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## THE COTTON PROGRAM UNDER THE FOOD AND AGRICULTURE ACT OF 1965

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Many features incorporated in the Food and Agriculture Act of 1965 were previously tested for feed grain and wheat but used little, if at all, for controlling production and supporting incomes from cotton. The Act included additional provisions specifically applicable to cotton. The following analysis is directed toward appraising the effects of the Act on cotton production, on the income of cotton producers, and on Government costs.

### HISTORICAL BACKGROUND

The Agriculture Act of 1965 marked a major change in the emphasis of farm programs. It was the first legislation to officially recognize (by legislation for a 4-year program) that the surplus production of specific commodities was not a temporary problem that could be solved with temporary programs. It took cognizance of the desirability of allowing prices to respond to changes in supply and market demand. The Act also reflected the need for reducing the amount of resources used in production of surplus crops. Although this fact was also reflected in the Soil Bank program of the 1950's and in the emergency feed grain programs of 1961-65, the Soil Bank programs were allowed to lapse and the emergency feed grain programs still reflected the idea that surpluses were temporary.

The earlier acreage allotment programs encouraged producers to restrict production of specified crops in exchange for prices supported at relatively high levels. Land use on each farm could be shifted from allotment crops to other crops. Production of wheat, cotton, tobacco, peanuts, and rice was restricted by allotments and marketing quotas. Most of the reduc-

tion in acreage of these crops showed up as increases in acreages of feed grains, soybeans, forage crops, and fallow. Stocks of major crops held by CCC rose for several years as prices generally were supported above market equilibrium prices by nonrecourse loans from the Commodity Credit Corporation.

By 1961, the emergency feed grain programs brought about the first change toward the programs that were later included in the 1965 legislation. Although prices were supported at relatively high levels, land taken out of feed grain could not be used for production of other crops. In 1962, the first step toward lower price supports was made by reducing the loan rate for wheat and making up the difference by a price support payment. For 1964, this principle was applied to feed grains and the loan rate for wheat was further reduced, while the price support payment rate was raised, as well as extending the program through 1965. Thus, all of the features of the program had been tested as they applied to feed grain and wheat by the time the 1965 Act was passed. However, none of these program provisions, except for relatively low price support payments in exchange for diversion in 1964 and 1965, had been tested relative to cotton and the need for immediate action left little time for advance analysis of their application to cotton. With stocks of cotton approaching the equivalent of a 2-year supply, the need to do something to restrict a further buildup in stocks was urgent.

As a result of the 1965 Act, the feed grain and wheat programs beginning in 1966 remained essentially as they were in 1964 and 1965, but in the cotton program there were notable changes from the acreage allotment and relatively high price support program that prevailed through 1965.

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## **EFFECT OF THE 1965 ACT ON FEED GRAINS, WHEAT, AND COTTON**

Although the Agriculture Act of 1965 provided similar programs for feed grains, wheat, and cotton, the application to the three commodities were quite different. For one reason, diversion started from different bases. Diversion of wheat and cotton was from current allotments, while diversion of feed grains was from the average acreage harvested in 1959 to 1960.

Wheat and cotton allotments had been in effect since 1954. By 1966, when the 1965 Act became effective, acreages of these crops had been reduced considerably below preallotment years. However, feed grain bases were based on acreages in years when production was unrestricted and when acreages of feed grains probably reflected shifts to these crops from crops restricted by allotments. Furthermore, upward adjustments were made in many individual feed grain bases prior to the time the 1965 Act went into effect so that by 1966 the aggregate feed grain bases were several million acres greater than the average acreage in the base years, 1959-60. Current bases also reflect base acreages released with the expiration of Conservation Reserve agreements. Similar acreages are included in wheat and cotton allotments.

Even though the 1967 and 1968 Wheat Programs and the 1969 Cotton Program did not provide for diversion from allotments, part of the wheat certificate payments and cotton price support payments in those years were proxies for diversion payments; that is, if acreages had exceeded allotments, farmers would not have been eligible for income support payments, and, in the case of cotton, penalties would have been imposed for exceeding allotments.

It could be rationalized that an attempt was made through administrative interpretations to equalize the program effects on the three commodities. For example, under the feed grain programs, farmers are required to divert 20 percent of their feed grain bases to be eligible for price support payments. Theoretically, intention was to constrain output comparable to the reduction in allotments of wheat and cotton, but, in effect, the price support payments became a payment for minimum diversion.

### **COTTON PROGRAMS UNDER THE 1965 ACT**

Under cotton programs prior to 1966, cotton producers received price support loans only for actual production, but under the 1965 Act, as things worked out in practice, they commonly received price support payments for more cotton than was produced. The acreages for which price support pay-

ments were computed frequently exceeded the acreage harvested and sometimes exceeded the acreage planted (Table 1).

In 1966, the total acreage for price support exceeded the acreage harvested in Florida, Georgia, Illinois, Kentucky, Missouri, Nevada, North Carolina, Oklahoma, South Carolina, Texas, and Virginia. In 1967, the total acreage receiving price support exceeded acres harvested in 15 of 19 States with cotton allotments; in 1968, it was 7 of 19. Although one of the requirements for price support payments was that the acreage must have been planted, many farmers, in other States, likely received price support payments on more acreage than was harvested.

The average of yields that were used as a basis for computing payments exceeded State average yields of cotton produced in all States and years from 1966 to 1968 except one, and that was in Nevada in 1968 (Table 2). In some States and years, these yields exceeded actual yields by as much as 50 percent. On a national average basis, they exceeded actual yields by 48 pounds per acre in 1968, 69 pounds per acre in 1966, and 129 pounds per acre in 1967.

At least four factors contributed to the above disparity between actual yields and those used as a basis for payments. Unfavorable weather, particularly in 1967, held actual yields considerably below normal. The relatively low price of cotton discouraged gleaning the last few pounds per acre. The reduction in the amount of labor used to produce cotton also tended to reduce yields, as farmers rapidly shifted from hand hoeing to chemical weed control. In some cases, the change resulted in weedier fields and lower yields. In others, the chemicals retarded the growth of cotton as well as that of weeds. Part of the detrimental effect of the chemicals resulted from farmers' inexperience with chemical weed control and the consequent application of too much or too little, or application under improper conditions. On the other hand, sale and lease and release and reapportionment of allotments tended to raise both the actual yields and those used to compute payments because allotments usually were moved to better land.

Perhaps, the change in technique from hand hoeing to chemical weed control was not sufficiently recognized by the USDA yields projection committee in estimating projected yields. Thus, the U.S. average projected yield of 545 pounds, used as a starting point in assigning farm yields, was too high and these estimates were reflected in the yields used in computing payments. But the practice of permitting individual farmers to be paid on the basis of "proven yields," when these could be established without a downward adjustment in yields on other farms, re-

TABLE 1. COTTON ACREAGES PLANTED, HARVESTED, AND RECEIVING PRICE SUPPORT PAYMENTS, 1966-1968

State	1966			1967			1968		
	Acres planted	Acres harvested	Acres for price support payment	Acres planted	Acres harvested	Acres for price support payment	Acres planted	Acres harvested	Acres for price support payment
	1,000 acres								
Alabama	589	564	554	513	340	532	555	525	530
Arizona	255	252	212	248	245	213	298	296	211
Arkansas	930	865	834	830	715	829	1,045	980	825
California	632	618	467	595	588	474	695	687	474
Florida	---	14.3	14.8	---	10.0	11.8	13.4	12.5	12.7
Georgia	403	380	398	335	267	346	410	395	387
Illinois	---	0.5	1.8	---	0.2	1.7	2.0	0.3	1.8
Kentucky	---	2.5	4.3	---	0.9	4.3	5.0	3.7	4.3
Louisiana	367	357	342	348	330	337	423	410	338
Mississippi	1,032	993	957	955	890	945	1,155	1,105	945
Missouri	255	190	231	245	90	226	318	190	231
Nevada	---	2.2	2.3	---	2.2	2.2	2.5	2.4	2.2
New Mexico	142	134	108	132	122	109	162	152	109
North Carolina	244	155	231	191	75	190	206	195	192
Oklahoma	447	380	431	425	370	428	425	385	433
South Carolina	355	305	342	307	190	304	354	340	325
Tennessee	398	365	339	336	236	340	394	365	340
Texas	4,265	3,968	3,990	3,960	3,525	3,904	4,450	4,125	3,961
Virginia	---	6.1	9.6	---	0.6	8.5	8.2	6.0	7.8
Total	10,349	9,552	9,468	9,448	7,997	9,203	10,921	10,175	9,329

sulted in payments based on yields that exceeded the official projections.

The Food and Agriculture Act of 1965 provided that the total price for permitted production of cotton could not be less than 65 percent of parity. Permitted production was interpreted to include the potential production on acreage voluntarily diverted for payment.

Although the loan rate was set at a realistic 21 cents per pound for the 1966 crop, it was further reduced for the 1967 and succeeding crops despite a sharp reduction in the supply. The price support payment rate was raised accordingly, to keep the total of price support payment plus loan rate at 65 percent of

parity; whereas, the average price of cotton rose considerably above the loan rate. Thus, instead of receiving 65 percent of parity for the cotton produced, farmers received from 74 percent of parity for the 1966 crop to 97 percent in 1967 (Table 3).

The increase in price support payments since 1966 reflects the increases in parity prices of cotton which, in turn, reflect the rise in the parity index. In 1966, the price support payment was 9.42 cents per pound. In 1967, this was raised to 11.53 cents per pound. Part of the increase (0.75 cents) was due to the reduction in the loan rate, but with no change in loan rate, the price support payment rose to 12.24 cents and 14.73 cents per pound in 1968 and 1969, respectively. A further increase in 1970 is likely.

**TABLE 2. COMPARISON OF COTTON YIELDS ON WHICH PRICE SUPPORT PAYMENTS WERE BASED AND ACTUAL COTTON YIELDS, BY STATES, 1966-1968**

State	1966		1967		1968	
	Average of yields used as basis for payments	Excess of projected yields over yields per harvested acre	Average of yields used as basis for payments	Excess of projected yields over yields per harvested acre	Average of yields used as basis for payments	Excess of projected yields over yields per harvested acre
Pounds per acre						
Alabama	525	133	564	282	541	171
Arizona	1,170	191	1,179	292	1,207	56
Arkansas	620	202	644	311	595	91
California	1,164	212	1,173	326	1,156	84
Florida	416	80	448	112	456	68
Georgia	497	99	540	132	516	194
Illinois	533	179	563	318	500	20
Kansas	237	---	257	---	248	---
Kentucky	672	147	671	349	646	49
Louisiana	622	20	629	8	634	2
Mississippi	694	41	742	175	730	70
Missouri	627	219	622	308	588	95
Nevada	915	102	889	22	844	- 36
New Mexico	773	125	767	148	743	175
North Carolina	470	180	479	202	435	140
Oklahoma	331	61	326	75	316	17
South Carolina	491	49	550	101	533	173
Tennessee	643	168	660	365	615	181
Texas	411	26	437	61	430	26
Virginia	435	255	438	300	372	124
United States	549	69	576	129	559	48

The Act also provides that the payment for required diversion could not be less than 25 percent of parity per pound of projected yield on the diverted acreage. During the first 2 years of operation (1966 and 1967) under the 1965 Act, the payment rate for voluntary diversion also was at 25 percent of the parity price. After the first year, it was clear that this rate was too high for voluntary diversion, because in the first year nearly all cotton producers diverted the maximum of 35 percent of allotments permitted by the program. The 1968 payment for voluntary diversion was reduced to 6 cents per pound, compared with 10.5 cents and 10.78 cents in 1966 and 1967, respectively. Even so, about 18 percent of the allotted acreage was voluntarily diverted. Although payment for voluntary diversion was about at the level needed to induce farmers to divert, 20-20 hindsight indicates that payments for the required diversion were higher than would have been necessary

to encourage diversion even if it were not a necessary condition to be eligible for price support payments.

By 1969, the combination of an effective program to reduce production and less than favorable weather had reduced stocks of cotton to the point where acreage diversion was no longer considered necessary. Marketing quotas are still in effect and, thus, prevent producers from expanding cotton acreage in excess of their allotments.

The combination of legislative requirements and administrative determination resulted in a program that was more remunerative to producers than the pre-1966 programs when higher support prices were in effect.

The size and distribution of payments to producers was another effect of the cotton program that

**TABLE 3. PRICE RECEIVED FOR COTTON, INCLUDING PRICE SUPPORT PAYMENT, UNITED STATES**

Item	Program year		
	1966	1967	1968
Total cotton allotment on participating farms, acres	15,126,712	14,902,763	14,907,868
Cotton harvested, acres	9,552,000	7,997,000	10,175,000
Harvested as percentage of allotment, percent	63	54	68
Production, 1,000 bales	9,575	7,455	10,822
Season average price	20.84¢	25.60¢	22.5¢
Value of production	\$ 997,467,000	\$ 953,627,000	\$1,217,475,000
Price support payment	\$ 489,352,840	\$ 611,709,698	\$ 638,821,168
Total value and price support payment	\$1,486,819,840	\$1,565,336,698	\$1,856,296,168
Total price received per pound produced	31.06 ¢	41.99¢	34.31¢
Parity price	41.89	43.10	43.03
Price received as percentage of parity	74	97	80

many people did not anticipate. In 1968, a total of nearly 450,000 producers received payments for participation in the cotton program. Of these, more than 15,000 received \$10,000 or more and about 5,200 received \$20,000 or more. The largest payment to any one producer exceeded \$4 million.

Payments proportionate to size of allotment and volume of production resulted in large payments to some producers. Such large payments to a few producers generated considerably increased support for a limit on the amount of payment to any one producer, but, if a limit were to be imposed, another feature of the 1965 Act, commonly known as the "snapback" provision, would become effective. This provision specified that, "If the Secretary is unable to make available to all cooperators the full amount of the price support to which they would otherwise be entitled . . . price support to cooperators shall be made available for such crop through loans or purchases at such level not less than 65 percent of parity . . ." Thus, unless the basic legislation is changed, a limitation on payments to individual cotton producers would be meaningless.

As indicated earlier, the 1965 Act was enacted under stress of surpluses and need for haste. The Act included several features specifically applicable to cotton. Little time was available for analysis of the effects of the program on cotton production, farm

incomes, or program costs, but, after nearly 4 years of experience with the program, the effects of the various provisions are much clearer.

Although cotton production has been below utilization since 1965, production potential may still exceed utilization at relatively low prices if all restrictions on production are removed. For example, in 1968, some 122,000 producers, with 7.2 million acres of allotments, planted about 1.6 million acres for which they received only the market price. This acreage was planted despite the offer of 6 cents per pound of potential production if it had been diverted. Some of these producers were prohibited from expanding production because of marketing quota penalties. In addition, nearly 4.5 million acres were planted by producers whose plantings did not exceed the acreage on which they received price support payments. Some of this cotton would not have been planted if price support payments were not available. On the other hand, on some farms the acreage was reduced because farmers chose to divert for 6 cents a pound.

Thus, the need remains to find ways to adjust an industry with too much capacity to a new level of output and prices. Part of the adjustment may come as a result of improved technology, thus lowering costs; another from shifting production to lower cost areas.