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The CONSERVATION RESERVE PROGRAM of the SOIL BANK,

CURRE T SEPT L RECORD

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Effects in Selected Areas, 1957

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CONTENTS

	Page
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HIGHLIGHTS	1
BACKGROUND OF THE STUDY	3
THE CONSERVATION RESERVE PROGRAM	5
Provisions of the program	5
Participation in the program Overall effects on crop production	. 6 8
NORTHERN AND CENTRAL MAINE	9
Extent of participation	9
Participants compared with nonparticipants	10
Factors that affect participation	10 12
Crop production reduced slightly	13
CENTRAL WISCONSIN	13
Extent of participation	13
Participants compared with nonparticipants	14
Factors that affect participation	15
Effects small thus far	16
Farmers plan to participate to greater extent	17
UPPER COASTAL PLAIN OF SOUTH CAROLINA	17
Extent of participation	17
Participants compared with nonparticipants	18
Factors that affect participation	19 21
Crop production reduced	22
Future participation to increase	
PANHANDLE WHEAT AREA OF TEXAS	22
Extent of participation	23
Participants compared with nonparticipants	23
Factors that affect participation	24 25
Acreage of grain sorghum reduced by participants	26
Participation to increase on dryland farms	
SOUTH DAKOTA AREAS	27
Extent of participation	27
Participants compared with nonparticipants	28
Factors that affect participation	29
Effects on production small	29 30
Participation may increase slightly	30
COLUMBIA BASIN WHEAT AREA OF OREGON	30
Extent of participation	30
Participants compared with nonparticipants	31
Factors that affect participation	32
Little influence on production thus far	33
Participation may continue low	34

THE CONSERVATION RESERVE PROGRAM OF THE SOIL BANK EFFECTS IN SELECTED AREAS, 1957

Prepared in Farm Economics Research Division//

HIGHLIGHTS

Approximately 83,000 farm operators put a total of 6.5 million acres of cropland in the conservation reserve part of the Soil Bank Program in 1957. They made agreements to reduce the acreages of cropland harvested on their farms by the acreages put in the conservation reserve for 3, 5, or 10 years and to establish permanent cover where it is needed to protect and conserve the land. Farm operators receive annual rental payments that average about \$9 per acre and practice payments that cover up to 80 percent of the cost of establishing protective cover on cropland placed in the program. Most contracts are for 5 years. However, 10-year contracts call for planting of trees on nearly 500,000 acres.

Farm surveys were made in selected areas of six States during the summer of 1957 to learn what effects the Conservation Reserve Program is having on farming. Altogether, more than 1,000 farm operators were interviewed. Half of them were participating in the Conservation Reserve Program. The study areas are representative of widely differing types of farming situations.

As shown in the tabulation below, the extent of participation in the Conservation Reserve Program differed widely among the study areas, as did the size of the farms whose operators participated:

	Percent croplar		Acres per farm ²			
Study area	Conser-		Farmers partici- pating with		Farmers	
	vation reserve	Acreage reserve	Part of eligible land	All eligible land	not partici- pating	
Aroostook County, Maine	Percent 10.2 2.0 2.5 4.7 9.0 4.3 0.9 0.6	Percent 0.6 5.3 11.0 11.1 6.2 4.0	Acres 296 234 194 787 920 1,214 204 2,608	Acres 121 141 163	Acres 245 217 190 155 616 1,070 222 1,794	

¹ Percentage of total cropland as reported in 1954 Census of Agriculture in Conservation and Acreage Reserve Programs in 1957. The Acreage Reserve part of the Soil Bank Program was not in effect in Maine as this State is not part of the commercial wheat or corn area under acreage allotment programs.

² Data are for survey farms selected at random in each area. In some areas, only a few farmers put all eligible land in the soil bank and in these instances the data shown are for all farms in the sample.

In the wheat and cotton areas, farmers put larger acreages in the acreage reserve than in the conservation reserve because rental payments per acre for diverting cropland from allotment crops average much higher under the acreage reserve than under the Conservation Reserve Program. About 40 percent of the participants in the study areas in Maine, and 30 percent in Wisconsin put all eligible land on their farms in the Soil Bank Program. But in the other areas, most participants put only a part of their eligible land in the program. In most areas, farms with part of their eligible lands in the conservation reserve average larger and those with all of their eligible land in the soil bank average smaller than do other farms in the survey samples.

In general, the Conservation Reserve Program is helping many farmers make the adjustments in their farming operations that they want to make and is speeding up adjustments that have been in progress. The program is especially attractive to farm owners who want an assured income from their cropland and who want to conserve and build up their soil resources over a period of several years in the future. Annual rental payments under the program usually represent a reasonable return on investment in land. However, they do not compensate farm operators for reductions in earnings of labor, machinery, and other resources which may take place when land is put in the program.

Participation is influenced by many things in addition to payment rates. Some older farmers are using the program to help retire, and still get an income from, their land. Others have found it advantageous to put land in the program and work off the farm full or part time. Some operators of large farms are utilizing the program to reduce both the size of their farming operations and their need for hired labor. In most study areas, as shown in the tabulation below, the participants are older than nonparticipants, more of them have nonfarm jobs, and more of them live off their farms:

	Age of operator1			Real estate value per acre1			
Study area	Farmers pating	partici- with	Farmers	Farmers partici- pating with		Farmers	
Duddy area	Part of eligible land	All eligible land	not partici- pating	Part of eligible land	All eligible land	not partici- pating	
	Years	Years	Years	Dollars	Dollars	Dollars	
Aroostook County, Maine Franklin and Kennebec Coun-	47	58	51	71	63	83	
ties, Maine	53	57	53	52	69	84	
Central Wisconsin dairy area- South Carolina, upper Coastal	57	60	52	60	61	59	
Plain Texas Panhandle, dryland	51		51	82		97	
farms	51		49	68		78	
North Central South Dakota Southeastern South Dakota	48 50		44 46	38 192		215	
Columbia Basin wheat area, Oregon	45		50	104		160	

¹ Data are for survey farms selected at random in each area. In some areas, only a few farmers put all eligible land in the soil bank and in these instances the data shown are for all farms in the sample.

Most farmers who are not participating in the Conservation Reserve said that they needed all their cropland to operate efficiently. Many whose farms are small have labor and machinery with which to operate more land; some would like to add land to their farms and thereby increase their incomes. Payment rates would need to be higher before

participation would be profitable for most farm operators who work full time on their farms. However, estimates developed for some large farms show that it would be profitable to put parts of farms in the Conservation Reserve.

As the total acreage put in the Conservation Reserve Program through 1957 is equivalent to only about 1.5 percent of all cropland in the United States, the effects of the program on total crop production are slight. However, farmers said that most land in the program would have been used to grow crops if there had been no program. For example, farmers in the Texas Panhandle area indicated that land put in the program, an acreage equivalent to 9 percent of all cropland in the area, would have been used mainly to grow more grain sorghum. Farmers in Maine would have grown more oats, hay and potatoes, while those in South Carolina would have grown more soybeans, oats, and corn. In the South Dakota, Wisconsin, and Oregon areas, farmers said they would have grown more feed grains and hay. Few farmers applied more fertilizer or otherwise attempted to increase crop yields on remaining cropland when parts of their farms were put in the conservation reserve.

Farmers in most areas said that land put in the Conservation Reserve Program averages only slightly lower in productivity than does other cropland on their farms. Estimates made by the farmers of real estate values per acre, as shown by the tabulations above, indicate that value of cropland averages only slightly lower on farms of participants than on farms of nonparticipants.

Many farmers are using the Conservation Reserve Program to get fields not well adapted for cultivation shifted to conservation uses. Some utilize the program to build up productivity of soils. A part of the land put in the program may come back into crop production at higher yields after 3 or 5 years. However, many farmers are using the program to get permanent pasture established; these farmers plan to use the land for grazing when contracts expire. Permanent shifts in land use can be expected also in areas where much cropland put in conservation reserve is planted to trees. Contracts call for planting of trees on 85 percent of the conservation reserve land in the South Carolina study area, 50 percent in Franklin and Kennebec Counties, Maine, and 12 percent in central Wisconsin.

As the Conservation Reserve Program is relatively new, it is too early yet to decide very precisely what long-term effects the program may have on the agriculture of the study areas. However, participation can be expected to increase as more farm people learn about the advantages and disadvantages of participating. In all areas, farmers said they plan to put additional cropland in the Conservation Reserve Program in 1958.

BACKGROUND OF THE STUDY

The Soil Bank Program was initiated late in 1956 to reduce production of surplus farm commodities and to promote conservation of the Nation's land resources. Participation by farmers in the program has varied among areas. Questions have developed concerning the impacts of the Soil Bank Program, especially the Conservation Reserve part of the program, on agriculture in general and on farmers in different types of farming situations.

The study on which this report is based was made to obtain information that would help in answering the kinds of questions listed here. What are the characteristics of farms and farm operators who are participating in the Conservation Reserve Program? How do farms and farm operators who are participating in the program differ from those who are not participating? What factors cause some farmers to participate and others not to do so? What are the effects of the program on use of land, buildings, machinery, and other farm resources? What are the effects on farm production, tenure arrangements, and land values?

Field surveys were made in selected areas of six States during the summer of 1957. Figure 1 indicates the location of these areas and the main farm enterprise in each area. Extent of participation in the Conservation Reserve differs widely among these areas.

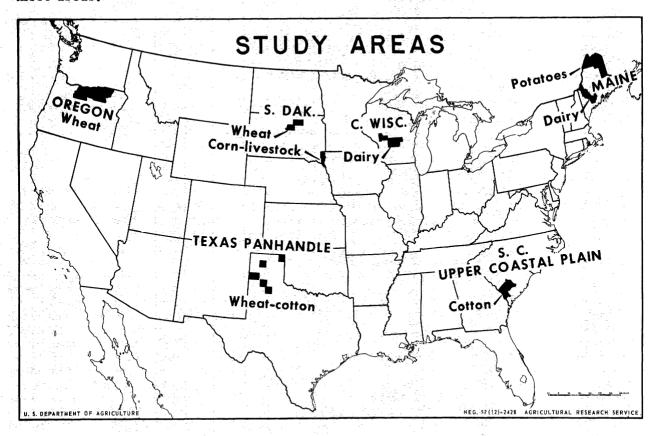


Figure 1

Altogether, more than 1,000 survey schedules were obtained during interviews with farm operators. Approximately half were from farmers who are participating in the Conservation Reserve Program and the rest were from farmers who are not participating. Both groups were selected at random. In this report, farm operators who have put land in the Conservation Reserve Program are called participants, while those who have no land in this program are called nonparticipants.

Information was obtained from each of the farm operators interviewed as to the extent of participation in Soil Bank Programs, the reasons for participating or not participating in the Conservation Reserve Program, the quality of the land put in conservation reserve, and the changes that had been made on the farm since 1955 in land use, crops grown, livestock kept, fertilizer applied, and labor used. Farmers were asked how they would have used land put in conservation reserve if there had been no program. Also, some information was obtained as to how well farmers understood the Conservation Reserve Program, plans for participating in the future, the conservation practices that are being put into effect on land placed in the program, and possible effects on land values, ownership, and tenure arrangements.

The study reported here was concerned primarily with the effects of the Conservation Reserve Program. However, information about participation in the Acreage Reserve Program was obtained from the farm operators interviewed. This was necessary in order to have a complete account of the changes in farming that accompany participation in the Conservation Reserve Program. The findings reported here may be representative for surrounding sections of the areas studied, but it is not known to what extent they may be applicable to other regions. It should be recognized that the Conservation Reserve Program has been in effect only since late in 1956. Therefore, it is too early yet to decide what the long-term effects of the program may be in the areas studied.

THE CONSERVATION RESERVE PROGRAM

Provisions of the Program

The Conservation Reserve and the Acreage Reserve Programs make up the Soil Bank Program. Both are voluntary. Farmers participate in these programs to the extent they think it advantageous to do so. Farmers must comply with all acreage allotments on their farms to qualify for payments under the Soil Bank Program.

Under present legislation, 1960 is the last year for entering into contracts to take land out of production under the Conservation Reserve Program of the soil bank. However, as contracts under the Conservation Reserve Program may run for as long as 10 years, some land will continue to be in the soil bank through 1969, even though the period for writing new contracts is not extended.

The Acreage Reserve Program is designed to reduce production of the allotment crops--wheat, cotton, corn, rice and most types of tobacco. Large stocks of these commodities have been accumulated in recent years because production has been larger than market outlets at the prices that have prevailed. Under this program, farmers who agree to reduce their acreages of wheat, corn, cotton, rice, and tobacco below their acreage allotments for these crops are eligible to receive payments to compensate for loss of income. National average payments per acre on agreements in 1957 were approximately as follows: Wheat \$18, upland cotton \$51, corn \$38, rice \$64, and tobacco \$223. Payment rates vary among States, counties, and individual farms in accordance with differences in yields per acre. Farmers enter into 1-year contracts to reduce their acreages of these crops below their allotments. No crops can be harvested from land put into the acreage reserve. Nor can the land be grazed. Farm operators who participated in the 1957 Acreage Reserve Program were not required to reduce the total acreages of crops grown on their farms by the acreages they placed in the program in order to be eligible for payments. However, this is a requirement under the 1958 Acreage Reserve Program.

The Conservation Reserve Program is a long-term measure designed to help adjust farm production to market demands and to increase the conservation of soil, water, forest, and wildlife resources. It is applicable to all land used to grow crops. Farmers enter into contracts for 3, 5, or 10 years. They agree to keep land placed in the Conservation Reserve Program out of production for the duration of the contract. They also agree to establish a permanent vegetative or woody cover for soil protection if an acceptable vegetative cover does not exist. Where trees are to be planted for cover, contracts are for 10 years.

Farmers who participate in the Conservation Reserve Program are eligible to receive two types of payments on their diverted acreages: (1) Annual per acre rental payments in each year the land is under contract; and (2) cost-sharing payments for carrying out conservation measures in the year in which these measures are carried out. Cost-sharing payments are made for establishing cover crops where none exist, for planting trees, for building dams, pits, or ponds to protect cover crops or store water, and for protecting wildlife through cover, water marsh management, or dam and pond construction on land placed in the program. Cost share payments are made up to 80 percent of the cost of carrying out the conservation practices.

Annual rental payments are made at two rates, the regular rate which in 1957 averaged about \$10 per acre and the nondiversion payment rate, which is 30 percent of the regular rate. Farmers receive payments at the diversion rate for reductions in what

have been designated soil-bank base crops. These are cultivated crops, grains, flaxseed, soybeans, and most other crops, except those harvested for hay or forage. Payments are made at the nondiversion rate for reductions in eligible cropland that is in excess of the soil-bank base for the farm.

Land in the farm not included in the Soil Bank base crops is considered to be in conserving or idle uses. Farmers who participate in the Conservation Reserve Program agree to keep the same total acreages of land in idle and conservation uses as in the past, in addition to the acreages they place in conservation reserve. They agree also to reduce the acreages used in production of all crops by the acreages placed in the program.

Farmers can participate in both the Acreage Reserve and Conservation Reserve Programs. If they do so, they are eligible to receive acreage reserve payments for reductions in wheat, cotton, corn, rice, and tobacco, and conservation reserve payments for reductions in other crops. Land that has been used to grow allotment crops may be placed in conservation reserve, but in general, farmers have found it advantageous to put this land in acreage reserve, for which payments per acre are higher.

Changes have been made in the Conservation Reserve Program for 1958 to encourage more operators to participate with whole farm units and to encourage participation by farmers who have large acreages in hay or summer fallow, as well as to emphasize further forestry and wildlife practices. In 1957, farmers with a soil bank base of 30 acres or less could put any part of this acreage in the program at the regular diversion rate and any part of their remaining cropland at the nondiversion rate. But farmers with a Soil Bank base of more than 30 acres were required to put all of this acreage in the program before they could put in any land at the nondiversion rate. In 1958, however, farmers with a soil-bank base of more than 30 acres will be permitted to put land in the conservation reserve at the nondiversion rate up to the number of acres they put in the program at the regular rate. This will benefit those farmers who devote a large part of their cropland continuously to production of hay.

Also, in 1958, County Agricultural Stabilization Committees are authorized to raise the nondiversion payment rate up to 50 percent of the regular rate when all eligible land on a farm is placed in the conservation reserve, or when any land is placed in the program to be planted to forest trees. County committees are also authorized to raise the nondiversion rate up to 100 percent of the regular rate when the entire eligible land on a farm is placed in the conservation reserve and planted to forest trees.

Farmers will be allowed to put any eligible acreage that is to be planted to forest trees in the program at the nondiversion rate.

Participation in the Program

Participation in the Conservation Reserve Program through 1957 may be summarized as follows:

Number of contracts	82,588
Acreage under contract:	
At regular rate, acres	6,178,430
At nondiversion rate, acres	359,502
Total acres in the Conservation Reserve	6,537,932
Farms with entire eligible acreage under contract:	
Number	12,163
Acreage in the Conservation Reserve	
Conservation practices performed or to be performed in 1957 or later,	
Establish permanent vegetative cover, acres	5,205,761
Temporary vegetative cover (preparation for permanent)	
Tree or shrub cover, acres	

Winter vegetative cover, acres	193,293
Summer vegetative cover, acres	512,515
Establish cover beneficial to wildlife, acres	7,737
Water and marsh management to benefit fish and wildlife, acres	2,264
Dams, pits, or ponds for protecting vegetative cover, number	2,223
Dams, pits, or ponds for irrigation water, number	264
Dams and ponds for fish, number	451

Slightly less than 2 percent of all farms had conservation reserve contracts in 1957. The total acreage placed in the program was equivalent to about 1.5 percent of total cropland as reported by the 1954 Census of Agriculture.

Participation is widely distributed throughout the United States. Nearly 85 percent of all counties had one or more farm operators with contracts in the Conservation Reserve Program. However, participation is higher in some regions than others. Figure 2 shows by counties the percentage of cropland under contract in 1957. Regions with relatively high participation are the Southeast, the Southwest, and the northern Great Lakes States.

Acreages under contract in the Acreage Reserve Program in 1957 by crops are as follows:

Wheat	12,783,192
Corn	5,233,478
Cotton	3,015,630
Rice	242,017
Tobacco	79,701
Total	21,354,018

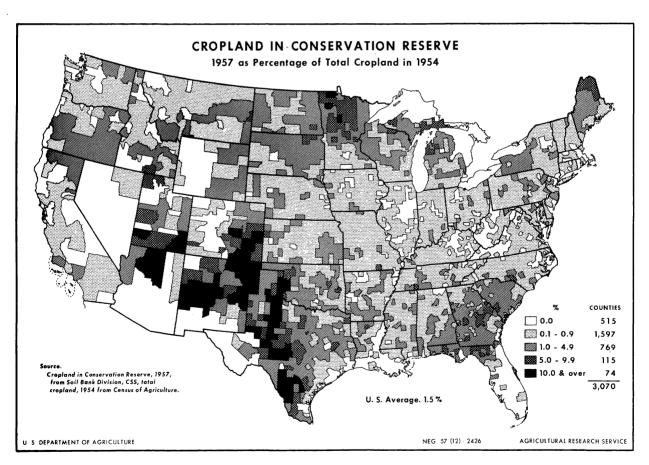


Figure 2

Overall Effects on Crop Production

Altogether, nearly 28 million acres were in the Soil Bank Program in 1957. This is equivalent to about 8 percent of the total acreage of crops planted or grown. No doubt total crop production would have been larger in 1957 if this land had not been taken out of production. The Soil Bank Program probably was responsible for much of the reduction in the total acreage of crops planted or grown of 19.7 million acres from 1955 to 1957. Figure 3 shows changes in acreages of major crops from 1955 to 1957 and acreages in Soil Bank Programs in 1957.

The net reduction of 6.5 million acres of crops on farms in the conservation reserve may have been partly offset by increases in crop acreages on farms not participating in this program. Also, most regions have some idle cropland, and with more favorable growing conditions in 1957 than in other recent years, especially in the Southwest, it is probable that more of the available cropland has been utilized.

Farmers who participated in the 1957 Acreage Reserve Program probably did not reduce their total crop acreages by the amounts they placed in this program. The reduction of 20 million acres in the 5 allotment crops (cotton, wheat, corn, rice, and tobacco) from 1955 to 1957 is about the same as the total acreage in the Acreage Reserve Program in 1957. However, the total acreage of wheat has not decreased by as much as that placed in the acreage reserve.

The total acreage of crops planted or grown probably would have been at least as large in 1957 as in 1955, or about 20 million acres larger, if there had been no Soil Bank Program. This is equivalent to about 6 percent of the total acreage harvested. Much of the cropland in the Soil Bank in 1957 is located in areas with crop yields that average lower than those for the country as a whole. If it is assumed that land put into the soil bank would have been planted and that yields on this land would have averaged half as high as national yields in 1957, total crop production would have been about 3 percent larger in 1957.

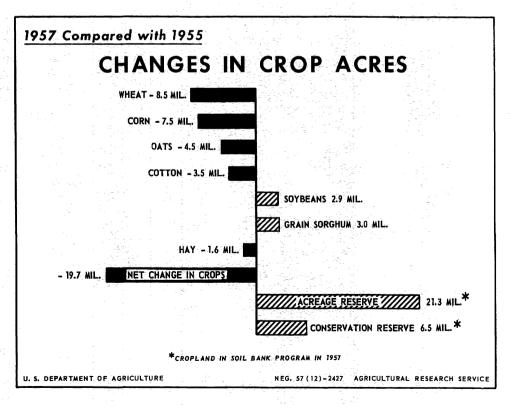


Figure 3

NORTHERN AND CENTRAL MAINE

Aroostook County in northern Maine and Franklin and Kennebec Counties in central and southwestern Maine were the areas studied.

Potato growing is the main farm enterprise in Aroostook County. Potatoes account for 90 percent of total farm sales. Farms vary in size, but average about 200 acres. Approximately half of the land in farms is classified as cropland. Potatoes are grown on about 40 percent of the harvested cropland. Prices received by farmers for potatoes have been low during the last few years, and many farmers have been looking for alternative sources of income. The acreage in potatoes has changed greatly from one year to the next, but the total was about the same in 1954 as in 1939. The harvested acreage of all crops also has remained about the same. However, the total number of farms decreased by nearly 30 percent from 1939 to 1954. Farms have increased in size and have become more mechanized. There are now relatively few part-time farmers. Nonfarm employment opportunities are limited. Only 17 percent of the farm operators worked off their farms 100 days or more, according to the 1954 Census of Agriculture.

Dairying is the main farm enterprise in Franklin and Kennebec Counties, although production of broilers has become important in recent years. Farms average about 150 acres in size, but only about a third of the land in farms is cropland. In recent years, much cropland has been abandoned and has reverted to brush and trees. Total farm population decreased about 30 percent from 1939 to 1954. Many young people migrated to southern New England where better employment opportunities were available. About half of the farm operators worked off their farms 100 or more days in 1954.

Extent of Participation

Only the conservation reserve part of the Soil Bank Program was in effect in Maine. The State includes no counties designated as commercial corn- or wheat-growing areas under acreage-allotment programs so the acreage reserve part of the Soil Bank Program was not in effect.

Nearly 14 percent of the farmers in Aroostook County and a little less than 3 percent in Franklin and Kennebec Counties have land in the conservation reserve. Of these farms, about 45 percent in Aroostook County and about 25 percent in Franklin and Kennebec Counties had all of their eligible land in the program. Nearly half of the cropland put in the conservation reserve in the three counties is on farms whose operators placed all eligible land in the program. Much of the cropland placed in the program--95 percent in Franklin and Kennebec Counties and 40 percent in Aroostook County--was at the non-diversion payment rate.

Most conservation reserve contracts in Aroostook County are for 3 or 5 years. Nearly half of those in Franklin and Kennebec Counties are for 10 years and provide also for planting of trees.

Participation in 1957 may be summarized as follows:

	Aroostook County	Franklin and Kennebec Counties
Percentage of all farms with All eligible land in program Part of eligible land in program	- 6.0 - 7.7	0.6 2.0
Total	- 13.7	2.6
Percentage of all cropland in program At regular rate At nondiversion rate		.1 1.9
Total	- 10.2	2.0

Data on total number of farms and acreages of cropland used to compute these percentages are from the 1954 Census of Agriculture.

The annual rental payment for reductions in Soil-Bank base crops, (cultivated crops, small grains, and so on) was \$9.00 per acre. The nondiversion payment rate for other eligible land above the soil-bank base was \$2.70 per acre. In addition, farm operators receive up to 80 percent of the cost of establishing approved conservation practices on designated conservation reserve land.

Conservation reserve contracts call for planting of trees on nearly half of the land in the program in Franklin and Kennebec Counties but on only about 1 percent in Aroostook County. Cost-sharing payments for tree planting average about \$24 per acre.

Participants Compared with Nonparticipants

Farm survey records were obtained from 138 farm operators in Aroostook County and from 74 in Franklin and Kennebec Counties. A little more than half of these were participants in the Conservation Reserve Program. Both participating and nonparticipating farms were selected at random.

In Aroostook County, farms with part of eligible land in the Conservation Reserve Program average larger than nonparticipating farms. But those with all land in the program average only about half as large (table 1). Farms with all land in the program have relatively little cropland. However, those with part of their land in the program have more cropland than other farms in the area. Farm real estate values per acre average slightly lower but real estate taxes per acre average much lower on participating than on non-participating farms. This suggests that the productivity of land placed in the program may average lower than that of land on other farms in the area. Some of the farm operators who are participating in the program are part-time farmers, have nonfarm jobs or retirement annuities, or live off the farm. However, a large proportion of participants are full-time farmers, live on the farm, and do not have off-farm employment.

In Franklin and Kennebec Counties, farms with all eligible land in the Conservation Reserve Program also are relatively small and have little cropland (table 1). Farms with only part of the eligible land in the program average larger than other farms in the area. Farmers who participate in the program have relatively few livestock as compared with other farmers. Data on real estate values per acre and real estate taxes per acre suggest that land on participating farms may be less productive on the average than land on nonparticipating farms. However, these data also reflect differences in buildings and other improvements on the farms. A high proportion of the participating farm operators have nonfarm jobs and retirement annuities.

Factors that Affect Participation

Farm operators gave a variety of reasons for putting cropland in the Conservation Reserve Program. About a third said they wanted to improve the productivity of the land or control growth of brush. About a fourth said they needed the income to pay real estate taxes or that it was more profitable to place land in the program than to operate it. Another 20 percent said they were too old to farm or for other reasons did not want to do so. The rest gave other reasons such as "have too much land to cultivate," "labor is hard to get," "don't have the capital required to farm the land," "land is too far away to operate," and "prefer not to rent the land out to others."

Some participants in Aroostook County who are commercial potato farmers said that production of potatoes has been unprofitable during the last few years and that this was the major reason for putting some land in the program.

Most farm operators who are not now participating in the Conservation Reserve Program thought that participation would not be profitable. Nearly two-thirds said they needed all their cropland to operate efficiently. About 80 percent indicated that payment rates

TABLE 1.--Characteristics of farms and farm operators participating and not participating in the Conservation Reserve Program, selected areas of Maine, 1957

	Arc	oostook Coun	ty	Franklin a	ranklin and Kennebec Counties		
Item ·	Farmers partici- pating with		Farms	Farmers partici- pating with		Farms	
1 tem	Part of eligible land	All eligible land	not partici- pating	Part of eligible land	All eligible land	not partici- pating	
Farm operators interviewednumber	38	38	52	22	16	36	
Land per farmacres	296	121	245	234	141	217	
Cropland per farmacres	142	57	119	52	24	68	
Real estate value per acredollars	71	63	83	52	69	84	
Real estate taxes per acrecents	161	163	264	79	116	146	
Average age of farm operatoryears	47	58	51	53	57	53	
Percentage of farm operators who— Are part-time farmers———————————————————————————————————	24 50 29 5	21 58 37 24	4 15 8 4	18 86 14 27	25 81 31 43	11 30 11 72	
Have nonfarm incomes of \$2,500 or moredo	37	44	8	55	81	20	

would need to be higher before it would be profitable to participate. Dairy farmers in Franklin and Kennebec Counties said they needed all their cropland to grow feed for dairy herds and many would like to increase their acreages of cropland. The remaining 20 percent said they were not participating for such reasons as "do not know much about the program," "plan to sell the farm," and "too old to participate."

In both areas, lack of information about the Conservation Reserve Program probably affected participation. Nearly half of the farm operators who were not participating had little or no knowledge about the program. However, much of this lack of information was due to the fact that the program is relatively new.

Crop Production Reduced Slightly

In Aroostook County, where approximately 10 percent of the cropland was in the Conservation Reserve Program, crop production in 1957 was less than it would have been if there had been no program. Farmers said that crops would have been grown on most of the land placed in the conservation reserve. Nearly half of the cropland retired from production was from whole farm units, and if there had been no program, most of this cropland would have been used to grow potatoes, oats, and hay. However, a small part would have been idle. Most farmers who did not participate in the program, as well as those who put part of their cropland in the program, reduced their acreages of potatoes from 1956 to 1957. Most of them said that they reduced their potato acreages because of the low prices during the previous few years. Some could not obtain the credit required to grow more potatoes. However, participating farmers made larger reductions in acreages of oats than did other farmers.

The quantities of fertilizer applied per acre of potatoes grown were lower in 1957 than in other recent years on farms with land in the conservation reserve as well as on other farms. This may have been a result of the relatively low prices received for potatoes in the last few years. However, farmers tended to keep their best land in potatoes and potato production did not decrease as much as acreage.

In Franklin and Kennebec Counties, the Conservation Reserve Program has affected crop production slightly, as only 2 percent of the cropland was in the program. Most of the contracted acreage was at the nondiversion rate. Hay would have been harvested from most of this land if there had been no program. However, farmers indicated that some of the hayland might not have been harvested. Most of the farmers who participated in the program have relatively few livestock. However, dairy farmers in the area frequently cut hay from land on nearby farms. Consequently, the quantity of hay available for harvest by dairy farmers was reduced slightly as a result of the program.

The Conservation Reserve Program is likely to have some important long-term effects on the agriculture of these areas, especially if participation increases in the future. Only about 20 percent of the farm operators said they plan to farm the land placed in the program when their contracts expire, although nearly 30 percent were undecided. Nearly 25 percent said they would put the land in trees, and an additional 17 percent said they would renew contracts. About 10 percent said they plan to sell the land.

Not much change in the use of buildings and machinery has accompanied participation in the Conservation Reserve Program, probably because the program is relatively new. Most of those who put all of their eligible acreage in the program have little or no machinery and relatively poor farm buildings. A few said they plan to sell their machinery. However, most farmers who put part of their eligible land in the program plan to keep the machinery they have on hand and to repair and improve farm buildings.

Many farm operators are utilizing the Conservation Reserve Program to help make such adjustments as reducing the size of the farming operation, shifting to nonfarm employment, or retiring. It seems likely that recent trends toward establishment of more conservation practices, reduction in farm population, movement to nonfarm employment, and others will be speeded up as a result of the program.

Farmers Undecided as to Future

Most farmers were undecided about plans for putting land into the Conservation Reserve Program in 1958 when they were visited during the summer of 1957. However, about 8 percent of those who had placed part of their eligible acreage in the conservation reserve plan to put all of their eligible land in the program in 1958. Another 8 percent of these farmers indicated that they would make contracts for additional acreages. About 10 percent of the nonparticipants interviewed said they plan to put some land in the conservation reserve in 1958.

In Aroostook County, many farmers said they would wait and see what happened to the price of potatoes before they decided on plans for participation. This was true of both farmers with no land in the conservation reserve and of those with part of their land in the program.

In Franklin and Kennebec Counties, certain modifications made in the Conservation Reserve Program for 1958 are likely to encourage greater participation. These are the modifications that provide for higher annual rental rates for cropland that has been in hay when whole farm units are placed in the program or when cropland is planted to trees.

In both areas, participation can be expected to increase as more farm people and owners become better informed about provisions of the program.

CENTRAL WISCONSIN

The Wisconsin study area includes Adams, Jackson, Juneau, Marquette, and Waushara Counties. It covers a large part of the central sandy section of the State. Soils vary in productivity but average below those of counties to the south, east, and west. According to the 1954 Census of Agriculture, farms averaged 184 acres in size and had 96 acres of cropland and 64 acres of harvested crops. Corn, oats, and hay are the main crops grown.

Dairying is the main farm enterprise. In 1954, nearly 20 percent of the farms were part-time or residential units. The value of production per farm is lower here than in surrounding areas. In 1954, the total value of farm products sold was less than \$5,000 for 76 percent of the farms and less than \$2,500 for 45 percent. Only 9 percent of the farms were operated by tenants.

The total acreage of cropland has decreased gradually; it was 20 percent smaller in 1954 than in 1910. The number of farms decreased by 31 percent while acreage per farm increased by 18 percent. Farm population has decreased also. On the average, farm operators here are older than those in surrounding areas.

Off-farm employment has become increasingly important in recent years. In 1954, 22 percent of the farm operators worked 100 days or more off their farms and 44 percent had some off-farm employment. However, few local nonfarm employment opportunities are available, and most farm people who have industrial jobs travel 30 to 50 miles to work each day.

Extent of Participation

About 6 percent of all farmers had land in the Conservation Reserve Program in 1957. About a third of these farmers put all of their eligible acreages in the soil bank. About 80 percent also had some land in the Acreage Reserve Program.

Farmers have agreed to establish cover crops on 88 percent of the land placed in the conservation reserve. Trees will be planted on the remaining 12 percent.

Participation in the Soil Bank Program in 1957 may be summarized as follows:

Percentage of all farms with Conservation reserve contracts	
Acreage reserve contracts	
Percentage of all cropland placed in Conservation reserve	
Acreage reserve	
Total in soil bank	

Annual rental payments for reductions in soil-bank base crops under the Conservation Reserve Program vary from \$8 to \$13 per acre for individual farms, depending on the productivity of the soil. As in other areas, annual rental payments for reductions in other crops, or what have been called nondiversion rates are 30 percent of regular annual rental rates. Rental payments under the Acreage Reserve Program for reductions in corn and wheat average higher.

Participants Compared with Nonparticipants

Farms and farm operators with land in the Conservation Reserve Program differ in some important respects from those with no land in the program (table 2). Altogether, 149 farm operators were interviewed. Of these, 74 had land in the conservation reserve and 75 did not. Of the 74 with land in the program, 24 had all eligible land in the soil bank. Most of these also participated in the Acreage Reserve Program.

TABLE 2.--Characteristics of farms and farm operators participating and not participating in the Conservation Reserve Program, central Wisconsin, 1957¹

			Farmers pa	Farmers not	
	Item		Part of eligible land	All eligible land	partici- pating
Farm operators int	erviewed	number	50	24	75
Land per farm		acres	194	163	190
Cropland per farm-		acres	108	87	103
Real estate value	per acre	dollars	- 60	61	59
Real estate taxes	per acre	cents	107	108	129
Average age of ope		years	57	60	52
Have gross farm	rmers s incomes of \$	ho percent do 2,500 or more	40 42 8 44	38 50 8 62	24 23 52 38

¹ This area includes Adams, Jackson, Juneau, Marquette, and Waushara Counties. Nearly all farmers with all eligible land in the Soil Bank and some of the others also participated in the Acreage Reserve Program.

Farms with land in conservation reserve do not differ significantly from other farms with regard to total acreage or acreage of cropland. However, farms with all eligible land in the soil bank have about 15 percent less cropland than other farms. The current market value of real estate per acre was about the same for farms with land in the program as for farms with no land in the program. However, real estate taxes per acre averaged nearly 20 percent higher for farms not in the program than it did for farms in the program.

Few farms operated by tenants have land in the program.

Farm operators who participate in the Conservation Reserve Program are older, more of them are part-time farmers, more of them have off-farm jobs, and more of them live off their farms than is true of other farm operators in the area.

In general, farm operators with land in the program have low incomes from farming. Ninety-two percent had gross farm incomes of less than \$2,500. But only 48 percent of the farm operators with no land in the program had gross farm incomes of less than \$2,500. The former, however, had higher incomes from nonfarm sources than did other farmers.

Factors that Affect Participation

The main reasons given by farmers for participating in the Conservation Reserve Program were as follows:

Reason	Percent
To improve soil	25
To help him retire	21
To receive payments	17
To avoid problems of renting	14
To work full-time off farm	10
To help him get started in farming	5

Most farmers placed land in the program for more than one reason. Payment rates, for example, were an important consideration in each instance.

The Conservation Reserve Program provides a profitable alternative for a substantial proportion of the farmers of the area. This group includes older farmers who want to retire, either entirely or partially, by reducing the size of their farming operations, part-time farmers who work off the farm and want to shift to full-time nonfarm jobs, some farmers with large farms who want to use the programs to improve the productivity of parts of their farms, others who for a variety of reasons want to reduce the size of their farming operations, and people who have moved off their farms and placed their cropland in the program rather than rent to others. Annual payment rates were considered a reasonable return for diverting cropland from soil-bank base crops. Farm owners who were interested in receiving a return from land, but not from labor or capital investments used on the land, usually considered participation in the program advantageous. However, most farmers thought that the payment rates for hayland were too low to be attractive. This accounts for the small acreage put in the program at the nondiversion payment rate.

A little more than half of the farm operators with land in the program indicated that they did not want to continue farming and were utilizing the program to get out of farming or to reduce their farming operations.

Most of the farm operators with no land in the program said they required all of their cropland to operate efficiently. In fact, many said that with modern machinery they could handle larger crop acreages and more livestock. Some farmers would like to expand the sizes of their farms and thereby utilize their labor and machinery more effectively and increase their net incomes.

Annual payment rates are too low to make a great deal of participation profitable for most full-time farmers whose cash costs would not decrease significantly if they operated less land. Records for 156 central Wisconsin farms in the State Agricultural Extension Service Farm Accounting Association show that net cash income per harvested crop-acre averaged \$40 in 1956. Most of these farmers probably would not find it profitable to place much land in the conservation reserve. However, in some instances, use of the program to conserve and build up soil productivity might be profitable.

Lack of information about the program apparently has affected participation significantly. About half of the farm operators with no land in the program said that they had little or no information about the program, and only about 40 percent said they had considered the advantages or benefits of participating.

Effects Small Thus Far

Obviously the net effect of the Soil Bank Program on total farm production of the area has been small, as only about 3 percent of the cropland has been placed in the program. Nonetheless, the program has caused total farm output to be a little less than it otherwise would have been in 1957. About a third of the cropland placed in the conservation reserve was on farms that put all eligible land in the Soil Bank Program. There was no evidence that farm operators who placed part of their cropland in the conservation reserve used more fertilizer on their remaining land or otherwise attempted to offset any decrease in production that occurred as a result of putting land in the program. On farms where the program is used mainly as a means to improve soil productivity, and the land is brought back into crop production in later years, crop yields can be expected to be higher than they would have been otherwise.

Farmers were asked what use they would have made of cropland placed in the conservation reserve if there had been no program. Only 38 percent said that they would have farmed the land themselves. Nearly 20 percent would have rented out the land. Another 20 percent would have put the land in legumes and grass, and most of these farmers would have sold some hay. The remaining 22 percent said they would have left the land idle or put it in trees. Or they were uncertain as to what they would have done. Thus, it is evident that the program brought about some reduction in crop production.

Most farm operators who were participating in the program said they plan no major changes in the use or repair of farm buildings. However, many farm buildings will become obsolete in another few years if they are not maintained or improved. Many farmers sold their livestock or reduced their livestock numbers when they placed land in the program. In general, farmers who have land in the program are poorly equipped with machinery. Most of them said they planned to keep the machinery they had on hand.

The Soil Bank Program appears to have affected land values in the area very little. Three participants said they would have sold their farms if there had been no program. Only one of the participants interviewed had purchased his farm during the last year. The acreage of cropland available for rent was slightly smaller because of the program, but the percentage of all cropland operated by tenants is relatively small in this area.

The Soil Bank Program has speeded up adjustments in farming that have been in progress in central Wisconsin during the last 20 years. These adjustments include the expansion of the acreage in legumes, grass and trees, reduction in the total acreage of cropland and shift of farm people to nonfarm employment. It has helped some older farmers to retire and others to shift to nonfarm employment. Only 27 percent of the farm operators said they planned to farm the land they placed in the program when their contracts expire. Nearly 30 percent said they would renew the contracts if they could and another 12 percent said they would let the land remain in trees. Only 3 percent said they would rent out the land. About 5 percent plan to sell their farms. The rest had no definite plans.

Farmers Plan to Participate to Greater Extent

When they were interviewed in the summer of 1957, most farmers were uncertain as to their plans for 1958. However, 14 percent of those who had part of their farms in the conservation reserve said they intended to put all of their eligible land in the program in 1958, and another 14 percent said they planned to put additional land in the program.

Among those who were not participating in 1957, only about 3 percent said they had definite plans to put land in the 1958 Conservation Reserve Program. Some farmers who are not now participating in the program said they would participate if nondiversion payment rates for land in hay were increased or if higher nondiversion rates were paid when all eligible land in the farm is placed in the program. Modifications in the 1958 program which permit higher nondiversion payments are expected to lead to greater participation.

Future participation is likely to be highest among part-time farmers, full-time farmers who want to shift to part-time farming, farmers who want to retire, and those who want to shift to nonfarm occupations. Nearly 25 percent of the 1957 nonparticipants are part-time farmers and many of them may find participation in the program advantageous.

UPPER COASTAL PLAIN OF SOUTH CAROLINA

This study area includes Allendale, Bamber, Barnwell, Calhoun, Hampton, and Orangeburg Counties. Agriculture here is diversified, but a cash-crop system with cotton and corn as major crops is characteristic of most farms. According to the 1954 Census, about half of the land in farms was cropland, 35 percent was woodland, and most of the remaining 15 percent was pasture. Farms vary in size, but half of all farms have less than 50 acres of cropland. Sharecroppers and wage hands make up an important part of the farm labor force.

The agriculture of the area has changed in recent years. From 1946 to 1956, the total acreage of cotton and corn decreased about 20 percent. But the acreage of soybeans has increased. The total number of farms in the area has decreased by about a fourth since 1945 and farms have increased in size. In recent years, there has been an outward migration of farmworkers. Industrial growth has been slower than in the Piedmont Area and opportunities for nonfarm employment have been limited. Nevertheless, part-time farming has increased.

Pine trees grow rapidly in this area and the growing of pine trees has become a profitable enterprise. The acreage planted to pine trees has increased greatly in recent years. Paper companies, large and small timber operators, some leading farmers, and others own forest land for investment purposes.

Extent of Participation

About 10 percent of the cropland of the area was put in the soil bank in 1957. The Conservation Reserve Program accounts for nearly 5 percent and the Acreage Reserve Program for a little more than 5 percent.

Many farms operated as one unit have tracts of land at different locations. Some of the operators of these farms have more than one contract under the Soil Bank Program. Therefore, the number of soil bank contracts is larger than the number of farmers with contracts. However, if each contract in the conservation reserve is considered as a farm, participation may be summarized as follows:

Percentage of all farms with	
Conservation reserve contracts	6.1
Acreage reserve contracts	35.7

Percentage of all cropland placed in	
Conservation reserve	
Total in soil bank	9.8

About 6 percent of the conservation reserve contracts were for entire farm units. Another 8 percent of the farmers put all eligible land in the soil bank by participating in both the Conservation and Acreage Reserve Programs. Thus about 85 percent of the contracts were for parts of farm units. Less than 2 percent of the cropland placed in the conservation reserve was at the nondiversion rate.

Conservation reserve contracts call for planting of trees on 85 percent of the cropland placed in the program, other permanent vegetative cover on about 13 percent, and wildlife protection and water storage on the remaining 2 percent.

The regular annual payment rates for cropland placed in the conservation reserve vary from \$8 to \$10.50 per acre among counties. These payment rates reflect differences in productivity of cropland.

Cotton accounts for 90 percent and wheat and tobacco for 10 percent of the cropland placed in the acreage reserve.

Participants Compared with Nonparticipants

Altogether, 306 farm operators were interviewed. They included 147 who were participating in the conservation reserve and 159 who were not participating. About 15 percent of the participants interviewed put all of their eligible land in the soil bank.

Farms of operators with land in the conservation reserve average larger and have more cropland than do other farms in the area (table 3). There was some participation by operators of farms in all size groups, but a larger proportion of the large than of the small farmers have land in the program. Although farms with less than 50 acres of cropland account for more than half of all farms in the area, farmers with less than 50 acres of cropland account for only 19 percent of all farmers in the sample who were participating in the conservation reserve. The percentage distribution of survey farmers participating and those not participating in the Conservation Reserve Program follows:

Acres of cropland per farm	Percentage distribution of farms participating	Percentage distri- bution of farms not participating
Small farms 50 or less	19	52
Medium-sized farms51 to 150	41	34
Large farms 151 or over	40	14
Total	100	100

Farm real estate values and taxes per acre average lower for farms with land in the conservation reserve than they do for other farms. This suggests that the productivity of lands of participating farmers may average a little lower than that of nonparticipating farmers.

The average ages and the proportions having retirement annuities are about the same for participants and nonparticipants.

Approximately half of the farm operators with land in the conservation reserve have nonfarm jobs. Nearly half are part-time farmers. Half live off the farm. Only about a fourth of the farm operators with no land in the program have these characteristics.

TABLE 3.--Characteristics of farms and farm operators participating and not participating in the Conservation Reserve Program, Upper Coastal Plain of South Carolina, 1957¹

Item	Farmers participating	Farmers not participating
Farm operators interviewednumber	147	159
Land per farmacres	787	155
Cropland per farmacres	225	92
Real estate value per acredollars	82	97
Real estate taxes per acrecents-	33	41
Average age of the farm operatoryears	51	51
Percentage of farm operators who Are part-time farmers	47 15 48 52 11 44 44	24 24 24 25 12 30 39

¹ This area includes Allendale, Bamberg, Barnwell, Calhoun, Hampton, and Orangeburg Counties. Data are not shown separately for farms with all eligible land in the soil bank, as they account for only about 15 percent of farms in the sample. Many farmers have land in the Acreage Reserve Program.

Relatively few tenant-operated farms have land in the conservation reserve. But it is significant that 7 percent of the participating farms were operated by tenants.

Participants have higher average gross farm incomes and nonfarm incomes than do nonparticipants. However, this would be expected as participants have larger farms and more of them have nonfarm jobs than nonparticipants.

Factors that Affect Participation

Farmers gave many reasons for participating in the Conservation Reserve Program. Many recognized that the program would help them make the kinds of land use adjustments that they have wanted to make.

Major reasons given by farm operators for placing land in the Conservation Reserve Program and percentages giving different reasons follow:

Reason	Percent
More profitable than to farm the land or to rent it out Land required conservation practices because it was hilly or low in productivity, or farmer wanted to improve and conserve soil productivity for other reasons	•
Program provided the means for retirement or farmer did not want to operate the land because of old age or poor health	:
Shortage of laborFields put into the program were inconvenient to operate because of	9
Wanted to establish improved pasture	_

The most common reason given by farm operators for not participating was that they did not think participation would be profitable. Most of these farmers said that they needed all their cropland to operate their farms efficiently. Some did not want to place land in the program for long periods. Tenant farmers usually do not have control of the land they operate for long enough periods to place it in the conservation reserve. Some landlords said that if they were required to share rental payments with tenants it would be more profitable to rent the land to tenants. Also, farmers who already have large proportions of their lands in soil-conserving uses said there was little or no advantage in participating.

The economic advantages of participating in the Soil Bank Program depend to a large extent upon whether labor is a cash cost that can be reduced when land is put in the soil bank. When labor is considered a cash cost, net cash income from representative farms increases as more land is put in the Conservation and Acreage Reserve Programs (table 4). This is true of small and medium-sized as well as large farms. But when labor is not considered a cash cost, net cash incomes decrease as more land is placed under the programs. A larger part of the labor used on large farms is hired than is true in the case of small or medium-sized farms. Many operators of large farms can increase net cash incomes from their farms by placing land in the soil bank. But most farm operators of small farms who hire little or no labor would reduce their net cash incomes from farming if they put their land in the soil bank. Participation might be advantageous in many instances, even though net cash incomes from farming were reduced for a few vears, because it would help the farm operator make such adjustments as conserving and building up soil productivity of some fields, reducing the amount of farmwork, retiring, or shifting to nonfarm employment. Operators of some small farms may be able to increase their total net incomes by putting land in the soil bank and working off the farm.

Information or lack of information about the Soil Bank Program also affected participation. Most of the participants understood the program fairly well, but 60 percent of the nonparticipants understood it poorly or not at all. Only 25 percent of the nonparticipants had made any estimates of how participation in the conservation reserve might

TABLE 4.--Estimates of net cash income on representative farms with different degrees of participation in Soil Bank Program in 1957, Upper Coastal Plain of South Carolina¹

	Portion of	farm in Soil E	Bank Program
Item ²	None	Average ³	All eligible land
Net cash income when labor is a cash cost: Small farms	Dollars 276 462 4,177 716 1,437 9,253	Dollars 368 821 4,242 562 1,318 7,581	Dollars 450 1,051 5,953 458 1,076 6,059

¹ Estimates based on 1956 crop yields and on organization and production data for study farms participating in conservation reserve in 1957.

² Sizes of farms: Small - 50 acres or less cropland; medium - 51 to 150 acres of cropland; large - 151 or more acres of cropland.

³ Average participation in Acreage Reserve and Conservation Reserve Programs of participants in 1957.

⁴ Eligible cropland in acreage reserve and other cropland in conservation reserve.

affect their net incomes. In general, operators of large farms have a better knowledge of Soil Bank Programs and the advantages of participating in them than do operators of small or medium-sized farms.

Crop Production Reduced

Crop production was less in 1957 on farms whose operators participated in the conservation reserve than it would have been if there had been no program. The farm operators visited placed about 40 percent of their cropland, or an average of about 55 acres per farm, in the conservation reserve. This includes reductions of about 20 acres in soybeans, 17 in oats, 13 in corn, and 5 in other crops. In addition, acreages of cotton and wheat were reduced on many of these farms because their operators participated in the Acreage Reserve Program.

According to most of the farm operators interviewed, land placed in the conservation reserve averaged a little lower in productivity than that of other cropland on the same farm. Also, farmers who participated in the program said they applied about 5 percent more fertilizer per acre of cropland in 1957 than in 1956. The total quantity of nutrients applied per acre of cotton, corn, and oats did not change, but it was increased for wheat, soybeans, and rotation pasture.

Farmers have made few changes in livestock numbers during the last 2 years. There were few livestock on the farms whose operators put all of their cropland in the soil bank. In a few instances, farmers who put part of their land in the program increased their livestock numbers slightly.

The resident labor force on farms whose operators participated in the Conservation Reserve Program was reduced slightly. This was true also of other farms in the area from 1956 to 1957. However, it was probably a continuation of a long-term trend. The number of farmworkers on participating farms in the sample decreased by 12 percent from 1956 to 1957, but farm operators said there would have been a reduction of 9 percent had there been no Conservation Reserve Program. Most of the reduction that has occurred may be due to reductions in acreages of cotton.

The survey indicated that the Soil Bank Program has affected tenure arrangements or land values very little. A few landowners who had been renting out land have placed land in Acreage and Conservation Reserve Programs. It is customary to rent land for annual cash payments of \$5 to \$10 per acre. Rental contracts usually are oral and are made for only one year. Only 10 percent of the farm operators who participated in the conservation reserve and 4 percent of those who did not participate said that they had bought land during the last 2 years. A few who had bought land said their purchases were influenced by availability of the Soil Bank Program, but most of these few said that the Soil Bank Program did not influence the price they paid. However, other sources of information indicate that interest in buying land for investment purposes has increased because of the Conservation Reserve Program.

Thus far, the Conservation Reserve Program has caused only a few farm operators to move off their farms, to retire, or to take nonfarm jobs. However, if the program continues, the number probably will increase.

The total volume of business activity in the area has been affected very little by the Conservation Reserve Program. Purchases of fertilizer were 4 percent less in 1957 than in 1956, but this was due mainly to reduction in cotton acreages under the Acreage Reserve Program. Purchases of machinery and building materials for replacements and repairs have remained about the same. But they may decrease if participation in the conservation reserve increases. The use of buildings or machinery on most farms has changed little as a result of placing land in the conservation reserve.

The planting of trees on cropland put in the conservation reserve may affect business activity significantly in the area over the long run. As pointed out earlier, 85 percent of

the cropland placed in the conservation reserve has been or is soon to be planted to trees. If the acreage planted to trees continues to increase, less labor will be used to grow crops but more will be used gradually for the planting and care of woodlands and in forest industries.

Future Participation to Increase

Information obtained from farm operators interviewed indicates that an additional acreage equivalent to about 125 percent of that in the conservation reserve in 1957 may be placed in the program in 1958.

Nearly half of the participants interviewed said they intend to place additional land in the Conservation Reserve Program in 1958. They plan to increase their total acreages in the program by about 60 percent. Nearly 70 percent of the operators of large farms said they expect to put additional land in the program as compared with only about 30 percent of the small and medium-sized farms. About half of those who intend to put additional land in the program said they would intensify production or increase yields on their remaining acreages. About 10 percent said they expect to do more nonfarm work.

Nearly 15 percent of the farm operators who do not now have land in the Conservation Reserve Program said they plan to put some cropland in the program in 1958. Another 13 percent said they were undecided. Only 10 percent of the operators of small farms plan to put land in the program as compared with about 20 percent of the operators of medium-sized and large farms.

These intentions were obtained from farm operators during the summer of 1957. Plans may change before the spring of 1958 when the period for signing new contracts expires. But it seems likely that total acreages in the Conservation Reserve Program will increase greatly in 1958. The program was relatively new in 1957 and participation can be expected to increase as more farm operators learn about the advantages of participating. Much of the additional participation probably will be from operators of large farms. However, some operators of small farms who want to retire, reduce the size of their farming operations, or shift to nonfarm employment, can be expected to place land in the program also.

PANHANDLE WHEAT AREA OF TEXAS

Five counties--Deaf Smith, Floyd, Lipscomb, Moore, and Swisher--were selected in this area for study. The agriculture of the area has changed greatly during the last 30 years. After 1920, large-scale wheat farming replaced cattle ranching, although about a third of the land is still in pasture. During the last 20 years, irrigation from deep wells has become important, and nearly three-fourths of the farmers grow some irrigated crops. Irrigation water is used mainly for cotton but it is used also for grain sorghum, wheat, alfalfa, and other crops when water is available. However, the underground water supply has been reduced throughout the High Plains Area, and the recharge rate is inadequate to assure continued use of water at a volume as high as in recent years.

Low rainfall during most of the 1950-56 period caused much crop failure. Livestock numbers were reduced as grazing and feed supplies decreased. The acreages of wheat and cotton harvested also declined. However, rainfall was relatively good throughout the area in 1957 and the total harvested acreage has increased.

Expansion in the acreage of grain sorghum is a major development since 1955. In 1957, many farmers had larger acreages in grain sorghum than in wheat.

Farms are highly mechanized. They average about 1,200 acres, although sizes vary greatly. About 35 percent are operated by owners, about 35 percent by tenants, and about 30 percent by owners who operate some rented land in addition to the acreages they own. Many farmers operate land at different locations with the same set of machinery. Many farm operators live in nearby towns and a few farm owners live outside the area.

Extent of Participation

Large acreages were placed in both the Conservation and Acreage Reserve Programs. Participation in 1957 for the five counties was as follows:

Percentage of all farms with Conservation reserve contracts	
Percentage of all cropland placed in Conservation reserve	
Total in soil bank	2.0

These data on percentages of farms with contracts assume that each farm has only one contract for land in conservation or acreage reserves. Actually, many farmers operate as one farm unit tracts of land at different locations, and some of these farmers have more than one contract for land in the conservation or acreage reserves. Therefore, the percentage of farm operating units with contracts in the Conservation Reserve Program is slightly less than the percentages indicated above.

Less than I percent of the cropland placed in the Conservation Reserve was non-diversion land.

About 3 percent of the farm operators put all their eligible land in the soil bank. Land on these farms accounts for about 2 percent of all cropland in the 5 counties.

Annual rental payment rates varied from \$9 to \$12 per acre by counties but were uniform within counties. Annual rental payments, together with practice payments for establishing permanent cover under the Conservation Reserve Program, were higher per acre than annual payment rates under the Acreage Reserve Program for wheatland on some farms. Consequently, some farmers preferred to place cropland in the conservation reserve rather than in the acreage reserve.

Participants Compared with Nonparticipants

Altogether, 220 farm operators were interviewed. They include 112 participants in the Conservation Reserve Program and 108 nonparticipants. Some farm operators have cropland in both the Conservation and Acreage Reserve Programs. For example, of the 112 participants in the conservation reserve who were interviewed, 65 percent also had land in the acreage reserve. About 40 percent of the farm operators interviewed who had no land in the conservation reserve had some land in the acreage reserve. But most of them had fewer acres per farm in the acreage reserve than did participants in the conservation reserve.

Participation in the Conservation Reserve Program is relatively greater on dryland than on irrigated farms. About 60 percent of the farms with land in the program in the survey sample are dryland farms (farms with no irrigated land) although dryland farms account for only about a fourth of all farms in the area. Farms with some irrigated land are called irrigated farms in this study, even though in some instances the proportion of cropland irrigated may be small.

Farms with land in the conservation reserve differ from other farms in several respects. They average larger in total acreage and have more cropland (table 5). Irrigated farms with land in the program, for example, average nearly twice as large as other irrigated farms. Farms with land in the program have more pasture and livestock than do other farms. Real estate values and taxes per acre average lower for farms with land in the conservation reserve than they do for other farms. Productivity of cropland may average lower on farms with land in the program than it does on other farms.

TABLE 5.--Characteristics of farms and farm operators participating and not participating in the Conservation Reserve Program, Panhandle wheat area of Texas, 1957¹

	Farmers participating Farmers not participating			
	Irrigated farms	Dryland farms	Irrigated farms	Dryland farms
Farm operators interviewednumber	43	69	83	25
Land per farmacres	1,666	1,520	861	1,260
Cropland per farmacres	976	920	654	616
Real estate value per acredollars	126	68	184	78
Real estate taxes per acrecents	14	18	15	22
Average age of farm operatorsyears	45	51	41	49
Percentage of farm operators who				
Are tenantspercent	19	21	40	36
Are part-ownersdo	46	38	40	28
Are ownersdo	35	41	20	36
Are part-time farmersdo	14	10	10	20
Live off the farmdo	35	28	13	28
Have retirement annuitiesdo Have gross farm incomes of	7	9	1	12
\$5,000 or moredo	69	52	93	44
Have nonfarm incomes of	1	La Asia		1
\$2,500 or moredo	11	16	8	20

¹ The survey area includes Deaf Smith, Floyd, Lipscomb, Moore, and Swisher counties. Data are not shown separately for farms with all land in the soil bank, as they account for only about 3 percent of the farms in the survey sample.

Participants were mainly farm owners or farmers who operated some rented land in addition to the land they owned. However, some land in the program is contained in tenant-operated farms.

There is relatively little difference between participating and nonparticipating farm operators with regard to such things as age, retirement status, off-farm employment, and income. In general, farm operators with irrigated land have higher incomes than do those with only dryland.

Factors that Affect Participation

Farm operators gave several reasons for participating in the Conservation Reserve Program. Major reasons were as follows:

Reason	Dryland <u>farms</u> (Percent)	Irrigated farms (Percent)
To return cropland to grass	43	37
Low crop income due to drought	27	21
To be assured of some income	12	9
To improve soil	4	12

Many farmers are utilizing the Conservation Reserve Program to help get grass established so they can expand livestock production when the contract period ends. Retirement or movement to nonfarm employment are less important reasons for participating in the program in this area than in some others.

Farmers said that most of the land placed in the conservation reserve was about as good or only slightly lower in productivity than other cropland on their farms. However, some also said that they put their poorest cropland in the program. In a few instances, certain fields were selected because they had fences or could not be irrigated.

Most farmers indicated that annual rental and practice payments were adequate for cropland not irrigated. In general, they indicated that payments were high enough to be attractive for poor land but not for good or irrigated land. About 70 percent of the nonparticipants said that rental payments were too low to make participation profitable. Others indicated that they did not want to sign long-term contracts or that they wanted to use the land for grazing.

No land that has been irrigated in recent years was put in the conservation reserve.

Information or lack of information about the Conservation Reserve Program probably affected participation greatly. Most participants had a fairly good understanding of the program, but nearly 60 percent of the nonparticipants understood the program poorly or not at all.

Acreage of Grain Sorghum Reduced by Participants

The total acreage of grain sorghum was less in 1957 than it would have been if there had been no Conservation Reserve Program. The acreage of grain sorghum grown on dryland farms whose operators participated in the program decreased by 62 percent from 1955 to 1957 (table 6). It decreased by 35 percent on irrigated farms whose operators participated in the program. But acreages of grain sorghum on nonparticipating farms increased slightly.

TABLE 6.--Acreage per farm in crops and in Soil Bank Program on farms participating and not participating in the Conservation Reserve Program in 1957, Panhandle wheat area of Texas, 1955 and 1957

		Dryland	l farms	-	į.	Irrigate	ed farms	
Use of cropland		Farmers participating Farmers not				ners pating	Farmer partici	
	1955	1957	1955	1957	1955	1957	1955	1957
Grain sorghum Wheat Cotton Other crops Acreage Reserve Conservation reserve Idle or fallow	Acres 382 456 7 38 81	Acres 146 245 4 28 161 276 60	Acres 214 334 7 20 29	Acres 236 190 4 19 157	Acres 409 337 61 13 75	Acres 266 212 71 17 149 189 72	Acres 277 177 46 17 46	Acres 277 169 50 44 47
Total cropland	964	920	604	616	895	976	56 3	654

The total acreage in wheat also was lower in 1957 than it would have been without a Conservation Reserve Program. On dryland farms with land in the program, reductions in wheat from 1955 to 1957 averaged 211 acres as compared with 161 acres put in the

acreage reserve (table 6). The difference of 50 acres probably is mainly land put in the conservation reserve. The reduction per farm of 236 acres of grain sorghum from 1955 to 1957 does not account for all of the 276 acres per farm put in the conservation reserve in 1957.

Farmers said that, if there had been no program, most of the land put in the conservation reserve would have been used to grow crops in 1957. About 70 percent of the operators of dryland farms and 80 percent of the operators of irrigated farms said that the land would have been in crops. The rest said that it would have been planted to grass for pasture or left idle.

Farmers indicated that with no Soil Bank Program acreages of grain sorghum, wheat, and cotton would have differed in 1957 by these percentages:

	Grain sorghum (Percent)	Wheat (Percent)	Cotton (Percent)
Participants in conservation reserve:			
Dryland farms	+168	+85	+85
Irrigated farms	+53	+78	+12
Nonparticipants in conservation reserve:			
Dryland farms	-1	+19	+24
Irrigated farms	+1	+75	+87

The larger acreages of wheat and cotton that would have been grown in 1957 had there been no Soil Bank Program may be attributed mainly to the Acreage Reserve Program.

The Conservation Reserve Program is likely to have important long-term effects on the agriculture of the area. Nearly 75 percent of the operators of dryland farms and 60 percent of the operators of irrigated farms said they plan to keep land placed in the program in grass after their contracts expire. This could help greatly to reduce soil losses caused by wind erosion. Only 7 percent of the operators of dryland farms and 23 percent of the operators of irrigated farms said they plan to put the land in crops when their contracts expire. Some said they would put the land in the conservation reserve again, if possible. About 15 percent said they had no definite plans.

Rainfall was above average throughout the area in 1957. As a result, cover crops and grass have good possibilities of being established on most of the cropland placed in the conservation reserve. Because of favorable experience in 1957, more farmers may be encouraged to utilize the Conservation Reserve Program to get permanent cover established on additional land in 1958.

Thus far, the program has affected the use of buildings or machinery very little. Only a few farm owners placed all their eligible land in the soil bank, and most of these owners operated their farms with custom-hired machinery and labor. The number of hired workers has not changed significantly.

A few tenants said that the acreage of land available for rent had been reduced as a result of the Soil Bank Program. Usually, contracts for renting in this area are for only one year and are not written. Farmers indicated that the program affected the prices of land or the number of farm real estate transactions very little.

Participation to Increase on Dryland Farms

Many farmers had made no definite plans for future participation when interviewed. However, they indicated that the acreage of cropland in the conservation reserve will increase in 1958.

Nearly a third of the operators of dryland farms who now have some land in the conservation reserve said they plan to put additional land in the program in 1958. About 15 percent of the operators of dryland farms who have no land in the program plan to participate in 1958.

Participation on irrigated farms may not increase as much as that on dryland farms. However, nearly 20 percent of the operators of irrigated farms who are now participating in the Conservation Reserve Program said they plan to put additional land in the program. About 10 percent of those who are not participating plan to put some land in the conservation reserve. Probably this will be land that has not been irrigated.

SOUTH DAKOTA AREAS

Surveys were made in two areas of South Dakota. Edmunds and Potter Counties were selected as representative of the north-central wheat-cattle section of the State and Lincoln and Union Counties as representative of the southeastern corn-livestock section.

The Edmunds-Potter area is transitional between the concentrated wheat production of Spink and Brown Counties to the east, and the range-livestock area west of the Missouri River. Wheat, the major cash crop, is grown on the more level and stone-free benchlands. Interspersed are hilly, stony lands suitable only for pasture. Farms average about 850 acres in size. About half of the acreage is in crops and half is in pasture used mainly for beef cattle. Since 1953, farmers have reduced their acreages of wheat in compliance with acreage allotments and have planted the diverted land to oats, flax, and corn. Farms are rapidly decreasing in number and increasing in size. Despite this adjustment, many farms are still too small. About half the land in farms is rented from landlords, many of whom live outside the area. Much of the rented land consists not of entire farms but of separate tracts without buildings. Typical leases are for one year only, but they are renewable.

Lincoln and Union Counties are on the western fringe of the Corn Belt. Feed grain, fattening of cattle, and raising of hogs are the main enterprises. Because most of the corn they produce is fed to livestock on the farm, many farmers here, as elsewhere in the Corn Belt, have not found it profitable to comply with corn acreage allotments. Those who have complied have planted the diverted land to soybeans, oats, and a variety of other crops. Considerable land is operated by tenants, usually as whole farms which include buildings and other improvements. Less than 1 in 5 farmers have both owned and rented land.

Extent of Participation

Participation in Soil Bank Programs was relatively high in the north-central wheat area but lower in the southeastern corn-livestock area. Participation may be summarized as follows:

	North-central wheat area	Southeastern corn- livestock area
Percentage of all farms with Conservation reserve contracts Acreage reserve contracts	14.4 73.8	2.4 34.6
Percentage of all cropland placed in Conservation reserve Acreage reserve	4.3 11.1	0.9 6.2
Total in soil bank	15.4	7.1
Percentage of cropland on participating farms in conservation reserve:		
Lincoln County		53.0
Union County		35.0
Potter County	38.0	
Edmunds County	34.0	

In Lincoln County in the southeastern corn-livestock area, participants as a group contracted a high proportion of their cropland in the program. Three-fourths of the participants in this county placed between half and three-fourths of their cropland in the program. The average for all participants was 53 percent. In contrast, the participants of Union County, which borders Lincoln County on the south, placed only a third of their cropland in the program. The degree of participation in the north-central wheat-livestock area was also about a third of the cropland per participant. Participation varies widely; it ranges from 10 to 85 percent, for all of the counties. A few put all eligible land in the Soil Bank by participating in both the Conservation and the Acreage Reserve. Only a few acres of hayland were put in the Conservation Reserve at the nondiversion payment rate.

Annual rental rates for cropland placed in the Conservation Reserve averaged \$7.00 an acre in the north-central wheat-cattle area and \$12 an acre in the southeastern cornlivestock area. The rates were uniform within counties.

Participants Compared with Nonparticipants

Farm survey records were obtained from a total of 92 participants and 100 non-participants in the two areas (table 7).

TABLE 7.--Characteristics of farms and farm operators participating and not participating in the Conservation Reserve Program, South Dakota areas, 19571

	North-c wheat		Southeastern corn-livestock area		
Item	Farmers partici- pating	Farmers not partici-	Farmers partici- pating	Farmers not partici-pating	
Farm operators interviewednumber	50	50	42	50	
Land per farmacres	1,214	1,070	204	222	
Cropland per farmacres-	490	564	175	186	
Real estate value per acredollars	38	34	192	215	
Real estate taxes per acrecents-	44	35	165	176	
Average age of operatoryears	48	44	50	46	
Percentage of farm operators who					
Are tenantspercent	g	28	12	54	
Are part-time farmersdo	30	8	21	8	
Have nonfarm jobsdo	30	Ö	14	8	
Live off the farmdo	22	14	43	10	
Have retirement annuitiesdo Have gross farm incomes of	14	12	12	2	
\$5,000 or moredo	46	56	10	3 0	
\$2,500 or moredo	12	4	7	12	

¹ Data are for farms in Edmunds and Potter Counties in the north-central wheat area and Lincoln and Union Counties in the southeastern corn-livestock area.

Farms whose operators had land in the conservation reserve averaged about the same size and had about the same acreages of cropland as other farms.

Farm real estate values and real estate taxes per acre averaged slightly higher on participating than on nonparticipating farms in the wheat-cattle area. The reverse was true in the corn-livestock area. The fact that the differences were small indicates that the average quality or productivity of the land on farms whose operators participated in the program was about the same as on farms with nonparticipating operators.

Another question that arises is, What quality of land do participating farmers put into the conservation reserve? When asked this question, 39 participants said it was as good as other land on the farm, 10 said it was higher in quality, and 22 said it was lower.

Farm operators who have land in the conservation reserve also differ in some respects from other operators (table 7). On the average, more of them are part-time farmers, more of them live off the farm, and more of them receive retirement annuities. Nevertheless, a majority of the participants in the program are full-time farmers who reside on their farms and are not retired. The ages of participants averaged slightly higher than those of nonparticipants.

A smaller percentage of the participants than nonparticipants had gross incomes above \$5,000. In the wheat-cattle area, more of the participants than nonparticipants had nonfarm incomes of \$2,500 or more. Again the reverse was true in the corn-livestock area.

Factors that Affect Participation

Most farmers with land in the conservation reserve gave more than one reason for participating in the program. Most of these reasons have an economic context, in that participation in the program was more profitable to the farmer in his particular circumstances than was nonparticipation.

Some farmers said they were using the program to improve soil productivity or to arrest erosion. Others said they wanted to reduce the size of their operations and partially retire. A few who would have rented out their land preferred to put it in the conservation reserve.

Most farmers who were not participating in the program said the rates of payment must be higher before participation would be profitable for them. An indication of how much higher can be found in estimates of probable net returns from oats, which is an alternative crop available to most farmers in both study areas. In the north-central wheat-cattle area, where the annual rental payment under conservation reserve averages \$7 an acre, the estimated returns from oats, based on 1957 prices and 1947-56 average yields, are also \$7. In the southeastern corn-livestock area, the estimated average returns from oats are \$13 an acre, as compared with the payment of \$12. Thus in both areas, the expected average returns from oats are about equal to the program payments. This means that the program is relatively more attractive to farmers who have land of less-than-average quality.

Lack of information about the Conservation Reserve Program has been thought to be an important reason for some of the nonparticipation. In both areas, more than 35 percent of the nonparticipants were found to have little knowledge of the program, and a much larger percentage said they had not considered whether or not participation would be profitable for them.

Effects on Production Small

Farm production has changed little here as a result of the Conservation Reserve Program, as only 4.3 percent of the cropland in the north-central area was placed in the program and only 0.9 percent in the southeastern area. The acreage of cropland used to grow oats and barley may have been slightly less in 1957 than it would have been if there had been no program. Livestock numbers have not been influenced by this small reduction in cropland used to grow feed crops. As both areas normally ship out feed grains, participation would need to be considerably higher to influence the total livestock production of the area.

Some marginal cropland contracted in the program in the wheat-cattle area will be likely to remain in grasses after the contracts expire. This is evident from the fact that 11 operators in Potter County reported that they would leave their conservation reserve land in permanent grass. But a majority of operators, said they would return their conservation reserve land to crop production after their contracts expired.

The Conservation Reserve Program thus far has not appreciably influenced the use of buildings and machinery or the intensity of farming on farms with operators participating. These farmers have continued to use their buildings and machinery to operate about as before. Little fertilizer is used in either of these study areas, and there was no evidence that farmers increased the rates of fertilization or otherwise attempted to increase crop yields on the remaining land. Farmers are likely to intensify their operations only as they find that it pays, whether or not they participate in the program.

Thus far apparently, the program has affected neither the price of land nor the availability of land for rent. Very little rental land has been placed in the reserve. None of the farm operators interviewed had bought land specifically to put into the program.

Participation May Increase Slightly

At the time of the interview, most farm operators had made no definite plans for participation in 1958. However, about 14 percent of the participants said they plan to put additional cropland in the conservation reserve in 1958. Five percent said they plan to put all of their eligible land in the soil bank. About 4 percent of the nonparticipants said they plan to put some cropland in the conservation reserve.

COLUMBIA BASIN WHEAT AREA OF OREGON

The white wheat-producing region of the Pacific Northwest was represented in this study by the Columbia Basin area in Oregon. This area includes Gilliam, Morrow, Sherman, Umatilla, and Wasco Counties. Specialized wheat farms, which are farmed with a grain-fallow crop rotation system, are prevalent in the area. The acreage of wheat has decreased by about a third under acreage-allotment programs during the last few years. Barley has been grown on the diverted acres. Livestock production, primarily beef cattle and sheep, is also important in some parts of the area. The numbers of livestock and forage production in the area have been stable for many years. Specialized wheat farms average about 2,100 acres and specialized livestock farms about 3,400. A considerable number of small diversified farms exist in the western and eastern counties of the area. Timber is produced on small acreages of land in isolated areas.

Extent of Participation

All participants (65) in the Conservation Reserve Program in the Columbia Basin area were included in the study reported here. This is a very small percentage (1.8) of all farms in the area, and an even smaller percentage (0.6) of the total acreage of cropland.

Participation in the Soil Bank Program in 1957 was as follows:

Percentage of all farms with Conservation reserve contracts Acreage reserve contracts	
Percentage of all cropland placed in Conservation reserve	0.4
Acreage reserve	
Total in soil bank	4.6

The extent to which individuals participate in the Conservation Reserve Program is also relatively small. About a third of the 65 participants contracted 5 percent or less of their total cropland. Five-sixths contracted 20 percent or less. As a group, these farmers put 17 percent of their cropland in the conservation reserve program.

The participation in the acreage reserve of the participants and nonparticipants in the conservation reserve who were interviewed is of interest also. Seventeen percent of the wheat allotment acreage on farms whose operators participated in the conservation reserve was displaced by the acreage reserve. Ten percent was displaced on the farms of those interviewed who were not participating in the conservation reserve.

Regular annual conservation reserve rental payments for land contracted in this area were \$12 per acre in 3 of the 5 counties (Wasco, Gilliam, and Morrow). The average rental payment was \$13.00 per acre in Sherman County and \$14.00 in Umatilla County.

Participants Compared with Nonparticipants

The average size of farms owned or operated was determined for both the participants and nonparticipants interviewed. In the Columbia Basin area, farms of participants were found to be considerably larger than those of nonparticipants (table 8). Only five participants placed all eligible land in the soil bank. These farmers had relatively small farms; they averaged less than 510 acres with a small proportion of cropland.

TABLE 8.--Characteristics of farms and farm operators participating and not participating in the Conservation Reserve Program, wheat-fallow area of Oregon, 1957¹

Item	Farmers participating			:
	All eligible land in		Part of	Farmers not
	Conservation Reserve	Acreage and Conservation Reserves	eligible land in Conservation Reserve	partici- pating
Farm operators interviewed number	2	3	60	65
Land per farmacres	285	508	2,608	1,794
Cropland per farmacres	116	224	1,841	1,107
Real estate value per acre of croplanddollars	121	89	104	160
Real estate taxes per acre of croplandcents	231	136	104	200
Average age of operatorsyears	66	36	45	50
Percentage of farm operators who- Are tenantspercent Are part-time farmersdo Have nonfarm jobsdo Live off the farmdo	0 0 100 100	0 0 100 67	15 12 18 27	25 8 8 8 22
Have retirement annuitiesdo Have gross farm in-	100	0	5	2
comes of \$10,000 or more	0	0	74	83
Have nonfarm incomes of \$2,500 or moredo	50	100	67	75

¹ Data are for farms in Gilliam, Morrow, Sherman, Umatilla, and Wasco Counties. All farmers participating in the conservation reserve are included.

How does the land in farms of participants compare in quality with land in other farms? And how does the land placed in the program compare with other land in participating farms?

To answer the first question, the average normal yield for farms established by county and community committees and the average land values, based on farmers' and landowners' estimates and real estate tax assessments, were used as criteria. The resulting evidence indicates that farms of participants were generally lower in quality than farms whose operators had no land under contract. Real estate values and taxes averaged lower for farms with land in the program than for farms with no land in the program. The average normal yield of wheat set by county and community committees for farms with land in the program is about 10 percent below the average set for the county. The average normal yield for the farms of nonparticipators is 3 percent above the county average.

To determine the quality of cropland placed in the program compared with the remaining land of participants, evaluations were obtained from enumerators, farmers surveyed, and local personnel in charge of the program. The results of these evaluations indicated that on 11 percent of the farms, land in the conservation reserve was well above other land on these farms in quality; on 50 percent of the farms, the land contracted was comparable or slightly better than the remaining farmland; while on 39 percent of the farms, the conservation reserve land was slightly less productive than the remaining cropland.

There were fewer tenants among the participating farmers than among nonparticipants. But participants included more part-time farmers, more having nonfarm jobs, more living off the farm, and more receiving retirement annuities than nonparticipants.

Participants averaged a few years younger than nonparticipants. Only those few farmers who contracted all of their land in the soil bank program were approaching retirement age. These were full owners and were retired or had full-time nonfarm jobs. Only 1 nonparticipant received a retirement annuity, whereas 5 of the participants received retirement annuities.

Gross income received from farming in the Columbia Basin area is relatively high. Nearly 50 percent of both participants and nonparticipants in the area receive gross incomes of more than \$25,000 a year. Only a slightly larger percentage of participants than nonparticipants received gross incomes below \$10,000.

Factors that Affect Participation

The net return from rental payments compared with the net return from cropping land is apparently the main consideration in a farmer's decision as to whether to place nonallotment land in the Conservation Reserve. Farmers surveyed mentioned land productivity, field location, topography, need for conservation, and efficient use of labor and machinery, as factors that affect the net returns from the land. Also, the costs of fencing and weed control that arise as a result of participation were mentioned as affecting the net returns from the program.

Other considerations that influence farmers to participate in the programs are that it helps to reduce surpluses, permits retirement of the operator, and provides a certain income. However, certainty of income was a minor consideration of most participants. Moisture conditions during the last several years, and particularly in the fall of 1956, were favorable. This has removed the major hazard to crop production in the area.

Reasons for not participating include the reduction of farm size, restrictions imposed by landlords, opposition to government programs, and the total payment limitation of \$5,000. The \$5,000 limitation has not seriously affected participation to date. However, at the current payment rates, in most instances this limit will prevent entire farms from being removed from production.

Does knowledge or lack of knowledge of the conservation reserve program affect farmers' participation? Enumerators observed that about 3 in 5 participants had a good-to-fair understanding of the program. As a group, the nonparticipants appeared to be less informed. Their knowledge was limited largely to the rental and practice payment rates of the program. Beyond this, nonparticipants apparently had made little effort to inquire as to the advantages or disadvantages of the program to them.

Calculations made for a wheat farm of average size in this area show that net income would be reduced by putting land that has been used to grow barley in the conservation reserve. The estimates assume normal crop yields and 1957 costs and prices. This farm contains an average of 1,200 acres of cropland, grows about 360 acres of wheat and 240 acres of barley each year, and has about 600 acres in fallow. If the 240 acres in barley were placed in the conservation reserve, the total return to labor, management, and investment in land, buildings, and machinery would be reduced by about \$1,100, or 8 percent. Annual rental payments would need to be about \$4.60 higher per acre before it would be as profitable to put the 240 acres in the program as it would be to use them for growing barley.

Net incomes also would be reduced on smaller farms where land of average quality is shifted from barley to the conservation reserve. Costs would not be reduced much with less land in crops on these farms. Gross incomes per acre from the growing of barley average higher than annual rental payments.

Estimates for a large wheat-fallow farm show that it would be profitable to put some land that has been used to grow barley in the conservation reserve. For example, a farmer who has 2,400 acres of cropland with 720 acres in wheat, 480 acres in barley, and 1,200 acres in fallow could increase his total return to labor, management, and investment by about \$540, or 2 percent, if he put 400 acres of barley land in the program. Some costs would be reduced and labor and machinery on the farm still would be utilized fully.

These estimates indicate that only in the case of the very large wheat farms or those that have land of low productivity is it profitable for farmers to participate in the conservation reserve. In instances when farmers want to retire or shift to nonfarm employment, participation in both the Conservation and Acreage Reserve Programs may provide higher returns than would renting the land to other farmers.

Little Influence on Production Thus Far

The immediate effects of the Conservation Reserve Program on agriculture in the Columbia Basin area are minor because of the small amount of participation. Most of the contracts made during the 1957 season were for a 5-year period and provided for a grass cover. Nearly 80 percent of the participants said that the land they put in the conservation reserve would have been in their regular crop rotation if the program had not been in effect. About 16 percent said that without the program they would have put contracted land into grass or left it idle. Some would have grazed the land that is now restricted from grazing under the program. To this extent, an expansion of livestock production in the area may have been limited slightly. A few contracts were made for 10 years when cropland was contracted to round out timber holdings or windbreaks.

One factor that is discussed extensively by farmers in this area has to do with the acreage of fallow land released from the normal crop-fallow rotation as land in crops is banked. Some farmers have contended that the rental payment should apply to fallow land released as well as to land removed from crops. Under the program in the past, the released fallow land could be left idle or seeded to grass and pastured. A change in the 1958 program permits the released fallow land to be entered in the Conservation Reserve Program at the nondiversion rate.

At the present level of participation, participants expect to make no changes in the use and upkeep of farm buildings and machinery because of the program. Part of the labor

resource released from crop production thus far has been utilized in establishing vegetative cover on the contracted acreage.

In most instances the land contracted is owned by the farm operator. In the few instances of rented land under contract, the rental payment was usually divided equally between the renter and the landlord. The landlord's share in most crop-rental agreements made in the area is one-third of the crop. Except for this change in rental contracts, there is no evidence of significant change in landlord-tenant relationships as a result of the Conservation Reserve Program.

The program appears to be particularly well adapted to help those farmers who want to retire. The fact that a few farmers have taken advantage of the program for this purpose is evidence that the program is operating in this direction. Retiring farmers represent the sole source of "whole farm" participation thus far in the Columbia Basin area.

Effects on the community could be substantial if participation increased to the extent that a large number of whole farm units were placed in the program and large numbers of owners and operators then moved out of the area. The current effects of the program on the community are insignificant. Under present conditions, a slight shift from farm supply and service expenditures to living and home expenditures may occur.

Participation May Continue Low

Future plans of farmers regarding participation in the program, at the time the study reported here was made, were indefinite. For most farmers, it was too early in the year to formulate plans. Of the participants, 18, or 30 percent, planned to contract additional land in the conservation reserve. Of the nonparticipants interviewed, only 2 were considering participation.

Approximately 23 percent of the participants plan to let the trees or grass grow permanently after expiration of the contract. They would use the land for pasture and increase livestock production. Twenty-six percent would like to renew the contract. Some of these participants indicated that in renewing they would contract different fields. The largest group of participants (45 percent) would put the land back into the wheat-summer fallow rotation.

An increase in rental payments and higher maximum allowance was mentioned by 41 percent of the nonparticipants as main conditions under which they would consider contracting some of their land. Permission to graze the land contracted and cost-sharing for fencing and weed control were conditions mentioned by only a few. A relatively large number of the nonparticipants indicated that they cannot agree to a reduction in their farming operations.