	65.8	102	182.4	98	155.3	102	382.0	101	922.7	101

1/ Size of farm based on 1954 cotton acreage as follows: Delta - Small, under 20 acres cotton; medium, 20-99 acres; and large, 100 or more acres. Clay Hills and Piedmont - Small, under 10 acres cotton; medium, 10 to 30 acres; and large, 30 or more acres. High Plains - Small, under 100 acres cotton; medium, 100 to 249 acres; and large, 250 or more acres.

Table 59. - Cotton acreage diversions on survey farms, averages per farm, by size of farm, selected cotton areas, 1955 1/

Item	Delta						Clay Hills					
	Small farms		Medium farms		Large farms		Small farms		Medium farms		Large farms	
	Area	Percentage of cropland	Area	Percentage of cropland	Area	Percentage of cropland	Area	Percentage of cropland	Area	Percentage of cropland	Area	Percentage of cropland
	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.
Cropland	42	---	93	---	571	---	25	---	67	---	179	---
Cotton:												
Base	2/	---	2/	---	2/	---	4	16.0	18	27.0	71	41.0
Allotment	11	26.0	30	32.0	195	34.0	4	16.0	12	18.0	50	29.0
Planted	12	29.0	31	33.0	199	34.0	4	16.0	12	18.0	50	29.0
Diverted	4	10.0	17	18.0	127	22.0	1	4.0	6	9.0	26	15.0
	Area	Percentage of total diversion	Area	Percentage of total diversion	Area	Percentage of total diversion	Area	Percentage of total diversion	Area	Percentage of total diversion	Area	Percentage of total diversion
	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.
Cotton acreage diverted to:												
Corn	1.7	42.0	3.3	20.0	12.9	10.0	0.3	31.1	3.3	53.5	12.2	47.3
Grain sorghum for grain	.1	3.0	.2	1.0	1.7	1.0	0	---	0	---	0	---
Oats	.1	3.0	1.6	10.0	23.1	18.0	0	---	0	---	0	---
Barley	0	---	.2	1.0	5.9	5.0	0	---	0	---	0	---
Soybeans	1.6	39.0	7.9	47.0	61.5	48.0	0	---	0	---	0	---
Miscellaneous other crops	.4	10.0	2.0	12.0	14.5	11.0	.2	20.4	1.1	18.2	6.3	24.4
Cropland pasture	0	---	.4	2.0	3.5	3.0	3/	.1	.7	11.9	.8	3.1
Idle cropland	.1	3.0	1.4	7.0	3.9	4.0	.5	48.4	1.0	16.4	6.5	25.2
Total cropland	4.0	100.0	17.0	100.0	127.0	100.0	1.0	100.0	6.1	100.0	25.8	100.0

See footnotes at end of table.

- Continued

Table 59. - Cotton acreage diversions on survey farms, averages per farm, by size of farm, selected cotton areas, 1955 1/ - Con.

Item	Southern Piedmont						High Plains					
	Small farms		Medium farms		Large farms		Small farms		Medium farms		Large farms	
	Area	Percentage of cropland	Area	Percentage of cropland	Area	Percentage of cropland	Area	Percentage of cropland	Area	Percentage of cropland	Area	Percentage of cropland
	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.
Cropland	37	---	67	---	186	---	158	---	384	---	930	---
Cotton:												
Base	6	16.0	16	24.0	58	32.0	124	78.0	296	77.0	711	76.0
Allotment	5	14.0	13	19.0	41	23.0	68	43.0	165	43.0	396	43.0
Planted	5	14.0	12	18.0	39	22.0	69	44.0	169	44.0	380	41.0
Diverted	2	5.0	5	7.0	19	11.0	55	35.0	131	34.0	312	34.0
	Area	Percent-age of total diversion	Area	Percent-age of total diversion	Area	Percent-age of total diversion	Area	Percent-age of total diversion	Area	Percent-age of total diversion	Area	Percent-age of total diversion
	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.	Acres	Pct.
Cotton acreage diverted to:												
Corn	0.2	12.0	0.6	12.0	2.2	12.0	0	---	0	---	0	---
Grain sorghum for grain	0	---	0	---	0	---	52	94.0	126.6	97.0	307.7	99.0
Oats	.2	13.0	1.0	20.0	3.7	20.0	0	---	0	---	0	---
Barley	0	---	0	---	0	---	0	---	0	---	0	---
Soybeans	0	---	0	---	0	---	0	---	0	---	0	---
Miscellaneous other crops	.2	13.0	.6	12.0	4.1	21.0	1.1	2.0	1.6	1.0	3.4	1.0
Cropland pasture	.2	12.0	.3	6.0	1.9	10.0	0	---	0	---	0	---
Idle cropland	.8	50.0	2.5	50.0	6.9	37.0	2.0	4.0	2.8	2.0	.5	4/
Total cropland	1.6	100.0	5.0	100.0	18.8	100.0	55.1	100.0	131.0	100.0	311.6	100.0

1/ For definition of size of farm see footnote, table 58. 2/ Base acreage was not available for the Delta on a comparable basis with the other areas. 3/ Less than 0.05 acre. 4/ Less than 0.5 percent.

Table 60. - Land use by capability classes, survey farms, Walton County, Ga., Spartanburg County, S. C., and Henderson County, Tenn., 1953 and 1955

Land use	Walton County, Ga., and Spartanburg County, S. C.									
	Totals		Proportion of acreage in each capability class							
			Capability classes I and II		Capability class III		Capability class IV		Capability classes V, VI and VII	
	1953	1955	1953	1955	1953	1955	1953	1955	1953	1955
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Cropland:										
Cotton	100	100	49.0	54.1	44.6	39.5	3.2	3.7	3.2	2.7
Corn	100	100	44.2	41.9	41.0	42.3	9.9	10.1	4.9	5.7
Small grains	100	100	49.6	50.6	31.4	36.3	13.4	8.7	5.6	4.4
Hay and forage	100	100	29.2	44.0	52.8	42.8	10.8	9.0	7.2	4.2
Other crops	100	100	49.9	51.1	32.1	32.3	13.1	11.9	4.9	4.7
Idle cropland	100	100	59.7	30.1	21.6	48.9	14.1	12.8	4.6	8.2
Permanent pasture	100	100	23.1	24.1	47.6	48.1	5.7	5.9	23.6	21.9
Woods	100	100	7.0	7.0	22.5	22.4	13.4	13.4	57.1	57.2
Other land	100	100	39.6	39.5	35.6	35.8	12.5	12.3	12.3	12.4

- Continued

Table 60. - Land use by capability classes, survey farms, Walton County, Ga., Spartanburg County, S. C., and Henderson County, Tenn., 1953 and 1955 - Continued

Land use	Henderson County, Tenn.									
	Totals		Proportion of acreage in each capability class							
			Capability classes I and II		Capability class III		Capability class IV		Capability classes V, VI and VII	
	1953	1955	1953	1955	1953	1955	1953	1955	1953	1955
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Cropland:										
Cotton	100	100	38.4	42.3	25.3	29.3	23.2	19.6	13.1	8.8
Corn	100	100	29.3	23.4	46.8	44.6	14.9	20.0	9.0	12.0
Hay and forage	100	100	17.0	21.3	37.0	30.0	23.5	22.6	22.5	26.1
Other crops	100	100	18.5	31.7	21.8	17.8	24.2	31.5	35.5	19.0
Permanent pasture	100	100	8.9	8.3	15.5	16.0	21.1	22.8	54.5	52.9
Woods	100	100	2.8	2.8	12.0	12.9	25.7	25.1	59.5	59.2
Other land	100	100	6.5	9.1	14.2	13.1	20.3	19.2	59.0	58.6

Table 61. - Farm organization, income and costs, small commercial family-operated cotton farm, Mississippi Delta, with specified yields and prices, 1953-55

Item	Unit	Actual yields and seasonal prices			Normal yields, 1955 prices and costs	
		1953	1954	1955	1953	1955
Land use and cropland organization:						
Land operated	Acre	56.0	56.0	56.0	56.0	56.0
Cropland	do.	34.8	34.8	34.8	34.8	34.8
Crops:						
Cotton	do.	19.6	17.0	15.2	19.6	14.9
Corn	do.	6.9	8.0	8.4	6.9	8.4
Soybeans for beans	do.	4.2	5.0	6.2	4.2	6.2
Hay	do.	2.6	2.8	2.7	2.6	2.7
Idle	do.	.7	1.5	1.8	.7	1.8
Failure	do.	1.1	.8	.8	1.1	1.1
Double cropped	do.	.3	.3	.3	.3	.3
Livestock:						
Dairy cows	Number	1.3	1.3	1.3	1.3	1.3
Beef cows	do.	.8	1.0	1.0	.8	1.0
Pigs raised	do.	5.7	5.7	5.8	5.7	5.8
Crop yield per acre:						
Cotton lint	Pound	450	392	548	375	410
Corn	Bushel	21	17.5	32.7	23.6	23.6
Soybeans	do.	13	15.2	24.8	16.1	16.1
Prices:						
Cotton lint, per lb.	Dollar	0.336	0.347	0.344	0.344	0.344
Cottonseed, per ton	do.	53.02	60.98	43.49	43.49	43.49
Corn, per bu.	do.	1.54	1.48	1.09	1.09	1.09
Soybeans, per bu.	do.	2.51	2.50	2.03	2.03	2.03
Income:						
Cotton	do.	3,345	2,642	3,161	2,785	2,319
Perquisites	do.	517	489	484	474	477
Other	do.	421	506	745	407	529
Total gross farm income	do.	4,283	3,637	4,390	3,666	3,325
Expenses	do.	2,197	1,951	2,166	2,118	1,891
Net income 1/	do.	2,086	1,686	2,224	1,548	1,434

1/ Represents returns to land, other capital, and labor and management of the operator and his family.

Table 62.- Farm organization, income and costs, large-scale cotton farm, Mississippi Delta, with specified yields and prices, 1953-55

Item	Unit	Actual yields and seasonal prices			Normal yields, 1955 prices and costs	
		1953	1954	1955	1953	1955
Land use and cropland organization:						
Land operated	Acre	1,000	1,000	1,000	1,000	1,000
Cropland	do.	640	640	640	640	640
Crops:						
Wage cotton	do.	180	135	133	187	129
Cropper cotton	do.	161	111	92	168	90
Wage corn	do.	53	63	56	53	56
Cropper corn	do.	23	23	22	23	22
Oats	do.	54	76	88	54	88
Soybeans for beans	do.	88	153	166	89	155
Hay	do.	45	44	52	45	52
Cropland pasture	do.	9	11	13	9	13
Idle	do.	6	13	15	6	15
Failure	do.	36	25	19	21	37
Double cropped	do.	15	14	16	15	16
Cotton planted	do.	(369)	(252)	(228)	(369)	(228)
Soybeans planted	do.	(114)	(174)	(185)	(114)	(185)
Livestock:						
Beef cows	Number	48	57	63	48	63
Pigs raised	do.	59	56	61	59	61
Crop yield per acre:						
Cotton	Pound	507	420	580	440	485
Soybeans	Bushel	12.4	13.5	24.4	17.3	17.3
Oats	do.	44.8	50.1	39.0	38.5	38.5
Corn	do.	25.0	21.4	40.0	27.5	27.5
Prices:						
Cotton lint, per lb.	Dollar	0.335	0.349	0.346	0.346	0.346
Cottonseed, per ton	do.	53.65	62.19	44.28	44.28	44.28
Soybeans, per bu.	do.	2.48	2.48	2.01	2.01	2.01
Corn, per bu.	do.	1.53	1.50	1.19	1.19	1.19
Oats, per bu.	do.	.86	.84	.74	.74	.74
Income:						
Cotton	do.	65,374	41,214	49,484	59,682	40,527
Perquisites	do.	1,113	1,103	1,105	1,075	1,075
Other	do.	9,177	13,249	17,094	8,283	12,966
Total gross farm income	do.	75,664	55,566	67,683	69,040	54,568
Expenses	do.	50,570	38,276	41,571	49,576	39,336
Net income 1/	do.	25,094	17,290	26,112	19,464	15,232
Cropper families	Number	11.5	9.1	7.7	11.5	7.7

1/ Represents returns to land, other capital and labor and management of the operator and his family.

Table 63. - Changes in farm organization and estimated income and costs, with specified yields and prices, survey cotton farm, Clay Hills Area, Mississippi and Tennessee, 1953 and 1955

Item	Unit	Actual yield seasonal prices		Normal yields, 1955 prices and costs	
		I	II	III	IV
		1953	1955	1953	1955
Land use and cropland organization:					
Land operated	Acre	200	200	200	200
Cropland	do.	69	69	69	69
Crops:					
Cotton (operator)	do.	9	5	9	5
Cotton (cropper)	do.	18	11	18	11
Corn (operator)	do.	12	15	12	15
Corn (cropper)	do.	9	11	9	11
Hay	do.	6	6	6	6
Cropland pasture	do.	7	9	7	9
Miscellaneous crops	do.	2	3	2	3
Idle	do.	7	9	7	9
Livestock:					
Beef cows	Number	8	9	8	9
Dairy cows	do.	3	3	3	3
Pigs raised	do.	4	4	4	4
Crop yield per acre:					
Cotton lint	Pound	305	550	300	325
Corn	Bushel	22	30	25	25
Prices:					
Cotton lint, per lb.	Dollar	0.337	0.344	0.344	0.344
Cottonseed, per ton	do.	54.80	45.60	45.60	45.60
Corn, per bu.	do.	1.68	1.15	1.15	1.15
		Change II over I		Change IV over III	
		Increase	Decrease	Increase	Decrease
Income and expenses:					
Gross income:					
Cotton and cottonseed	do.	173	---	---	1,092
Other	do.	167	---	182	---
Total	do.	340	---	---	910
Expenses	do.	---	119	---	642
Net income	do.	459	---	---	268

Table 64. - Farm organization, income and costs, commercial family-operated cotton farm, with specified yields and prices, Southern Piedmont, 1953-55

Item	Unit	Actual yield seasonal prices			Normal yields, 1955 prices and costs	
		1953	1954	1955	1953	1955
Land use and cropland organization:						
Land operated	Acre	173.0	175.0	177.0	177.0	177.0
Cropland	do.	85.4	85.6	86.2	85.4	86.2
Crops:						
Cotton	do.	26.6	19.6	17.6	26.6	17.6
Corn	do.	17.0	16.8	15.6	17.0	15.6
Wheat	do.	5.8	4.8	4.4	5.8	4.4
Oats	do.	10.3	10.9	11.0	10.3	11.0
Hay	do.	7.4	9.4	11.5	7.4	11.5
Truck and miscellaneous	do.	1.8	2.1	2.4	1.8	2.4
Idle	do.	11.4	17.0	19.3	11.4	19.3
Cropland pasture	do.	7.7	7.7	8.7	7.7	8.7
Double cropped	do.	2.6	2.7	4.3	2.7	4.3
Cropper cotton	do.	(14.1)	(9.8)	(8.5)	(14.3)	(8.5)
Cropper corn	do.	(6.3)	(5.2)	(5.2)	(6.3)	(5.2)
Livestock:						
Dairy cows	Number	2.2	2.2	2.2	2.2	2.2
Beef cows	do.	2.3	2.7	2.4	2.3	2.4
Pigs raised	do.	4.7	4.9	5.3	4.7	5.3
Crop yield per acre:						
Cotton lint	Pound	277	263	460	287	310
Corn	Bushel	20.2	11.7	27.3	18.3	18.3
Wheat	do.	18.7	20.3	18.4	19.2	19.2
Oats	do.	38.3	35.7	30.5	33.5	33.5
Prices:						
Cotton lint, per lb.	Dollar	0.333	0.354	0.329	0.329	0.329
Cottonseed, per ton	do.	51.91	60.35	41.48	41.48	41.48
Wheat, per bu.	do.	1.98	2.04	2.02	2.02	2.02
Oats, per bu.	do.	.88	.86	.80	.80	.80
Corn, per bu.	do.	1.54	1.66	1.22	1.22	1.22
Income:						
Cotton	do.	2,681	1,984	2,888	2,764	1,916
Perquisites	do.	663	658	623	623	623
Other	do.	1,634	1,429	1,647	1,390	1,477
Total gross farm income	do.	4,978	4,071	5,158	4,777	4,016
Expenses	do.	3,267	2,713	3,007	3,318	2,737
Net income 1/	do.	1,711	1,358	2,151	1,459	1,279

1/ Represents returns to land, other capital, and labor and management of the operator and his family.

Table 65. - Farm organization, income and costs, commercial family-operated irrigated cotton farm, with specified yields and prices, High Plains Area, Texas, 1953-55

Item	Unit	Actual yields and seasonal prices			Normal yields, 1955 prices and costs	
		1953	1954	1955	1953	1955
Land use and cropland organization:						
Land operated	Acre	305	309	314	314	314
Cropland	do.	285	290	296	296	296
Crops:						
Cotton (irrigated)	do.	146.6	111.4	114.9	152.5	114.9
Cotton (not irrigated)	do.	9.4	19.6	14.2	41.4	13.1
Grain sorghum (irrigated)	do.	26.5	70.1	78.0	42.3	77.3
Grain sorghum (not irrigated)	do.	16.2	61.6	64.5	32.4	62.2
Forage sorghum	do.	6.0	4.0	5.0	6.0	5.0
Sudan pasture	do.	7.0	7.0	7.6	7.0	7.6
Idle	do.	18.0	5.6	5.6	5.6	5.6
Failure	do.	55.3	10.7	6.2	8.8	10.3
Cotton planted	do.	(192.5)	(132.5)	(130.5)	(200.0)	(130.5)
Grain sorghum planted	do.	(94.5)	(142.0)	(148.7)	(80.0)	(148.7)
Livestock:						
Dairy cows	Number	2.3	2.2	2.2	2.2	2.2
All cattle	do.	5.5	5.4	5.7	5.5	5.7
Pigs raised	do.	6.9	8.8	11.1	6.9	11.1
Crop yield per acre:						
Cotton lint (irrigated)	Pound	387	510	465	420	443
Cotton lint (not irrigated)	do.	88	154	125	145	155
Grain sorghum	Bushel	25.1	28.4	30.4	21.5	21.5
Prices:						
Cotton lint, per lb.	Dollar	0.297	0.318	0.304	0.304	0.304
Cottonseed, per ton	do.	52.04	57.35	45.30	45.30	45.30
Grain sorghum, per bu.	do.	1.23	1.13	.81	.81	.81
Income:						
Cotton	do.	19,178	21,429	18,528	23,516	17,744
Perquisites	do.	871	839	845	845	845
Other	do.	1,067	4,860	4,284	1,868	3,054
Total gross farm income	do.	21,116	27,128	23,657	26,229	21,643
Expenses	do.	13,493	13,918	14,485	14,861	14,189
Net income 1/	do.	7,623	13,210	9,172	11,368	7,454

1/ Represents returns to land, other capital, and labor and management of the operator and his family.

Table 66. - Farm organization, income and costs, commercial family-operated non-irrigated cotton farm, with specified yields and prices, High Plains Area, Texas, 1953-55

Item	Unit	Actual yields and seasonal prices			Normal yields, 1955 prices and costs	
		1953	1954	1955	1953	1955
Land use and cropland organization:						
Land operated	Acre	347	359	370	370	370
Cropland	do.	286	298	309	309	309
Crops:						
Cotton	do.	45.0	109.7	123.5	188.0	115.9
Grain sorghum	do.	27.0	143.1	149.6	74.7	144.0
Forage	do.	6.5	9.0	9.0	9.0	9.0
Sudan pasture	do.	10.0	5.8	6.0	6.0	6.0
Idle	do.	89.8	15.4	10.9	10.9	10.9
Failure	do.	107.7	15.0	10.0	20.4	23.2
Cotton planted	do.	(75.0)	(120.5)	(128.8)	(209.0)	(128.8)
Grain sorghum planted	do.	(119.5)	(152.0)	(158.0)	(83.0)	(160.0)
Livestock:						
Dairy cows	Number	1.9	1.7	1.8	1.9	1.8
All cattle	do.	6.5	5.8	6.5	6.5	6.5
Pigs raised	do.	2.6	3.8	5.2	2.6	5.2
Crop yield per acre:						
Cotton lint	Pound	88	154	125	145	155
Grain sorghum	Bushel	8.5	11.4	12.3	15.0	15.0
Prices:						
Cotton lint, per lb.	Dollar	0.297	0.318	0.304	0.304	0.304
Cottonseed, per ton	do.	52.04	57.35	45.30	45.30	45.30
Grain sorghum, per bu.	do.	1.23	1.13	.81	.81	.81
Income:						
Cotton	do.	1,254	5,997	5,137	9,125	5,991
Perquisites	do.	616	600	630	630	630
Other	do.	620	2,411	2,058	1,383	2,379
Total gross farm income	do.	2,490	9,008	7,825	11,138	9,000
Expenses	do.	3,123	4,713	4,796	5,585	5,021
Net income 1/	do.	-633	4,295	3,029	5,553	3,979

1/ Represents returns to land, other capital, and labor and management of the operator and his family.

Table 67. - Farm organization, production, costs and income, 80-acre cotton-potato farm, Upper San Joaquin Valley, Calif., with 1953 and 1955 normal yields and 1955 prices and costs

Item	Unit	Normal yields, 1955 prices and costs	
		1953	1955
Cropland	Acre	77	77
Crops:			
Cotton	do.	60	33
Potatoes	do.	17	15
Corn	do.	---	29
Yield per acre:			
Cotton	Bale	2.0	2.5
Potatoes	Cwt.	258	290
Corn	do.	---	50
Production:			
Cotton lint	Bale	120	82.5
Cottonseed	Ton	55.3	38.0
Potatoes	Cwt.	4,386	4,350
Corn	do.	---	1,450
Prices:			
Cotton lint	Pound	---	.35
Cottonseed	Ton	---	46.00
Potatoes	Cwt.	---	1.85
Corn	do.	---	2.70
Income:			
Cotton lint	Dollar	20,076	13,802
Cottonseed	do.	2,544	1,748
Potatoes	do.	8,114	8,048
Corn	do.	---	3,915
Total	do.	30,734	27,513
Expenses:			
Fixed	do.	3,450	3,450
Variable	do.	19,227	16,800
Total	do.	22,677	20,250
Net farm income: 1/	do.	8,057	7,263

1/ Represents return to land, other capital, and labor and management of the operator and his family.

Table 68. - Farm organization, production, costs and income, large cotton farm, Western San Joaquin Valley, Calif., with 1953 and 1955 normal yields and 1955 prices and costs

Item	Unit	Normal yields, 1955 prices and costs	
		1953	1955
Cropland	Acre	2,700	2,700
Crops:			
Cotton	do.	800	440
Barley	do.	1,250	1,560
Fallow	do.	650	700
Yield per acre:			
Cotton lint	Bale	1.60	2.0
Barley	Cwt.	34.6	33.0
Production:			
Cotton lint	Bale	1,280	880
Cottonseed	Ton	590.1	405.7
Barley	Cwt.	43,250	51,480
Prices:			
Cotton lint	Pound	---	.35
Cottonseed	Ton	---	46.00
Barley	Cwt.	---	2.15
Income:			
Cotton lint	Dollar	214,144	147,224
Cottonseed	do.	27,145	18,662
Barley	do.	92,987	110,682
Total	do.	334,276	276,568
Expenses:			
Fixed	do.	52,524	52,524
Variable	do.	156,019	128,174
Total	do.	208,543	180,698
Net farm income: 1/	do.	125,733	95,870

1/ Represents returns to land, other capital, and labor and management of the operator and his family.

Table 69. - Use of land diverted from wheat on survey farms, 4 selected wheat areas, 1955

Kind of farm 1/	Number of farms	Acres per farm: Crop-land	Acres per farm: Total diversion	Percentage of diverted acres in specified crops: Idle or fallow	Barley	Other small grain	Flax or dry peas 2/	Grain sorghum or corn 3/	Forage: Annual	Forage: Perennial	Durum	Other crops
	Number	Acres	Acres	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
West-central Kansas farms:												
Noncompliance	15	823	70	45	11	0	---	44	0	0	---	0
Compliance:												
Grain only	117	427	88	21	5	0	---	71	1	0	---	2
Grain-minor livestock	251	480	71	29	5	1	---	59	1	0	---	5
Grain-major livestock	34	519	34	14	2	0	---	73	4	0	---	7
Total compliance farms	402	451	73	26	5	1	---	64	1	0	---	4
All farms	417	464	73	27	5	4/	---	63	1	0	---	4
North-central North Dakota:												
Grain only	66	528	58	2	40	0	42	1	0	0	4	10
Grain-minor livestock	120	413	40	6	42	0	35	1	0	2	2	12
Grain-major livestock	190	330	43	2	39	0	33	3	1	3	7	12
All farms	376	492	45	3	40	0	36	2	1	2	5	11
North-central Montana:												
Noncompliance	19	1,239	51	0	75	0	0	4/	0	0	0	25
Compliance:												
Grain only	53	798	121	2	73	12	0	0	0	1	0	12
Grain-minor livestock	24	873	156	0	87	9	0	1	4/	3	0	4/
Grain-major livestock	38	927	124	2	65	15	0	0	3	3	0	12
Total compliance farms	115	856	129	2	74	12	0	4/	1	2	0	9
All farms	134	910	118	1	74	11	0	4/	1	2	0	10
Washington-Palouse:												
Fallow-system 5/	65	586	97	1	62	6	29	0	4/	2	---	4/
Fallow-conserving 5/	30	664	96	4/	63	1	20	0	0	6	---	10
Recropping system 5/	22	610	95	18	41	8	31	0	4/	0	---	2
Recrop-conserving 5/	11	338	56	0	52	16	29	0	0	3	---	0
All farms	93	605	96	1	58	7	27	0	4/	3	---	4

1/ Compliance refers to compliance with wheat allotments in 1955; grain only = less than 4 animal units; grain-minor livestock = 4 to 19 animal units; grain-major livestock = 20 animal units or more; fallow system = less than 25 percent of cropland in recropped wheat; recropping = 25 percent or more cropland in recropped wheat; conserving = 16 percent or more cropland in soil-conserving crops. 2/ Flax in North Dakota area, peas in Washington area. 3/ Grain sorghum in Kansas area, corn in other areas. 4/ Less than 0.5 percent. 5/ Includes some supplemental sample farms.

Table 70.- Average number of livestock per farm, survey farms, 4 selected wheat areas, 1953 and 1955

Item	West-central Kansas		North-central North Dakota		North-central Montana		Washington-Palouse	
	1953	1955	1953	1955	1953	1955	1953	1955
	Number	Number	Number	Number	Number	Number	Number	Number
Survey farms	417	417	376	376	134	134	93	93
Livestock on farms, January 1:								
Dairy cows	3.2	3.2	6.1	6.5	1.6	1.7	2.5	2.1
Beef cows	19.5	17.3	9.3	10.3	22.6	25.3	6.7	7.7
Calves under 1 year	17.2	15.1	9.2	9.9	11.9	14.1	5.1	6.1
Other cattle	5.3	5.8	5.1	6.6	2.9	3.9	1.6	2.0
Stock sheep	2.5	2.9	3.7	5.2	15.8	15.8	5.2	6.4
Total	29.4	27.3	24.5	27.5	30.5	35.4	13.6	15.3
During year:								
Cattle fed	10.0	17.1	5.3	6.7	1.4	3.3	3.3	3.9
Lambs fed	---	---	15.4	3.2	0	0	1.1	1.1
Spring pigs raised	.1	.5	4.8	6.6	3.1	3.7	6.9	7.5
Fall pigs raised	---	---	.2	.3	1.2	1.7	2.3	3.8
Beef cows per farm, January 1:								
Compliance farms	19.8	17.6	9.3	10.3	23.1	26.5	6.7	7.7
Noncompliance farms 1/	12.8	8.8	---	---	19.6	17.6	---	---
Cash-grain farms:								
Compliance	7.0	1.0	.3	0	.4	---	3.3	3.9
Noncompliance 1/	.2	.2	---	---	6.6	.3	---	---
Total	6.4	.9	.3	0	1.2	.2	3.3	3.9
Farms with minor livestock enterprise 2/	24.1	23.1	4.1	3.0	9.9	12.2	16.5	18.7
Farms with major livestock enterprise 2/	31.6	34.5	15.8	18.6	60.6	68.6	---	---

1/ Farms in noncompliance with wheat allotments reported only in Kansas and Montana areas.

2/ Includes both compliance and noncompliance farms. Number of farms too small to report separately by compliance and noncompliance.

Table 71.- Use of fertilizer on wheat and selected other crops on survey farms, compliance and noncompliance farms, 4 selected wheat areas, 1953 and 1954

Item	Compliance farms						Noncompliance farms 2/					
	Acreage fertilized		Average nutrients used- Per acre fertilized		Average nutrients used- Per farm 1/		Acreage fertilized		Average nutrients used- Per acre fertilized		Average nutrients used- Per farm 1/	
	1953	1955	1953	1955	1953	1955	1953	1955	1953	1955	1953	1955
	Acres	Acres	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
West-central Kansas (402 farms):												
Dryland wheat fertilized	982	1,738	33.5	27.9	82	121	---	---	---	---	---	---
Irrigated wheat fertilized	35	231	37.8	29.6	3	17	---	---	---	---	---	---
All wheat	1,017	1,969	33.6	28.1	85	138	---	---	---	---	---	---
Grain sorghum fertilized	723	2,537	35.0	36.0	63	228	---	---	---	---	---	---
North-central Montana (134 farms): 3/												
Any wheat after grain	147	---	7.5	---	96	---	69	---	15.0	---	54	---
Winter wheat after fallow	4,067	4,487	13.8	15.0	490	586	1,244	1,370	10.8	10.0	706	718
Spring wheat after fallow	1,081	1,361	10.5	14.6	99	173	16	2,694	15.0	13.1	13	1,860
Total	5,295	5,848	13.0	14.9	685	759	1,329	4,064	11.0	12.0	773	2,578
North-central North Dakota (376 farms):												
Hard wheat after grain	825	1,527	23.8	20.8	52	85	---	---	---	---	---	---
Hard wheat after corn or fallow	4,308	4,940	22.1	19.9	253	261	---	---	---	---	---	---
Durum	1,821	926	22.0	20.9	106	51	---	---	---	---	---	---
Total	6,954	7,393	22.2	20.2	411	397	---	---	---	---	---	---
Washington-Palouse (93 farms):												
Winter wheat after grain	5,603	2,256	42.0	73.2	2,530	1,776	---	---	---	---	---	---
Winter wheat after peas	3,862	2,977	40.5	50.4	1,682	1,623	---	---	---	---	---	---
Winter wheat after fallow	2,230	6,768	33.6	39.0	806	2,838	---	---	---	---	---	---
Total	11,695	12,001	39.9	48.3	5,018	6,237	---	---	---	---	---	---
Barley after grain	1,650	3,558	43.2	50.4	767	1,929	---	---	---	---	---	---
Barley after peas	93	1,776	40.0	53.7	40	1,025	---	---	---	---	---	---
Barley after fallow	---	419	---	45.8	---	206	---	---	---	---	---	---

1/ Average of all farms whether or not they used fertilizer.

2/ The noncompliance farms in the sample for the Kansas study did not use fertilizer in either 1953 or 1955. There were no noncompliance farms in the study areas in North Dakota or Washington.

3/ Includes 115 compliance and 19 noncompliance farms.

Table 72. - Acres of wheat per farm seeded on fallow and on stubble land, survey farms, selected wheat areas, 1953 and 1955

Item	Seeded after fallow		Seeded on stubble		Percentage seeded on fallow	
	1953	1955	1953	1955	1953	1955
	Acres	Acres	Acres	Acres	Percent	Percent
West-central Kansas:						
Compliance farms	88	89	159	91	36	50
Noncompliance farms	318	318	83	40	79	88
All farms	96	97	156	89	38	52
North-central Montana:						
Winter wheat:						
Compliance farms	240	195	14	4	98	98
Noncompliance farms	258	346	2	0	99	100
Total	242	216	5	4	98	98
Spring wheat:						
Compliance farms	126	54	57	3	69	95
Noncompliance farms	251	180	36	100	87	64
Total	143	72	55	16	72	81
All farms	386	288	59	21	87	93
Washington-Palouse	172	129	105	65	48	66

Table 73. - Production, returns, and expenses on wheatland, typical wheat farms, west-central Kansas, 1953 and 1955

Item	Unit	320-acre general farm, hard land, Rush County			480-acre general farm, sandy land, Pratt County		
		1953	1955		1953	1955	
			Actual	Without program		Actual	Without program
Land operated	Acre	320	320	320	480	480	480
Cropland	do.	248	248	248	378	378	378
Wheat allotment	do.	---	128	---	---	159	---
Crops:							
Wheat on fallow 1/	do.	8	30	12	13	24	30
Wheat on stubble 1/	do.	195	96	192	211	134	220
Grain sorghum 1/	do.	10	28	0	27	41	22
Other grains 1/	do.	0	3	0	0	21	0
Forage crops 1/	do.	6	5	0	5	9	0
Fallow or idle	do.	17	55	14	55	93	76
Less double cropping	do.	(20)	(1)	2	(31)	(42)	(68)
Wheatland 2/	do.	216	216	216	280	280	280
Yield per acre: 1/							
Wheat on fallow	Bushel	13.8	24.9	24.9	14.2	17.8	17.8
Wheat on stubble	do.	5.5	9.7	9.7	9.9	4.5	4.5
Grain sorghum	do.	---	11.2	---	16.6	9.7	9.7
Production:							
Wheat	do.	1,182	1,678	2,161	2,273	1,030	1,524
Feed grains	do.	166	379	0	448	441	213
Prices:							
Wheat price, per bushel	Dollar	2.11	2.05	2.05	2.11	2.05	2.05
Grain sorghum price, per bushel	do.	1.21	1.05	1.05	1.21	1.05	1.05
Returns:							
Gross returns	do.	2,787	3,823	4,430	5,532	3,039	3,354
Direct expenses 3/	do.	1,941	1,431	1,817	2,048	1,702	2,034
(Operator and family labor) 4/	do.	(551)	(504)	(558)	(687)	(718)	(814)
Net above direct expenses	do.	846	2,392	2,613	3,484	1,337	1,320
Results with normal yields:							
Wheat on fallow, yield 1/	Bushel	16.5	16.5	16.5	18.7	18.7	18.7
Wheat on stubble, yield 1/	do.	11.4	11.4	11.4	13.1	13.1	13.1
Grain sorghum, yield 1/	do.	---	16.4	---	15.9	15.9	15.9
Wheat, production	do.	2,355	1,589	2,387	3,007	2,204	3,443
Feed grains, production	do.	164	559	82	191	842	95
Gross returns	Dollar	5,128	3,827	4,979	6,550	5,687	7,161
Direct expenses 3/	do.	1,896	1,415	1,812	2,047	1,791	2,108
(Operator and family labor) 4/	do.	(551)	(513)	(577)	(687)	(697)	(757)
Net above direct expenses	do.	3,232	2,414	3,167	4,503	3,896	5,053

See footnotes at end of table.

- Continued

Table 73. - Production, returns, and expenses on wheatland, typical wheat farms, west-central Kansas, 1953 and 1955 - Continued

Item	Unit	480-acre grain farm, Cheyenne County			960-acre general farm, Cheyenne County		
		1953	1955		1953	1955	
			Actual	Without program		Actual	Without program
Land operated	Acre	480	480	480	960	960	960
Cropland	do.	359	359	359	478	478	478
Wheat allotment	do.	---	117	---	---	109	---
Crops:							
Wheat on fallow 1/	do.	146	119	170	120	113	160
Grain sorghum 1/	do.	9	91	25	2	71	26
Other grain 1/	do.	49	15	13	29	3	---
Forage crops 1/	do.	17	7	---	40	---	6
Fallow or idle	do.	167	147	187	166	166	164
Less double cropped	do.	(48)	(39)	(55)	(37)	(33)	(36)
Wheatland 2/	do.	340	340	340	320	320	320
Yield per acre: 1/							
Wheat on fallow	Bushel	20.0	12.0	12.0	20.0	12.0	12.0
Grain sorghum	do.	6.6	4.5	4.5	6.6	4.5	4.5
Production:							
Wheat	do.	2,920	1,428	2,040	2,400	1,356	1,920
Feed grains	do.	456	455	151	384	365	117
Prices:							
Wheat	Dollar	2.11	2.05	2.05	2.11	2.05	2.05
Grain sorghum	do.	1.21	1.05	1.05	1.21	1.05	1.05
Returns:							
Gross returns	do.	7,135	3,442	4,350	6,362	3,150	4,078
Direct expenses 3/	do.	1,883	1,598	1,505	1,577	1,296	1,473
(Operator and family labor) 4/	do.	(840)	(819)	(699)	(334)	(573)	(632)
Net above direct expenses	do.	5,252	1,844	2,845	4,785	1,854	2,605
Results with normal yields:							
Wheat on fallow, yield 1/	Bushel	16.8	16.8	16.8	16.8	16.8	16.8
Grain sorghum, yield 1/	do.	13.7	13.7	13.7	13.7	13.7	13.7
Wheat, production	do.	2,453	2,000	2,856	2,016	1,898	2,688
Feed grains, production	do.	520	1,324	403	546	903	329
Gross returns	Dollar	6,103	5,655	6,324	5,214	4,815	5,917
Direct expenses 3/	do.	1,889	1,680	1,650	1,579	1,331	1,487
(Operator and family labor) 4/	do.	(840)	(774)	(668)	(334)	(547)	(618)
Net above direct expenses	do.	4,214	3,975	4,674	3,635	3,484	4,430

1/ Planted acres.

2/ Represents land in wheat and associated fallow in 1953. Because of the dry fall in 1952, some wheatland not seeded and other crops substituted following spring (1953).

3/ Includes all labor, but excludes land charge, general overhead, depreciation, and management.

4/ Included with direct expenses.

Table 74. - Organization, yields, prices received, income, and costs, commercial family-operated wheat-small grain-livestock farm, Northern Plains, 1952-55 1/

Item	Unit	Actual production and calendar-year prices			Actual production and seasonal prices for crops		"Normal" crop production and 1955 prices and cost rates	
		1953 (1)	1954 (2)	1955 (3)	1953 (4)	1955 (5)	1953 (6)	1955 (7)
Land operated	Acre	671.0	680.0	690.0	---	---	---	---
Cropland	do.	505.0	502.6	509.3	---	---	---	---
Crops:								
Hard wheat	do.	156.4	123.9	132.8	---	---	---	---
Durum wheat	do.	68.7	58.1	35.2	---	---	---	---
Oats	do.	39.1	45.5	39.7	---	---	---	---
Barley	do.	49.1	76.8	90.6	---	---	---	---
Corn	do.	14.3	14.7	15.5	---	---	---	---
Rye	do.	---	---	12.2	---	---	---	---
Flax	do.	50.3	62.7	65.7	---	---	---	---
All tame hay	do.	15.0	17.8	18.8	---	---	---	---
Fallow and idle	do.	112.1	103.1	98.8	---	---	---	---
Yield per acre:								
Hard wheat	Bushel	9.3	8.3	15.6	---	---	12.2	12.2
Durum wheat	do.	6.7	2.8	13.8	---	---	11.2	11.2
Oats	do.	30.4	17.6	29.4	---	---	25.7	25.7
Barley	do.	22.6	19.8	24.2	---	---	20.0	20.0
Flax	do.	7.6	6.9	8.3	---	---	7.2	7.2
Livestock on farm, January 1:								
Cows milked	Number	6.1	6.2	6.2	---	---	---	---
Other cows	do.	5.3	5.9	6.5	---	---	---	---
All other cattle	do.	9.9	11.3	11.2	---	---	---	---
Hogs raised during year	do.	9	12	13	---	---	---	---
Prices received:								
Wheat, per bushel	Dollar	2.18	2.23	2.23	2.23	2/ 2.16	2/ 2.16	2/ 2.16
Barley, per bushel	do.	1.16	1.01	.91	1.08	.88	.88	.88
Flax, per bushel	do.	3.71	3.08	2.67	3.61	2.75	2.75	2.75
Cattle, per cwt.	do.	14.30	14.40	13.65	13.20	12.50	12.50	12.50
Perquisites	do.	592	563	593	592	555	547	593
Gross income	do.	9,370	7,460	11,397	9,214	11,373	10,564	9,544
Operating expenses	do.	5,295	5,197	5,597	5,295	5,598	5,598	5,598
Net income	do.	4,075	2,263	5,800	3,919	5,775	4,966	3,946

1/ Income and expenses in columns 1, 2, and 3 are based on actual production, prices received, and costs in the respective years. Prices received are averages for the calendar year. In columns 4 and 5, incomes are adjusted to what they would have been if crops produced had been sold at the season's average prices for those crops. All other prices and costs are the same as in columns 1 and 3, respectively. Columns 6 and 7 reflect incomes with the same organization as shown in columns 1 and 3, production with normal crop yields in 1953 and 1955, and prices received equal to the season average price for crops in 1955, and 1955 calendar-year prices for livestock and livestock products. Costs are based on production with normal yields and 1955 cost rates.

2/ Season average price. Support price on 1955 crop is $2.11.

Table 75. - Production, returns, and expenses on wheatland, typical wheat farms, north-central North Dakota, 1953 and 1955

Item	Unit	Hard spring wheat farms			Durum farms		
			1955			1955	
		1953	Actual	Without program	1953	Actual	Without program
Land operated	Acre	650	650	650	600	600	600
Cropland	do.	482	482	482	455	455	455
Wheat allotment	do.	---	141	---	---	142	---
Crops:							
Hard spring wheat 1/	do.	176	122	172	29	82	109
Durum 1/	do.	19	13	12	160	64	62
Barley 1/	do.	---	36	14	5	33	20
Flax 1/	do.	---	24	5	---	25	14
Forage crops 1/	do.	---	8	5	---	7	6
Fallow and idle	do.	65	57	52	61	44	44
"Wheatland" 2/	do.	260	260	260	255	255	255
Yield per acre:							
Hard spring wheat	Bushel	10.1	15.7	15.7	10.1	15.7	15.7
Durum	do.	6.4	13.1	13.1	6.4	13.1	13.1
Barley	do.	---	25.0	25.0	23.5	25.0	25.0
Flax	do.	---	8.5	8.5	---	8.5	8.5
Production:							
Hard spring wheat	do.	1,778	1,915	2,700	293	1,287	1,711
Durum	do.	122	170	157	1,024	838	812
Barley	do.	---	900	350	118	825	400
Flax	do.	---	204	42	---	212	119
Prices:							
Hard spring wheat, per bushel	Dollar	2.23	2.16	2.16	2.23	2.16	2.16
Durum, per bushel	do.	2.85	2.60	2.60	2.85	2.60	2.60
Barley, per bushel	do.	---	.88	.88	1.00	.88	.88
Flax, per bushel	do.	---	2.75	2.75	---	2.75	2.75
Returns:							
Gross returns	do.	4,082	5,967	6,602	3,651	6,329	6,583
Direct expenses 3/	do.	1,868	1,924	1,946	2,242	2,124	2,112
(Operator and family labor) 4/	do.	(553)	(597)	(587)	(545)	(601)	(594)
Net above direct expenses	do.	2,214	4,043	4,616	1,409	4,205	4,471
Results with normal yields and 1955 prices:							
Hard wheat, yield 1/	Bushel	12.2	12.2	12.2	12.2	12.2	12.2
Durum, yield 1/	do.	11.2	11.2	11.2	11.2	11.2	11.2
Flax, yield 1/	do.	7.2	7.2	7.2	7.2	7.2	7.2
All wheat, production	do.	2,360	1,634	2,232	2,146	1,717	2,024
Feed grains, production	do.	213	925	360	128	848	514
Flax, production	do.	---	173	36	---	180	101
Gross returns	Dollar	5,063	4,765	5,199	5,515	5,343	5,439
Direct expenses 3/	do.	1,868	1,924	1,946	2,242	2,124	2,112
(Operator and family labor) 4/	do.	(553)	(597)	(587)	(545)	(601)	(594)
Net above direct expenses	do.	3,195	2,841	3,253	3,273	3,219	3,327

1/ Planted acres.
2/ Represents land in wheat and associated fallow in 1953.
3/ Includes all labor, but excludes land charge, general overhead, depreciation, and management.
4/ Included with direct expenses.

Table 76. - Production, returns, and expenses on wheatland, typical wheat farms, north-central Montana, 1953 and 1955

Item	Unit	Small wheat farm			Medium wheat farm		
		1953	1955		1953	1955	
			Actual	Without program		Actual	Without program
Land operated	Acre	520	520	520	1,080	1,080	1,080
Cropland	do.	356	356	356	923	923	923
Wheat allotment	do.	---	122	---	---	311	---
Crops:							
Winter wheat 1/	do.	172	121	175	465	310	450
Barley 1/	do.	0	54	0	0	113	0
Fallow	do.	172	169	169	419	461	434
"Wheatland" 2/	do.	344	344	344	884	884	884
Yield per acre:							
Wheat 1/	Bushel	24.6	30.0	30.0	28.0	34.1	34.1
Barley 1/	do.	---	33.3	33.3	27.7	33.8	33.8
Production:							
Wheat	do.	4,231	3,630	5,250	13,020	10,571	15,345
Feed grain	do.	0	1,798	0	0	3,819	0
Prices:							
Wheat	Dollar	1.90	1.85	1.85	1.90	1.85	1.85
Barley	do.	---	.80	.80	---	.80	.80
Returns:							
Gross returns	do.	8,039	8,154	9,712	24,738	22,611	28,388
Direct expenses 3/	do.	1,763	1,821	1,836	3,436	3,262	3,276
(Operator and family labor) 4/	do.	(190)	(205)	(193)	(660)	(709)	(639)
Net above direct expenses	do.	6,276	6,333	7,876	21,302	19,349	25,763
Results with normal yields and 1955 prices:							
Wheat, yield per acre 1/	Bushel	18.5	18.9	18.5	18.5	18.9	18.5
Barley, yield per acre 1/	do.	---	26.4	---	---	26.4	---
Wheat, production	do.	3,182	2,287	3,238	8,602	5,859	8,325
Feed grains, production	do.	0	1,426	0	0	2,983	0
Gross returns	Dollar	5,887	5,372	5,990	15,914	13,225	15,401
Direct expenses 3/	do.	1,720	1,744	1,750	3,204	2,984	2,938
(Operator and family labor) 4/	do.	(190)	(205)	(193)	(660)	(709)	(639)
Net above direct expenses	do.	4,167	3,628	4,240	12,710	10,241	12,463

1/ Planted acres.

2/ Wheatland represents land in wheat and associated fallow in 1953.

3/ Includes all labor, but excludes land charge, general overhead, depreciation, and management.

4/ Included with direct expenses.

Table 77. - Organization, yields, prices received, income, and costs, commercial family-operated wheat-pea farms, Washington-Palouse area, 1953-55 1/

Item	Unit	Actual production and calendar year prices			Actual production and seasonal prices for crops		"Normal" crop production and 1955 prices and cost rates	
		1953 (1)	1954 (2)	1955 (3)	1953 (4)	1955 (5)	1953 (6)	1955 (7)
Land operated	Acre	512.0	512.0	536.4	---	---	---	---
Cropland	do.	474.0	474.0	496.7	---	---	---	---
Crops:								
All wheat 2/	do.	246.5	168.9	165.9	---	---	---	---
Oats 2/	do.	9.5	13.9	11.4	---	---	---	---
Barley 2/	do.	28.4	83.5	69.5	---	---	---	---
Peas 2/	do.	59.3	71.8	93.9	---	---	---	---
All hay 3/	do.	18.8	17.4	19.9	---	---	---	---
Other tame grasses	do.	9.5	9.7	12.4	---	---	---	---
Green manure	do.	19.0	19.3	42.2	---	---	---	---
Other fallow	do.	83.0	89.5	81.5	---	---	---	---
Yield per acre: 2/								
Wheat	Bushel	35.0	42.5	37.7	---	---	32.2	32.2
Barley	do.	31.0	43.0	30.7	---	---	33.8	33.8
Peas 4/	Cwt.	12.5	13.0	9.0	---	---	12.7	12.7
Livestock, January 1:								
Cows milked	Number	2.1	2.1	2.0	---	---	---	---
Other cows	do.	4.8	5.1	5.5	---	---	---	---
All other cattle	do.	2.7	2.5	2.4	---	---	---	---
Prices received:								
Wheat	Dollar	2.01	2.00	1.98	2.10	1.95	---	---
Barley	do.	1.15	1.00	.93	1.17	.95	---	---
Peas 4/	do.	4.70	4.38	4.56	4.70	4.56	---	---
Cattle	do.	15.89	16.50	16.50	---	---	---	---
Returns:								
Perquisites	do.	933	918	1,914	933	5/ 914	5/ 914	5/ 914
Other income	do.	22,509	22,920	18,279	23,222	18,463	18,513	18,682
Total gross income	do.	23,442	23,838	19,192	24,155	19,377	19,427	19,700
Operating expenses	do.	8,738	8,938	8,996	8,738	8,605	8,605	8,605
Net income	do.	14,704	14,900	10,196	15,417	10,772	10,822	10,991

1/ Income and expenses in columns 1, 2, and 3 are based on actual production, prices received, and costs in the respective years. Prices received are averages for the calendar year. In columns 4 and 5, incomes are adjusted to what they would have been if crops produced had been sold at the season's average prices for those crops. All other prices and costs are the same as in columns 1 and 3, respectively. Columns 6 and 7 reflect incomes with the same organization as shown in columns 1 and 3, production with normal crop yields in 1953 and 1955, and prices received equal to the season average price for crops in 1955, and 1955 calendar-year prices for livestock and livestock products. Costs are based on production with normal yields and 1955 cost rates.

2/ Planted acres.

3/ Harvested acres.

4/ Uncleaned basis.

5/ Season average price. Support price on 1955 crop is $2.11.

Table 78. - Production, returns, and expenses on wheatland, typical wheat farms, Washington-Palouse area, 1953 and 1955

Item	Unit	Small farm (Wheat-fallow system)			Large farm (Wheat-fallow system)		
		1953	1955		1953	1955	
			Actual	Without program		Actual	Without program
Land operated	Acre	220	220	220	980	980	980
Cropland	do.	200	200	200	960	960	960
Wheat allotment	do.	---	67	---	---	319	---
Crops:							
Wheat after sweetclover 1/	Acre	14	2	2	52	38	41
Wheat after fallow 1/	do.	31	49	52	308	243	279
Wheat after peas 1/	do.	37	11	18	118	38	76
Wheat after grain and other 1/	do.	14	5	22	34	0	39
All wheat 1/	do.	96	67	94	512	319	435
Barley 1/	do.	0	17	0	0	88	0
Oats 1/	do.	0	9	0	0	14	0
Peas 1/	do.	0	1	0	0	14	0
Fallow	do.	45	33	33	219	264	264
Green manure	do.	0	14	14	23	55	55
"Wheatland" 2/	do.	141	141	141	754	754	754
Yield per acre: 1/							
Wheat	Bushel	34.2	41.2	37.4	33.5	42.9	40.3
Barley	do.	---	37.1	---	---	45.6	---
Peas	Cwt.	---	8.1	---	---	8.1	---
Production:							
Wheat	Bushel	3,281	2,758	3,517	17,174	13,682	17,532
Feed grains	do.	0	1,017	0	0	4,612	0
Peas	Cwt.	0	8	0	0	113	0
Prices:							
Wheat	Dollar	2.10	1.95	1.95	2.10	1.95	1.95
Barley	do.	---	.95	---	---	.95	---
Peas	do.	---	4.56	---	---	4.56	---
Returns:							
Gross returns	do.	6,890	6,277	6,858	36,065	31,408	34,187
Direct expenses 3/	do.	1,798	1,684	1,775	8,513	6,938	7,166
(Operator and family labor) 4/	do.	(537)	(527)	(501)	(1,805)	(1,818)	(1,764)
Net above direct expenses	do.	5,092	4,587	5,083	27,552	24,470	27,021
Results with normal yields:							
Wheat, yield per acre	Bushel	41.8	42.6	41.6	42.6	43.4	42.6
Barley, yield per acre	do.	---	44.9	---	---	49.6	---
Peas, yield per acre	Cwt.	---	11.3	---	---	11.3	---
Wheat, production	Bushel	4,010	2,858	3,914	21,810	13,838	18,544
Feed grains, production	do.	0	1,286	0	0	5,177	0
Gross returns 3/	Dollar	8,421	6,699	7,632	45,801	32,395	36,161
Direct expenses 3/	do.	1,798	1,684	1,775	8,513	6,938	7,166
(Operator and family labor) 4/	do.	(856)	(868)	(838)	(1,432)	(1,438)	(1,357)
Net above direct expenses	do.	6,623	5,015	5,857	37,288	25,457	28,995

1/ Planted acres.
2/ Represents land in wheat and associated fallow and green manure in 1953.
3/ Includes all labor, but excludes land charge, general overhead, depreciation, and management.
4/ Included with direct expenses.

Table 79. - Production, returns, and expenses on wheatland, typical wheat farms, Washington-Palouse area, 1953 and 1955

Item	Unit	Medium farm (Conserving system)			Medium farm (Recropping system)		
		1953	1955		1953	1955	
			Actual	Without program		Actual	Without program
Land operated	Acre	520	520	520	520	520	520
Cropland	do.	490	490	490	490	490	490
Wheat allotment	do.	---	138	---	---	200	---
Crops:							
Wheat after sweetclover 1/	do.	66	99	106	34	10	10
Wheat after fallow 1/	do.	84	28	33	113	85	85
Wheat after peas 1/	do.	38	7	10	26	47	46
Wheat after grain and other 1/	do.	13	3	37	186	53	180
Total	do.	201	137	186	359	195	321
Barley 1/	do.	0	26	0	0	30	0
Oats 1/	do.	0	4	0	0	23	0
Peas 1/	do.	0	16	0	0	68	0
Fallow	do.	62	42	39	85	39	34
Green manure	do.	64	102	102	7	96	96
"Wheatland" 2/	do.	327	327	327	451	451	451
Yield per acre: 1/							
Wheat	Bushel	37.8	43.4	40.0	30.6	36.0	31.3
Barley	do.	---	36.6	---	---	27.0	---
Peas	Cwt.	---	8.1	---	---	8.1	---
Production:							
Wheat	Bushel	7,593	5,941	7,439	10,984	7,026	10,043
Feed grains	do.	0	1,124	0	0	1,799	0
Peas	Cwt.	0	130	0	0	510	0
Prices:							
Wheat	Dollar	2.10	1.95	1.95	2.10	1.95	1.95
Barley	do.	---	.95	---	---	.95	---
Peas	do.	---	4.56	---	---	4.56	---
Returns:							
Gross returns	do.	15,945	13,247	14,056	23,066	17,703	19,584
Direct expenses 3/	do.	3,394	3,208	3,272	7,063	6,183	6,320
(Operator and family labor) 4/	do.	(863)	(868)	(838)	(1,432)	(1,438)	(1,357)
Net above direct expenses	do.	12,551	10,039	11,234	16,003	11,520	13,264
Results with normal yields:							
Wheat, yield per acre	Bushel	43.3	45.2	44.1	40.6	41.6	40.0
Barley, yield per acre	do.	---	46.7	---	---	37.0	---
Peas, yield per acre	Cwt.	---	11.3	---	---	11.3	---
Wheat, production	Bushel	8,704	6,198	8,212	14,588	8,109	12,848
Feed grains, production	do.	0	1,460	0	0	2,444	0
Gross returns 3/	Dollar	18,278	14,317	16,013	30,635	21,279	25,054
Direct expenses 3/	do.	3,394	3,217	3,272	7,063	5,983	6,320
(Operator and family labor) 4/	do.	(863)	(868)	(838)	(1,432)	(1,438)	(1,357)
Net above direct expenses	do.	14,884	11,100	12,741	23,572	15,296	18,734

1/ Planted acres.
2/ Represents land in wheat and associated fallow and sweetclover in 1953.
3/ Includes all labor, but excludes land charge, general overhead, depreciation and management.
4/ Included with direct expenses.

Table 80. - Percentage of farmers surveyed who did and who did not comply with their corn acreage allotments in 1955, selected commercial corn areas

Item	Illinois cash-grain area			Iowa livestock area			Pennsylvania dairy-poultry area 1/		
	Total farms	Complied	Did not comply	Total farms	Complied	Did not comply	Total farms	Complied	Did not comply
	Number	Percent	Percent	Number	Percent	Percent	Number	Percent	Percent
All groups	233	44	56	136	42	58	214	49	51
Tenure:									
Owners	51	43	57	69	46	54	144	53	47
Part-owners	36	44	56	14	25	75	38	42	58
Tenants	146	44	56	53	43	57	32	41	59
Type of farm:									
Cash-grain	173	49	51	39	67	33	---	---	---
Livestock	33	24	76	73	20	80	---	---	---
Dairy	25	32	68	6	80	20	90	57	43
Poultry	2	50	50	---	---	---	42	50	50
General	---	---	---	18	73	27	40	30	70
Other	---	---	---	---	---	---	42	50	50
Size of farm in acres:									
Under 180	74	43	57	74	36	64	---	---	---
180-259	44	51	49	38	51	49	---	---	---
260-339	25	28	72	13	33	67	---	---	---
340 and over	30	51	49	11	60	40	---	---	---
Under 30	---	---	---	---	---	---	13	62	38
30-89	---	---	---	---	---	---	95	54	46
90-149	---	---	---	---	---	---	66	48	52
150 and over	---	---	---	---	---	---	40	35	65

1/ In the sample of 274 farmers, 24 had no corn acreage allotment in 1955 and no record on compliance was obtained for 36 farms. Compliance with corn acreage allotments in Pennsylvania was due largely to the fact that the allotments were equal to or larger than the acreage the farmers had planned to plant.

Table 81. - Percentage of farmers surveyed who gave specified reasons for complying with their 1955 corn acreage allotments, selected commercial corn areas

Reason	Illinois cash-grain area (102 farmers)	Iowa livestock area (57 farmers)	Pennsylvania dairy-poultry area (105 farmers)
	Percent	Percent	Percent
Allotment equal to or greater than acreage planned in 1955	13	60	78
To be eligible for price support	65	32	7
To cooperate in making program successful	4	14	---
Landlord wanted to	---	16	---
To aid in soil-improvement program	13	---	---
Compliance not intentional	5	---	---
Other	---	9	15
Total	100	1/ 131	100

1/ Some farmers gave more than one reason.

Table 82. - Percentage of farmers surveyed who gave specified reasons for not complying with their 1955 corn acreage allotments, selected commercial corn areas

Reason	Illinois cash-grain area (131 farmers)	Iowa livestock area (79 farmers)	Pennsylvania dairy-poultry area (109 farmers)
	Percent	Percent	Percent
Needed corn for feed	24	47	42
Did not want to disrupt crop rotation	10	44	45
Needed corn to maintain income	31	30	---
Landlord objected	11	3	---
Wanted to plant corn on land diverted from wheat	---	---	4
Legume seedings failed	6	5	---
Not interested in sealing corn	9	---	6
Insufficient storage	2	---	---
Too much red tape	3	---	---
Other	4	8	3
Total	100	1/ 137	100

1/ Some farmers gave more than one reason.

Table 83. - Percentage of farmers surveyed who did and who did not comply with their wheat acreage allotments in 1955, selected commercial corn areas

Item	Illinois cash-grain area 1/			Pennsylvania dairy-poultry area 2/		
	Total farms	Complied	Did not comply	Total farms	Complied	Did not comply
	Number	Percent	Percent	Number	Percent	Percent
All groups	72	71	29	196	74	26
Tenure:						
Owners	11	82	18	127	74	26
Part-owners	16	62	38	34	76	24
Tenants	45	71	29	35	74	26
Type of farm:						
Cash-grain	58	67	33	---	---	---
Livestock	10	90	10	---	---	---
Dairy	4	75	25	83	70	20
Poultry	---	---	---	35	76	24
General	---	---	---	40	60	40
Other	---	---	---	38	79	21
Size of farm in acres:						
Under 30	---	---	---	8	87	13
30-89	---	---	---	81	62	38
90-149	---	---	---	65	80	20
150 and over	---	---	---	42	88	12
Under 180	22	73	37	---	---	---
180-259	20	75	25	---	---	---
260-339	17	65	35	---	---	---
340 and over	13	69	31	---	---	---

1/ In the sample of 233 farmers, 69 had a wheat allotment and 3 others grew wheat in 1955 without an allotment.

2/ In the sample of 274 farmers, 48 had no wheat acreage allotment in 1955 and no record of compliance was obtained for 30 farms.

Table 84. - Percentage of farmers surveyed who gave specified reasons for complying with their 1955 wheat acreage allotments, selected commercial corn areas

Reason	Illinois cash-grain area		Pennsylvania dairy-poultry area	
	20 farmers who produced 15 acres or less	31 farmers who produced more than 15 acres	106 farmers who produced 15 acres or less	40 farmers who produced more than 15 acres
	Percent	Percent	Percent	Percent
Price incentive	55	97	25	93
Allotment too small to make wheat a profitable crop	40	---	---	---
To cooperate with program	5	3	---	---
Allotment equal to or larger than acreage planned in 1955	---	---	45	4
Other crops are better feed crops	---	---	17	3
Other	---	---	13	---
	100	100	100	100

Table 85. - Land utilization on 38 farms in survey whose operators were cooperating in the Soil Conservation District program, cash-grain area, Illinois, 1955

Item	Unit	1955 corn allotment	
		Complied	Did not comply
All farms	Number	24	14
Acreage in farms	Acre	216	279
Acreage in cropland	do.	200	252
Percentage of farm in cropland	Percent	93	91
Percentage of farm in:			
Capability class I land	do.	67	53
Capability class II land	do.	25	27
Capability class III land	do.	8	9
Capability class IV land	do.	---	3
Capability class VII land	do.	---	8
1955 corn allotment:			
Acreage	Acre	77	95
Percentage of farm	Percent	35.6	34.0
Corn grown in 1955	Acre	76	121
Acreage of 1955 corn on:			
Capability class I land	do.	68	65
Capability class II land	do.	7	30
Capability class III land	do.	1	12
Capability class IV land	do.	---	4
Capability class VII land	do.	---	10
Soil Conservation District planned rotation:			
Corn	Acre	66	88
Soybeans	do.	42	28
Small grains	do.	52	58
Meadow	do.	40	78

Table 86. - Percentage of farmers surveyed who complied with acreage allotments in 1955 who made specified changes from 1953 to 1955 in crop-production practices because of acreage allotments, selected commercial corn areas 1/

Practice	Illinois cash-grain area (102 farmers)	Iowa livestock area (57 farmers)	Pennsylvania dairy-poultry area	
			84 farmers who produced 1-15 acres	40 farmers who produced more than 15 acres
	Percent	Percent	Percent	Percent
Made no change	80	83	98	90
Used more lime	---	3	---	---
Used more fertilizer	20	11	1	8
Changed rotation	---	3	1	2
Total	100	100	100	100

1/ Corn acreage allotments in Illinois and Iowa and wheat acreage allotments in Pennsylvania.

Table 87. - Percentage of farmers surveyed who complied with acreage allotments in 1955 who made specified changes from 1953 to 1955 in livestock production practices because of acreage allotments, selected commercial corn areas 1/

Practice	Illinois cash-grain area (102 farmers)	Iowa livestock area (57 farmers)	Pennsylvania dairy-poultry area	
			84 farmers who produced 1-15 acres	40 farmers who produced more than 15 acres
	Percent	Percent	Percent	Percent
Made no change	84	89	88	75
Fed more oats and barley	---	4	11	25
Fed more forage	---	5	---	---
Increased dairy	2	---	---	---
Decreased dairy	2	---	---	---
Clover for fall pasture, more beef cattle	1	---	---	---
Buying feeders instead of raising	1	---	---	---
Bought chopper	1	---	---	---
Other	2	---	1	---
No report	7	2	---	---
Total	100	100	100	100

1/ Corn acreage allotments in Illinois and Iowa and wheat acreage allotments in Pennsylvania.

Table 88. - Participation by survey farmers in agricultural conservation program in cash-grain area, Illinois, 1954 and 1955

Item	In compliance with 1955 corn allotment		Not in compliance with 1955 corn allotment	
	1954	1955	1954	1955
	Number	Number	Number	Number
Total number of farms	102	102	131	131
Number of farms whose operators participated in program	34	23	21	12
Number of farmers using practice:				
Limestone	19	11	5	5
Erosion control (contours, terraces, diversions, waterways, dams, etc.)	---	3	3	3
Other (drainage, fertilizer, pasture improvement, etc.)	7	11	7	5
	Dollars	Dollars	Dollars	Dollars
Payment earned per farm participating	102	146	100	166

Table 89. - Farm organization, income, and expenses, typical cash-grain farm which was in compliance with corn acreage allotments in 1955, cash-grain area, Illinois

Item	Unit	1953		1955			
				In compliance		Without program 1/	
		Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices
Land operated	Acre	200	200	200	200	200	200
Cropland	do.	175	175	175	175	175	175
Crops:							
Corn	do.	95	95	77	77	89	89
Oats	do.	41	41	39	39	33	33
Soybeans	do.	25	25	44	44	32	32
Wheat	do.	5	5	---	---	---	---
Hay and pasture	do.	9	9	12	12	18	18
Yield per acre:							
Corn	Bushel	61	57	73	62	73	62
Oats	do.	36	36	52	40	52	40
Soybeans	do.	28	25	30	28	30	28
Wheat	do.	29	30	---	---	---	---
Hay	Ton	2	2	2	2	2	2
Livestock:							
Dairy cows	Number	2	2	2	2	2	2
Beef cows	do.	10	10	6	6	6	6
Calves under 1 year	do.	9	9	6	6	6	6
Other cattle	do.	4	4	5	5	5	5
Feeder cattle	do.	3	3	4	4	4	4
Spring pigs	do.	24	24	21	21	21	21
Fall pigs	do.	12	12	16	16	16	16
Hens	do.	107	107	47	47	47	47
Prices: 2/							
Corn, per bu.	Dollar	1.48	1.60	1.60	1.60	1.02	1.02
Oats, per bu.	do.	.71	.55	.55	.55	.55	.55
Soybeans, per bu.	do.	2.79	2.15	2.15	2.15	2.15	2.15
Wheat, per bu.	do.	1.91	1.90	---	---	---	---
Hogs, per cwt.	do.	21.70	15.55	15.55	15.55	15.55	15.55
Beef cattle, per cwt.	do.	19.00	17.67	17.67	17.67	17.67	17.67
Gross income	do.	13,391	11,528	13,257	11,444	10,714	9,360
Total expenses	do.	6,785	7,349	6,978	6,954	6,720	6,835
Net income 3/	do.	6,606	4,179	6,279	4,490	3,994	2,525

1/ Acreages farmers said they would have grown if there had been no acreage allotment program in 1955.

2/ Corn, November 15 for those not in compliance and support price for those in compliance; wheat, oats, and soybeans season average; livestock, calendar year.

3/ Returns to land, other capital and to labor and management of operator and his family. Does not include value of house rent or garden products used in the home.

Table 90. - Farm organization, income, and expenses, typical dairy farm that was in compliance with corn acreage allotments in 1955, cash-grain area, Illinois

Item	Unit	1953		1955			
				In compliance		Without program 1/	
		Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices
Land operated	Acre	160	160	160	160	160	160
Cropland	do.	145	145	145	145	145	145
Crops:							
Corn	do.	72	72	61	61	74	74
Oats	do.	34	34	26	26	25	25
Soybeans	do.	15	15	26	26	24	24
Hay and pasture	do.	22	22	30	30	20	20
Yield per acre:							
Corn	Bushel	63	57	78	62	78	62
Oats	do.	42	36	56	40	56	40
Soybeans	do.	27	25	32	28	32	28
Hay	Ton	2	2	2	2	2	2
Livestock:							
Dairy cows	Number	16	16	19	19	19	19
Calves under 1 year	do.	7	7	8	8	8	8
Other cattle	do.	1	1	1	1	1	1
Spring pigs	do.	15	15	22	22	22	22
Fall pigs	do.	25	25	15	15	15	15
Hens	do.	100	100	81	81	81	81
Prices: 2/							
Corn, per bu.	Dollar	1.48	1.60	1.60	1.60	1.02	1.02
Oats, per bu.	do.	.71	.55	.55	.55	.55	.55
Soybeans, per bu.	do.	2.79	2.15	2.15	2.15	2.15	2.15
Milk, per cwt.	do.	3.78	3.44	3.44	3.44	3.44	3.44
Hogs, per cwt.	do.	21.70	15.55	15.55	15.55	15.55	15.55
Gross income	do.	13,652	12,203	14,882	13,021	13,900	12,437
Total expenses	do.	7,157	8,559	8,555	8,589	8,994	9,124
Net income 3/	do.	6,495	3,644	6,327	4,432	4,906	3,313

1/ Acreages farmers said they would have grown if there had been no acreage allotment program in 1955.

2/ Corn, November 15 for those not in compliance and support price for those in compliance; wheat, oats, and soybeans season average; livestock, calendar year.

3/ Returns to land, and other capital and to labor and management of operator and his family. Does not include value of house rent or garden products used in the home.

Table 91. - Farm organization, income, and expenses, typical cash-grain farm that was in compliance with corn acreage allotment in 1955, east-central Iowa

Item	Unit	1953		1955			
				In compliance		Without program 1/	
		Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices
Land operated	Acre	200	200	200	200	200	200
Cropland	do.	168	168	168	168	168	168
Crops:							
Corn	do.	71	71	59	59	70	70
Oats	do.	37	37	39	39	38	38
Soybeans	do.	14	14	26	26	19	19
Hay	do.	32	32	30	30	28	28
Rotation pasture	do.	14	14	14	14	13	13
Livestock:							
Dairy cows	Number	7	7	6	6	6	6
Beef cows	do.	6	6	5	5	5	5
Hens	do.	65	65	71	71	71	71
Spring pigs	do.	44	44	52	52	52	52
Fall pigs	do.	9	9	19	19	19	19
Yield per acre:							
Corn	Bushel	63	68	72	73	72	73
Oats	do.	48	51	58	51	58	51
Soybeans	do.	31	33	33	34	33	34
Hay	Ton	2.5	2.7	2.5	2.5	2.5	2.5
Prices: 2/							
Corn, per bu.	Dollar	1.30	1.54	1.54	1.54	1.19	1.19
Oats, per bu.	do.	.75	.57	.57	.57	.57	.57
Soybeans, per bu.	do.	2.91	2.10	2.10	2.10	2.10	2.10
Milk, per cwt.	do.	3.85	3.50	3.50	3.50	3.50	3.50
Hogs, per cwt.	do.	22.30	15.46	15.46	15.46	15.46	15.46
Beef cattle, per cwt.	do.	19.38	19.28	19.28	19.28	19.28	19.28
Chickens, per lb.	do.	.188	.153	.153	.153	.153	.153
Eggs, per doz.	do.	.401	.352	.352	.352	.352	.352
Gross income	do.	12,851	12,204	12,548	12,684	12,079	12,201
Total expenses	do.	6,409	6,396	6,706	6,714	6,877	6,826
Net income 3/	do.	6,442	5,808	5,842	5,970	5,202	5,375

1/ Acreages of crops operators of typical cash-grain farms said they would have grown if there had been no acreage allotments in 1955, with numbers of livestock adjusted to production of feed crops.

2/ Corn, November 15; oats and soybeans, season average; livestock, calendar-year prices.

3/ Returns to land, other capital, and labor and management of operator and his family. Does not include value of house rent.

Table 92. - Farm organization, income, and expenses, typical hog-beef fattening farm that was in compliance with corn acreage allotment in 1955, east-central Iowa

Item	Unit	1953		1955			
				In compliance		Without program 1/	
		Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices
Land operated	Acre	200	200	200	200	200	200
Cropland	do.	130	130	130	130	130	130
Crops:							
Corn	do.	63	63	54	54	69	69
Oats	do.	36	36	36	36	28	28
Hay	do.	18	18	27	27	23	23
Rotation pasture	do.	13	13	13	13	10	10
Livestock:							
Feeder cattle	Number	11	11	12	12	15	15
Beef cows	do.	11	11	15	15	13	13
Hens	do.	100	100	100	100	100	100
Spring pigs	do.	115	115	115	115	143	143
Fall pigs	do.	59	59	52	52	77	77
Yield per acre:							
Corn	Bushel	66	67	68	72	68	72
Oats	do.	39	39	46	49	46	49
Hay	Ton	2.7	2.7	2.6	2.7	2.6	2.7
Prices: 2/							
Corn, per bu.	Dollar	1.30	1.54	1.54	1.54	1.19	1.19
Oats, per bu.	do.	.75	.57	.57	.57	.57	.57
Soybeans, per bu.	do.	2.91	2.10	2.10	2.10	2.10	2.10
Milk, per cwt.	do.	3.85	3.50	3.50	3.50	3.50	3.50
Hogs, per cwt.	do.	22.30	15.46	15.46	15.46	15.46	15.46
Beef cattle, per cwt.	do.	19.38	19.28	19.28	19.28	19.28	19.28
Chickens, per lb.	do.	.188	.153	.153	.153	.153	.153
Eggs, per doz.	do.	.401	.352	.352	.352	.352	.352
Gross income	do.	16,107	13,064	12,964	13,314	15,220	15,583
Total expenses	do.	8,497	8,712	8,877	8,905	9,754	9,785
Net income 3/	do.	7,610	4,352	4,087	4,409	5,466	5,798

1/ Acreages of crops operators of typical cash-grain farms said they would have grown if there had been no acreage allotments in 1955, with numbers of livestock adjusted to production of feed crops.

2/ Corn, November 15; oats and soybeans, season average; livestock, calendar-year prices.

3/ Returns to land, other capital, and labor and management of operator and his family. Does not include value of house rent.

Table 93. - Farm organization, income, and expenses, typical dairy farm that was in compliance with corn and wheat acreage allotments in 1955, southeastern Pennsylvania

Item	Unit	1953		1955			
				In compliance		Without program 1/	
		Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices
Land operated	Acre	132	132	132	132	132	132
Cropland	do.	127	127	127	127	127	127
Crops:							
Corn							
Grain	do.	34	34	32	32	34	34
Silage	do.	8	8	6	6	6	6
Wheat	do.	24	24	18	18	24	24
Oats	do.	6	6	---	---	---	---
Barley	do.	---	---	8	8	6	6
Alfalfa hay	do.	43	43	51	51	45	45
Rotation pasture	do.	12	12	12	12	12	12
Livestock:							
Dairy cows	Number	22	22	22	22	22	22
Feeder calves	do.	10	10	10	10	10	10
Hogs sold	do.	20	20	20	20	20	20
Hens	do.	300	300	300	300	300	300
Yield per acre:							
Corn	do.	45	52	42	52	42	52
Wheat	do.	24	26	29	26	29	26
Barley	do.	40	42	46	42	46	42
Oats	do.	42	41	47	41	47	41
Hay	Ton	1.6	1.7	2.0	1.7	2.0	1.7
Prices: 2/							
Corn, per bu.	Dollar	1.54	1.29	1.29	1.29	1.29	1.29
Wheat, per bu.	do.	1.83	1.85	1.85	1.85	1.85	1.85
Oats, per bu.	do.	.78	.65	.65	.65	.65	.65
Barley, per bu.	do.	1.05	.90	.90	.90	.90	.90
Milk, per cwt.	do.	4.89	4.40	4.40	4.40	4.40	4.40
Hogs, per cwt.	do.	22.00	17.00	17.00	17.00	17.00	17.00
Beef cattle, per cwt.	do.	20.00	16.00	16.00	16.00	16.00	16.00
Chickens, per lb.	do.	.26	.23	.23	.23	.23	.23
Eggs, per doz.	do.	.55	.46	.46	.46	.46	.46
Gross income	do.	16,160	14,614	14,061	14,471	14,384	14,791
Total expenses	do.	12,255	12,040	12,091	12,091	12,104	12,104
Net income 3/	do.	3,905	2,574	1,970	2,380	2,280	2,687

1/ Acreages of crops operators of typical dairy farms said they would have grown if there had been no acreage allotments.

2/ Corn, November 15; wheat, oats and barley, season average; livestock, calendar-year prices weighted by distribution of marketings.

3/ Returns to land, other capital, and labor and management of operator and his family. Does not include value of house rent or garden products used in the home.

Table 94. - Farm organization, income, and expenses, typical poultry farm that was in compliance with corn and wheat acreage allotments in 1955, southeastern Pennsylvania

Item	Unit	1953		1955			
				In compliance		Without program 1/	
		Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices	Current crop yields and prices	Normal crop yields 1955 prices
Land operated	Acre	80	80	80	80	80	80
Cropland	do.	68	68	68	68	68	68
Crops:							
Corn							
Grain	do.	30	30	28	28	30	30
Silage	do.	---	---	---	---	---	---
Wheat	do.	30	30	19	19	25	25
Oats	do.	---	---	3	3	---	---
Barley	do.	2	2	5	5	---	---
Alfalfa hay	do.	6	6	13	13	13	13
Livestock:							
Hogs sold	Number	10	10	10	10	10	10
Hens	do.	500	500	500	500	500	500
Broilers	do.	1,000	1,000	1,000	1,000	1,000	1,000
Yield per acre:							
Corn	Bushel	45	52	42	52	42	52
Wheat	do.	24	26	29	26	29	26
Barley	do.	40	42	46	42	---	---
Oats	do.	---	---	47	41	---	---
Hay	Ton	1.6	1.7	2.0	1.7	2.0	1.7
Prices: 2/							
Corn, per bu.	Dollar	1.54	1.29	1.29	1.29	1.29	1.29
Wheat, per bu.	do.	1.83	1.85	1.85	1.85	1.85	1.85
Oats, per bu.	do.	.78	.65	.65	.65	.65	.65
Barley, per bu.	do.	1.05	.90	.90	.90	.90	.90
Alfalfa hay, per ton	do.	33.00	33.00	33.00	33.00	33.00	33.00
Hogs, per cwt.	do.	22.00	17.00	17.00	17.00	17.00	17.00
Chickens, per lb.	do.	.26	.23	.23	.23	.23	.23
Broilers, per lb.	do.	.27	.25	.25	.25	.25	.25
Eggs, per doz.	do.	.55	.46	.46	.46	.46	.46
Gross income	Dollar	7,730	6,830	6,320	6,490	6,356	6,557
Total expenses	do.	4,120	3,910	3,910	3,910	3,910	3,910
Net income 3/	do.	3,610	2,920	2,410	2,580	2,446	2,647

1/ Acreages of crops operators of typical poultry farms said they would have grown if there had been no acreage allotments.

2/ Corn, November 15; wheat, oats and barley, season average; livestock, calendar-year prices weighted by distribution of marketings.

3/ Returns to land and other capital, and to labor and management of operator and his family.

Table 95. - Farm organization, income and costs, commercial family-operated cash-grain farms, east-central Illinois, with specified yields and prices, 1953-55

Item	Unit	Actual production and calendar-year prices			Actual production and seasonal prices for crops 1/			"Normal" yields and 1955 prices and cost rates 1/		
		1953	1954	1955	1953	1955 compliance	1955 no program	1953	1955 compliance	1955 no program
Land operated	Acre	226	228	230	226	230	230	226	230	230
Cropland	do.	187	191	194	187	194	194	187	194	194
Crops:										
Corn	do.	87.7	82.8	85	87.7	76	94	87.7	76	94
Oats	do.	34.4	36.7	36	34.4	36	36	34.4	36	36
Soybeans	do.	38.6	46.2	48	38.6	57	38	38.6	57	38
Wheat	do.	10.7	9.6	10	10.7	10	10	10.7	10	10
Hay	do.	15.6	15.7	15	15.6	15	15	15.6	15	15
Yield per acre:										
Corn	Bushel	59.8	61.7	65	59.8	65	65	57	62	62
Oats	do.	36.5	43.3	62	36.5	62	62	36	40	40
Soybeans	do.	25.5	28.8	26	25.5	26	26	25	28	28
Wheat	do.	35.0	35.7	37	35.0	37	37	30	34	34
Hay	Ton	1.7	1.6	1.6	1.7	1.6	1.6	2.0	2.0	2.0
Livestock:										
Milk cows	Number	4	4	4	4	4	4	4	4	4
Other cattle	do.	12	12	12	12	12	12	12	12	12
Pigs raised	do.	27	31	34	27	34	34	27	34	34
Prices: 1/										
Corn, per bu.	Dollar	1.42	1.45	1.26	1.48	1.60	1.02	1.02	1.60	1.02
Oats, per bu.	do.	.71	.69	.59	.71	.55	.55	.55	.55	.55
Soybeans, per bu.	do.	2.54	2.82	2.09	2.79	2.15	2.15	2.15	2.15	2.15
Wheat, per bu.	do.	1.74	1.89	1.83	1.91	2.06	1.90	1.90	1.90	1.90
Hogs, per cwt.	do.	21.70	21.60	15.55	21.70	15.55	15.55	15.55	15.55	15.55
Beef cattle, per cwt.	do.	19.00	18.60	17.67	19.00	17.67	17.67	17.67	17.67	17.67
Value of perquisites	Dollar	740	717	691	740	691	691	697	691	691
Other income	do.	13,120	14,228	12,831	13,866	13,968	11,814	9,977	13,356	11,197
Gross farm income	do.	13,860	14,945	13,522	14,306	14,659	12,505	10,674	14,047	11,888
Total costs	do.	6,389	6,570	6,783	6,389	6,741	6,825	6,501	6,741	6,825
Net income 2/	do.	7,471	8,375	6,739	8,217	7,918	5,680	4,173	7,306	5,063

1/ Corn at loan rate in 1955 for farms in compliance and at November 15 level with no program, other crops at season average and livestock at calendar-year levels.

2/ Returns to land, other capital, and labor and management of operator and his family.

Table 96. - Farm organization, income and expenses, medium-sized rice farm, Louisiana, with specified yields and prices, 1954 and 1955

Item	Unit	Actual yields and prices			Normal yields and 1955 prices		
		1954	1955	Percentage 1955 is of 1954	1954	1955	Percentage 1955 is of 1954
Land in farm	Acre	480	480	100	480	480	100
Cropland	do.	400	400	100	400	400	100
Crops:							
Rice	do.	205	165	80	205	165	80
Idle (native pasture)	do.	195	235	120	195	235	120
Livestock:							
Beef cows	Number	44	45	102	44	45	102
Rice yields	Cwt.	23	25	109	21.8	23.1	106
Rice production	do.	4,715	4,125	88	4,469	3,812	85
Prices:							
Rice, per cwt.	Dollar	4.30	4.70	109	4.70	4.70	100
Beef calves, per cwt.	do.	15.20	15.50	102	15.50	15.50	100
Other cattle, per cwt.	do.	10.00	10.20	102	10.20	10.20	100
Income:							
Rice	do.	20,275	19,388	96	21,004	17,916	85
Other	do.	1,115	1,355	121	1,138	1,355	119
Total gross farm income	do.	21,390	20,743	97	22,142	19,271	87
Expenses	do.	13,578	12,197	90	13,631	11,716	86
Net income 1/	do.	7,812	8,546	109	8,511	7,555	89

1/ Represents returns to land and other capital, and to labor and management of the operator. Does not include perquisites.

Table 97. - Farm organization, income, and expenses for selected rice farming systems, Sacramento Valley, California, 1954 and 1955, with specified yields and prices

Item	Unit	Rice farming systems					
		Rice-fallow		Rice-barley-fallow		Rice-beans-fallow	
		1954	1955	1954	1955	1954	1955
Land operated	Acre	620	620	620	620	620	620
Cropland	do.	600	600	600	600	600	600
Crops:							
Rice	do.	450	382	450	382	450	382
Fallow	do.	150	218	50	68	50	68
Barley	do.	---	---	100	150	---	---
Dry beans	do.	---	---	---	---	100	150
Yield per acre:							
Rice	Pound	2,400	3,400	2,400	3,400	2,400	3,400
Barley	Bushel	---	---	35	35	---	---
Dry beans	Cwt.	---	---	---	---	13	13
Production:							
Rice	Cwt.	10,800	12,988	10,800	12,988	10,800	12,988
Barley	Bushel	---	---	3,500	5,250	---	---
Dry beans	Cwt.	---	---	---	---	1,300	1,950
Prices:							
Rice	Cwt.	4.61	4.60	4.61	4.60	4.61	4.60
Barley	Bushel	---	---	1.16	1.04	---	---
Dry beans	Cwt.	---	---	---	---	8.90	8.20
Returns with actual yields and prices:							
Gross income							
Rice	Dollar	49,788	59,745	49,788	59,745	49,788	59,745
Other	do.	---	---	4,060	5,460	11,570	15,990
Total	do.	49,788	59,745	53,848	65,205	61,358	75,735
Expenses	do.	33,019	31,069	33,557	31,981	37,465	36,674
Net income 1/	do.	15,769	28,676	20,291	33,224	23,893	39,061
Returns with normal yields and 1955 prices:							
Gross income							
Rice	do.	74,520	63,259	74,520	63,259	74,520	63,259
Other	do.	---	---	3,640	5,460	10,660	15,990
Total	do.	74,520	63,259	78,160	68,719	85,180	79,249
Expenses	do.	34,777	31,320	35,315	32,232	39,223	36,925
Net income 1/	do.	39,743	31,939	42,845	36,487	45,957	42,324

1/ Represents returns to land and other capital, and to operator's labor and management.

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