

**Inter-Area Shifts in Burley Tobacco Allotments,  
1950-71**

By

**D. Milton Shuffett, Robert E. Barton and Patrick M. Henderson**



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University of Kentucky :: College of Agriculture  
Agricultural Experiment Station :: Department of Agricultural Economics  
Lexington



Late-Stage Shifts in Baby Tobacco Allotments

1950-51

By Milton J. Holt, Robert E. Brown and Curtis M. Henderson

RESEARCH REPORT 14 February 1953

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INTER-AREA SHIFTS IN BURLEY TOBACCO  
ALLOTMENTS, 1950-71

By

D. Milton Shuffett, Robert E. Barton and Patrick M. Henderson\*

INTRODUCTION

The geographic distribution of production of most agricultural commodities shifts continuously over time in response to technological and other developments affecting the comparative advantage of production by areas. Over time, production tends to shift to those areas that have the greater relative advantage in production from the standpoint of production costs, marketing costs and where the alternatives available to the producer favor the production of the commodity.

Prior to production control programs, the geographic distribution of burley tobacco was established on the basis of economic and technological considerations relating to the production and marketing of the crop. As production of the crop increased immediately prior to and after World War I in response to expanding market outlets in the manufacture of cigarettes, production tended to be concentrated in Central Kentucky, with production on a less dense basis throughout much of Kentucky and surrounding states.

With the advent of production control programs for burley tobacco in 1933, shifts in production between areas became restricted

and such shifts were no longer totally related to economic forces. In general, all production control programs that entail allocation of production rights based on past history of production tend to be restricted to regional adjustments in production patterns. At the same time, program changes and program administration often are such that they cause redistribution of production between areas. This has been particularly true of the control programs for burley tobacco. The production of burley has been controlled throughout the 1933-71 period with the exception of the crop produced in 1939. Various methods have been employed in attempts to keep production in line with market needs, including poundage quotas, incentive payments to producers for reducing output, acreage allotments and, finally, poundage quotas again beginning with the 1971 crop. Over the history of the program penalties for noncompliance have varied from forfeiture of incentive payments to heavy cash penalties for the sale of burley produced in excess of farm quotas. Also, differential treatment of small and large producers in allotment reductions was a feature of the burley tobacco production control program for many years. Likewise, at various times over the history of the program, producers were able to increase production quotas by producing tobacco in excess of the farm quota for the purpose of establishing an

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increased "history of production" on which the farm allotment was based. As a result of the operation of the burley tobacco control program over nearly 40 years the program has thus been both restrictive in that allotments have been based on historical production and at the same time conducive to regional adjustment in production patterns through differential adjustments in allotments for small and large producers.

Thompson [1, 2] in 1952 reported that burley allotments had shifted from the more dense areas of production to fringe areas under the influence of the government production control program during 1939-50. The current study brings up-to-date the information reported by Thompson and analyzes the effect of legislative and administrative programs relating to burley tobacco during the 1950-71 period on continued shifts in allotments and production between geographic regions.

The purpose of this study was to trace production patterns by geographic areas during the 1950-71 period and to determine those shifts in allotments between areas attributable to the production control program in effect. While this aspect of the study is historical in nature, results should prove useful in future modification of the burley program and in the operation of production control programs for other agricultural commodities by pointing out the effects of particular policy actions on the shifts that occur between producing areas.

#### Objectives

The specific objectives of this research were first, to determine the changing relative national importance in burley tobacco production (percent of National quota) in 12 geographic areas of the Burley Belt and, second, to determine the relationships between changing production quotas by regions and legislative changes in the burley

tobacco program. The burley tobacco control program was based on acreage allotments between 1940 and 1970, and throughout the period protection against allotment reductions was given to smaller producers. A change in the legislation for controlling production in 1971 shifted the control aspects of the program to pounds rather than acreage, with provisions for gradually eliminating the special protection against allotment cuts for small producers. The change in the burley program brought sharp changes in production quotas by regions and in effect froze allotments for the future according to the 1971 distribution.

The findings of the study will be useful as a means of appraising the effects of the burley tobacco program and in providing guidelines to policy makers and administrators on the impact of programs to agriculture in an area. Particularly in the case of the burley program it can be illustrated that a program guaranteeing high prices and providing special protection to small producers tends to fragment the industry into small units and expand the geographic pattern of production over a wider total area. Also, the findings will illustrate how a program change can change production patterns by areas abruptly and permanently.

#### Methods

The methods used in this study are largely historical analyses and descriptive in that the major objectives of the study was to present the changing picture of burley tobacco production quotas by geographic areas of the Burley Belt and to relate the changes to the burley tobacco control program and its provisions.

To retain comparisons with the earlier study by Thompson [1], the same geographic areas were used to illustrate the changing geographic pattern of production over the most recent 20-year period. These areas are



representative of the different densities of production of burley throughout the eight-state producing area, and together the illustrative production areas accounted for approximately one-half of the total U.S. production of burley during 1950-70. The geographic areas chosen to represent different production densities are shown in Fig. 1.

Shifts in production were analyzed by state and for the 12 areas chosen to represent the various characteristics of geographic areas of the Burley Belt. The method used for measuring shifts in production between areas was to compare, over time, the relative share of the national burley allotment allocated to each of the areas and/or states being compared. As for comparisons between states, both allotted acreage and total pounds of production were compared in order to show actual production compared with potential production as indicated by acreage allotments.

Relative shares of national allotments and production were computed for 5-year intervals for the 12 representative areas and annually by states. County data on allotments and production are available only from records in local Agricultural Stabilization and Conservation Service offices, and collection of data on an annual basis for all of the county units would have been both time consuming and expensive. At the same time, the data on the 5-year interval basis will provide the general nature of change occurring. The earlier study by Thompson made comparisons on an annual basis and indicated that little year-to-year variation from the general pattern of change occurred during 1933-50. A check on the annual variation about the general trend was provided by a comparison of shifts on a state basis annually. This comparison of state data indicated that measuring the shifts by regions on a 5-year basis provided valid comparisons and that the intra-period deviation from the period-to-period change was minor.

Shifts in the relative importance of burley among areas was related to the

production control-price support program in burley by analyzing the changes in total allotments over this period of years and the procedures for allocating allotments among producers along with the characteristics of the different areas to provide reasons for the differential changes in relative importance of the areas over time.

Additionally, the potential impact of the acreage-poundage program which was legislatively authorized, but rejected by producers in referendums held in 1966 and 1967, upon regional patterns of production was analyzed. Also, the regional allocation of production under the present poundage program for burley which was started with the 1971 crop was determined. Under the provisions of the new burley program the production patterns by areas becomes frozen in that special provisions for smaller producers will be eliminated and shifts that have been observed over the past will not continue, except for shifts that may occur due to failure to plant or lease-out allotments. Such shifts likely will be minimal.

#### The Study Area

The 12 geographic areas chosen for studying the geographic shifts in allotments were:

**Inner Bluegrass**—This area is made up of the nine Central Kentucky counties of Bourbon, Bracken, Clark, Fayette, Harrison, Jessamine, Scott, Shelby and Woodford (Fig. 1). This area is representative of the most intensive burley producing area. Average allotment size in these counties in 1969 ranged from 4.22 acres in Woodford county to 2.11 in Clark county. The number of allotments was approximately the same as the number of farms.

**Outer Bluegrass**—Eight counties were selected as representatives of the Outer Bluegrass area. This area is an intensive burley producing area but is more hilly and the soil is generally less suited to burley production

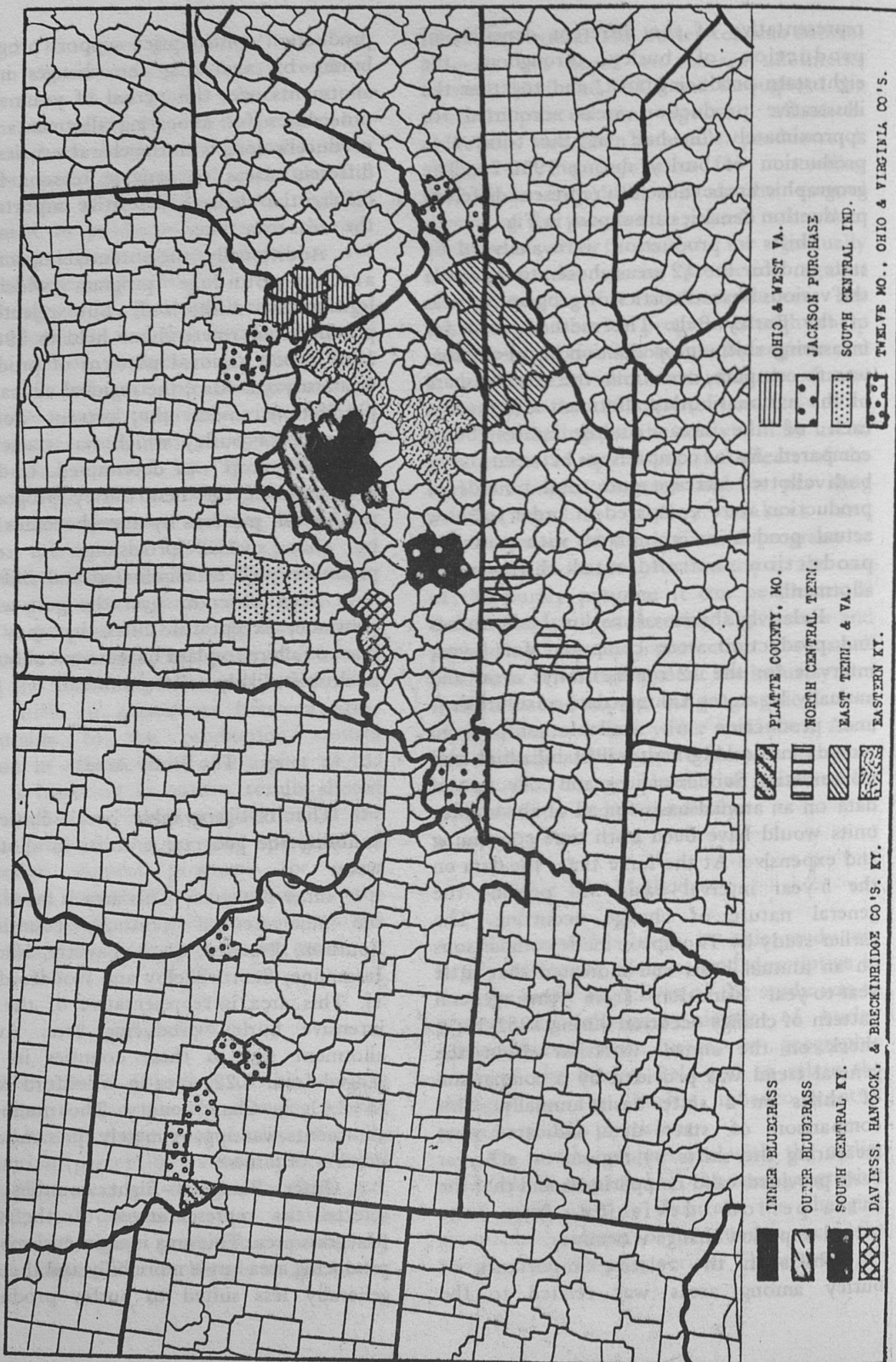


Fig. 1.--Geographic Areas Studied to Determine Allotment Shifts Resulting from Burley Tobacco Program

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than in the Inner Bluegrass region. Allotments are somewhat smaller than in the Inner Bluegrass area. In 1969 the average size of allotments in this area ranged from a high of 2.34 acres in Robertson county to a low of 1.52 in Pendleton county. The eight counties used to represent the Outer Bluegrass area were Franklin, Grant, Henry, Mercer, Montgomery, Owen, Pendleton, and Robertson (Fig. 1).

**South Central Kentucky**—Four counties (Barren, Green, Hart, and Metcalfe) were selected to represent this area of median density of production. Soils in this area are less productive for burley tobacco than those in the Bluegrass Areas and the topography is rolling. Allotment size in South Central Kentucky was considerably smaller on the average than in the Bluegrass Area and averaged from 1.37 acres per allotment in Hart county to 1.28 in Metcalfe county among the sample counties chosen to represent this area.<sup>1</sup>

**Daviess, Hancock, Breckinridge Counties of Kentucky**—This group of three counties was chosen to represent an area of relatively low density of production in Kentucky and an area where dark tobaccos are also produced. Also, this area of Kentucky is one where the land is level to rolling and grain production is an important part of commercial agriculture. Burley allotments in 1969 averaged 1.30 acres in Breckinridge county, 1.24 acres in Daviess county and 1.20 acres in Hancock.

**Platte County Missouri**—This county produces about 60 percent of all of the burley produced in Missouri and apparently is an area particularly suited to burley production. Production is relatively dense and in 1969 the county had 564 allotments that averaged 2.55 acres each.

**North Central Tennessee**—This area of Tennessee was represented by the seven counties of Jackson, Macon, Maury, Smith, Sumner, Trousdale, and Williamson (Fig. 1). The area is level to gently rolling and dark tobaccos are also produced in this area. The area is a medium-dense area of production, and in 1969 the average allotment size ranged from a high of 1.59 acres per allotment in Trousdale county to a low of 0.64 acre in Jackson county.

**Eastern Tennessee and Virginia**—The density of burley production in this area is quite low owing to the predominance of subsistence-type farms. Topography is generally quite rough and most of the burley is grown on small plots of bottom land along the streams. The counties chosen to represent this area were Lee, Russell, Scott, and Washington counties Virginia and the Tennessee counties of Claiborne, Cocke, Grainger, Greene, Hamblen, Hancock, Jefferson, Johnson, Sullivan, and Washington (Fig. 1). Allotments are numerous in this area of the Burley Belt but average quite small. In 1969 the range in allotment size among the selected counties was from a high of 0.82 acre in Greene county Tennessee to a low of 0.50 acre in Sullivan county Tennessee.

**Eastern Kentucky**—This area represented by 14 counties is a low density production area between the Bluegrass Area and extreme eastern Kentucky where burley production is sparse. The range in allotment size among these 14 counties in 1969 was from 0.92 acre in Wolfe county to 0.44 in Lee and Lawrence counties.

**Ohio-West Virginia**—This area is rough and not well suited to tobacco production except in the valleys. Six counties (two in Ohio and four in West Virginia) were chosen to represent the area. Generally allotments are small in this low density area and average allotment size ranged in 1969 from a high of 0.62 acre in Gallia county Ohio to a low of 0.51 acre in Cabell county West Virginia.

**Jackson Purchase**—This area in Kentucky is an area of low density production that is

<sup>1</sup>Hereafter in this report the Inner and Outer Bluegrass Areas together will be referred to as the Bluegrass Area.

primarily a general farming area where dark tobacco production predominates. However, the trend in the area has been away from dark tobacco. Ballard county was excluded from the Jackson Purchase Area for this analysis since it has been a rather heavy producer of burley. The low density of production in the remainder of the area can be illustrated by the relatively small allotments which averaged from 0.56 acre in McCracken county to 0.40 acre in Marshall county in 1969.

**South Central Indiana**—Seven counties were used to represent this area which in some aspects is similar to the Jackson Purchase Area of Kentucky except that dark tobacco is not produced in Indiana. It is, however, an area of low density of production, with allotments which ranged

from 1.21 acres in Bartholomew county to 0.41 in Orange county. However, allotments are relatively few in number in this area and the seven counties selected had only 971 allotments in 1969.

**Missouri, Ohio, West Virginia**—Twelve counties were selected from the three states of Missouri, Ohio, and West Virginia as representative of the very sparse areas of burley production (Fig. 1). Farming in the area selected ranges from subsistence farming in mountainous areas to commercial farming in corn and hogs in some of the Missouri area. However, burley production is very sparse in the areas represented by these counties, and in 1969 the 12 counties in total had only 1,627 allotments, averaging 0.50 acre in size.

#### ALLOTMENT SHIFTS UNDER THE PROGRAM

##### Shifts in Allotments and Production By State

In general, the shift in allotted acreage of burley tobacco since 1950 has continued to reflect a decrease in the share of acreage in states with larger allotments and an increasing share of the total allotment in states with smaller allotments due to minimum allotment provisions of the program (Tables 1 and 2). From 1950 to 1970, for example, Kentucky's share of the national burley tobacco allotment declined from 65.5 to 63.1 percent. The share of the total burley crop produced in Kentucky declined by a lesser amount, however. Kentucky's share of U.S. production of burley was at a record low proportion in 1950 mainly due to weather, but in 1970 Kentucky produced 68.4 percent of the U.S. output of burley, almost exactly the same proportion of the total crop as the average for 1949-51 (Table 3). Burley yields in Kentucky have increased relative to the remainder of the burley belt, particularly in the most recent

5-year period and it is generally accepted that there has been less underplanting of allotments in Kentucky than for the belt as a whole, due to the fact that allotments are larger and production more commercialized. The result has been that Kentucky's share of national production, which declined during the late 1950's and early 1960's, had increased by 1970 to about the same proportion as 20 years earlier.

Allotment shifts between states have generally been away from the states where allotment averages are high and toward the states with smaller allotments and less dense production. The decline in Kentucky's share of the national burley tobacco allotment was offset by increases of 1.53, 0.66, and 0.42 percentages of national allotment in Tennessee, North Carolina, and Virginia, respectively, between 1950 and 1970 (Table 2). Ohio, on the other hand, declined in terms of share of national allotment, but Ohio allotments tend to average about the same in size as for the Burley Belt in total.



Table 1.--Burley Tobacco Acreage Allotments  
By States, 1940-70

Year	State						
	Kentucky	Tennessee	Ohio	N. Carolina	Va.	Indiana	Other
-----Thousand Acres-----							
1950	273.9	84.0	13.9	12.5	14.1	10.6	9.2
1951	310.2	94.3	15.5	13.9	15.9	12.0	10.4
1952	312.2	94.8	15.6	14.1	15.9	12.0	10.1
1953	283.8	87.0	14.1	13.1	14.7	11.0	9.0
1954	261.7	80.4	13.0	12.3	13.7	10.1	8.3
1955	200.3	63.6	10.1	10.1	11.0	7.8	6.4
1956	200.2	63.3	10.0	10.1	11.0	7.8	6.3
1957	200.3	63.2	10.0	10.1	11.0	7.7	6.3
1958	200.4	63.3	10.0	10.1	11.0	7.7	6.4
1959	200.6	63.3	10.0	10.2	11.0	7.7	6.3
1960	200.7	63.4	10.0	10.2	11.0	7.7	6.4
1961	213.1	67.4	10.6	10.9	11.7	8.2	6.7
1962	226.1	71.5	11.2	11.5	12.5	8.7	7.1
1963	226.3	71.6	11.2	11.6	12.5	8.7	7.0
1964	204.3	65.1	10.1	10.6	11.4	7.9	6.3
1965	184.8	59.5	9.1	9.8	10.4	7.2	5.8
1966	159.4	53.1	8.0	8.8	9.3	6.3	5.0
1967	159.5	53.0	8.0	8.8	9.3	6.3	5.0
1968	159.6	53.0	8.0	8.8	9.3	6.3	5.0
1969	159.4	52.9	7.9	8.8	9.3	6.3	5.2
1970	145.8	49.9	7.4	8.4	8.7	5.9	4.8

Table 2.--Proportion of Burley Tobacco Acreage Allotment  
By States, 1950-70

Year	State						
	Kentucky	Tennessee	Ohio	N. Carolina	Va.	Indiana	Other
-----Percentage-----							
1950	65.49	20.09	3.31	2.98	3.37	2.54	2.22
1951	65.71	19.97	3.29	2.95	3.36	2.55	2.17
1952	65.75	19.96	3.28	2.97	3.36	2.53	2.16
1953	65.58	20.10	3.27	3.03	3.39	2.53	2.10
1954	65.50	20.11	3.25	3.09	3.43	2.52	2.10
1955	64.76	20.56	3.25	3.27	3.55	2.53	2.07
1956	64.88	20.50	3.24	3.28	3.56	2.52	2.04
1957	64.89	20.49	3.23	3.28	3.56	2.51	2.05
1958	64.89	20.49	3.23	3.29	3.56	2.51	2.03
1959	64.89	20.49	3.23	3.29	3.56	2.51	2.04
1960	64.86	20.49	3.22	3.30	3.57	2.50	2.06
1961	64.83	20.50	3.22	3.31	3.57	2.50	2.06
1962	64.86	20.50	3.22	3.31	3.58	2.50	2.03
1963	64.85	20.50	3.21	3.32	3.58	2.50	2.03
1964	64.71	20.61	3.20	3.35	3.60	2.50	2.02
1965	64.47	20.77	3.19	3.41	3.63	2.50	2.03
1966	63.79	21.23	3.19	3.53	3.71	2.53	2.01
1967	63.81	21.22	3.19	3.53	3.71	2.53	2.01
1968	63.83	21.22	3.18	3.53	3.71	2.53	2.00
1969	63.84	21.20	3.18	3.54	3.72	2.53	1.99
1970	63.12	21.62	3.19	3.64	3.79	2.56	2.09



Table 3.--Production and Yield of Burley Tobacco, Kentucky and United States, 1950-70

Year	Production (million pounds)			Yield (pounds)		
	Kentucky	U. S.	Ky. as % of U. S.	Kentucky	U. S.	Ky. as % of U. S.
1950	323.9	578.4	55.99	1,165	1,222	95.3
1951	419.6	618.1	67.89	1,345	1,355	99.3
1952	434.7	650.1	66.86	1,380	1,403	98.4
1953	383.1	564.4	67.88	1,335	1,345	99.3
1954	452.9	667.6	67.85	1,595	1,586	100.6
1955	304.3	470.0	64.74	1,470	1,513	97.2
1956	335.3	506.4	66.22	1,620	1,635	99.1
1957	319.8	488.1	65.52	1,560	1,592	98.0
1958	300.5	465.5	64.55	1,510	1,567	96.4
1959	322.4	502.3	64.18	1,620	1,669	97.1
1960	320.1	484.7	66.04	1,625	1,639	99.1
1961	379.8	580.3	65.44	1,800	1,820	98.9
1962	454.7	674.9	67.38	2,030	1,993	101.9
1963	520.8	755.1	68.97	2,325	2,231	104.2
1964	411.1	619.8	66.32	2,025	2,022	100.1
1965	395.3	586.3	67.42	2,160	2,116	102.1
1966	405.3	586.7	69.08	2,221	2,437	91.1
1967	388.6	558.8	69.67	2,385	2,274	104.9
1968	384.5	563.4	68.26	2,465	2,372	103.9
1969	406.4	591.4	68.72	2,605	2,488	104.7
1970	383.4	560.1	68.45	2,700	2,585	104.4

### Shifts in Acreage Allotments, 12 Representative Areas, 1950-1955

The procedure used to analyze the shift in allotments for the representative areas across the eight state burley producing areas was to compute the allotment shifts that occurred for each of the areas at 5-year intervals during 1950-70 and to assess these shifts in terms of underlying policy changes.

Major policy changes that affected the burley allotment distribution during 1950-55 dealt mainly with year-to-year changes in total allotments as supply-demand relationships shifted. Burley allotments were reduced by 15 percent for the crop year 1950, were increased by 11 percent for 1951, were unchanged in 1952, and were reduced by 10 percent, 8 percent, and 25 percent in 1953, 1954, and 1955, respectively. Thus an allotment that took average increases and decreases from the 1950 base would have been reduced by a total of 31.3 percent over this period of time (1950-55). Allotments in total were reduced by only 26 percent, however, owing to (1) provisions for new allotments and (2) the fact that allotments of 0.7 acre or less were protected from allotment cuts during this period.

Legislation approved for the 1955 burley crop set up a special referendum among producers in which program changes were approved by producers for:

(1) Reducing the above minimum acreage allotments by 25 percent for the 1955 burley crop.

(2) Reducing the minimum acreage below which a producer's allotment could not be cut from 0.7 acre to 0.5 acre but restricting the cut of allotment between 0.5 and 0.7 acre to no more than 0.1 acre per year.

(3) Eliminating the provisions whereby harvested acreage of burley in excess of allotments was taken into account in establishing new and adjusting upward old burley allotments.

(4) Increasing the penalty on the sale of tobacco harvested in excess of the farm quota from 50 percent for the average price in the preceding year to 75 percent of the preceding year's average price for that type of tobacco.

The major effects of the changes in legislation were generally (1) to eliminate the profit from producing burley tobacco outside allotted acreages, (2) to eliminate the provisions whereby over production could be used for establishing production history for a new allotment or increasing an allotment, and (3) reducing the level below which allotments could not be cut from 0.7 to 0.5 acre.

The substantial downward trend in total allotments from 1950 to 1955—from 418 to 309 thousand acres total—did not appreciably influence the proportion of the total allotted to the 12 representative areas used in this study (Table 4). In 1950 the 12 areas were allotted 50.76 percent of the national allotment compared with 50.43 percent in 1955. However, changes in individual areas differed substantially during this period. In general, the net downward adjustment in acreage during this period shifted allotments relatively from the dense to the less dense areas of production. For example, the Inner Bluegrass (-2.7), Outer Bluegrass (-3.4), South Central Kentucky (-2.7), Daviess-Hancock-Breckinridge (-3.5), areas of Kentucky and North Central Tennessee (-0.9) areas lost in shares of national allotments (Table 4), while all other areas showed increases. In general, the proportionate share of the national allotment in 1955 was not more than 5 percent plus or minus different from that in 1950 except for Platte county Missouri where the change was 47.5 percent. However, the absolute change was only from 0.40 to 0.59 percent of the national allotment, and the percentage comparison tends to overstate to some extent the increase in the relative share of national allotment held in this county.



Table 4.--Proportion of National Burley Tobacco Allotment in 1950 and 1955 and Percentage Change in Importance, 12 Representative Areas

Representative Area	National Importance 1950	National Importance 1955	Percentage Change in Importance
Inner Bluegrass	13.18	12.82	-2.7
Outer Bluegrass	7.76	7.50	-3.4
South Central Kentucky	4.87	4.74	-2.7
Daviess, Hancock and Breckinridge Counties Kentucky	2.82	2.72	-3.5
Platte County Missouri	0.40	0.59	+47.5
East Tennessee and Virginia	9.50	9.59	+0.9
North Central Tennessee	4.70	4.66	-0.9
Eastern Kentucky	5.39	5.62	+4.3
Ohio and West Virginia	1.02	1.06	+3.9
Jackson Purchase, Kentucky	0.63	0.63	0
South Central Indiana	0.20	0.21	+5.0
Missouri, Ohio and Virginia Counties	0.28	0.29	+3.6
TOTAL	48.69	48.40	-0.6

Source: Computed from Tobacco Acreages Allotted by States and Kinds, 1940-70, USDA, ASCS.

### Shifts in Acreage Allotments, 12 Representative Areas, 1955-60

The total acreage allotted to burley tobacco increased from 309,326 to 309,376 acres during 1955-60, a total of only 50 acres. New allotments and minor adjustments in old allotments accounted for the increase as national quotas were essentially unchanged during this 5-year period (Table 5).

The total share of the national allotments in the 12 representative areas changed very slightly during this period increasing from 50.43 to 50.52 percent of the national total. Likewise, shifts between areas in the relative shares of total allotments in between the 12 representative areas were not important during this period. The only area showing any appreciable loss in relative share of the national allotment was the seven-county Jackson Purchase area of Kentucky which lost 4.8 percent of its share of allotment. However, the area was not a dense production area and the decline was from 0.63 to 0.60 percent of the U.S. burley allotment. No other area shifted this much in the absolute share of allotment and percentage shifts were minor (Table 5).

No important policy changes developed relative to burley tobacco allotments during this 5-year period. The substantial reduction in allotments in 1955 reduced burley production to the point where downward adjustment in total supplies was occurring throughout this period and basic policy changes were not necessary to maintain balance between supplies and utilization.

The very slight shifts that occurred in relative shares of allotments by areas resulted from small acreages available annually for new allotments and adjustment of old allotments (generally less than 0.1 percent per year), differential adjustments in allotments between areas due to underplantings of allotments, and retirement of land with burley tobacco allotments from agriculture through the development of cities, roads,

parks, lakes, and other types of movement of land from agricultural to nonagricultural uses.

### Shifts in Acreage Allotments, 12 Representative Areas, 1960-1965

The reduction in total burley tobacco acreage allotted from approximately 475,000 to 308,000 acres during the early 1950's and the retention of allotments at the lower level from 1955 through 1960 resulted in improved balance between supplies and use of burley to the point where acreage allotments were increased by 6 percent in 1961 and by an additional 6 percent in 1962. Allotments were unchanged in 1963 but rising yields again brought increasing supplies to the point where allotments were reduced by 10 percent in both 1964 and 1965. The net effect of allotment changes during this 5-year period was to reduce the national acreage allotment for burley from 309,376 to 286,601 acres—a reduction of about 7.4 percent. Individual farms that were above minimum acres throughout the period and that took the increases and decreases proclaimed by the Secretary of Agriculture, had their allotments reduced by a net of nine percent during this 5-year period.

Shifts in burley allotments during the period 1960-65 among the 12 representative areas ranged from a loss of 1.7 percent of the national allotment in Platte county, Missouri and a loss of 1.5 percent of the share of total allotment in the Inner Bluegrass area of Kentucky to a gain of 5.0 percent in share for the Jackson Purchase counties of Kentucky and a gain of 6.9 percent in the area representing 12 Missouri, Ohio, and Virginia counties. The concentrated areas of production lost in relative share of production, while the less dense production areas showed gains in share of total allotment (Table 6). The reasons for the relative shifts in production by area during this period were related mainly to minimum acreage provisions



Table 5.--Proportion of National Burley Tobacco Allotment in 1955 and 1960 and Percentage Change in Importance, 12 Representative Areas

Representative Area	National Importance 1955	National Importance 1960	Percentage Change in Importance
Inner Bluegrass	12.82	12.81	-0.1
Outer Bluegrass	7.50	7.54	+0.5
South Central Kentucky	4.74	4.76	+0.4
Daviess, Hancock and Breckinridge Counties Kentucky	2.72	2.72	0
Platte County Missouri	0.59	0.60	+1.7
East Tennessee and Virginia	9.59	9.61	+0.2
North Central Tennessee	4.66	4.67	+0.2
Eastern Kentucky	5.62	5.64	+0.4
Ohio and West Virginia	1.06	1.06 <sup>1</sup>	0
Jackson Purchase Kentucky	0.63	0.60	-4.8
South Central Indiana	0.21	0.21	0
Missouri, Ohio and Virginia Counties	0.29	0.29	0
TOTAL	50.43	50.52	+0.2

<sup>1</sup>Estimated.

Source: Computed from Tobacco Acreages Allotted by States and Kinds, 1940-70, USDA, ASCS.

Table 6.--Proportion of National Burley Tobacco Allotment in 1960 and 1965 and Percentage Change in Importance, 12 Representative Areas

Representative Area	National Importance		Percentage Change in Importance
	1960	1965	
Inner Bluegrass	12.81	12.62	-1.5
Outer Bluegrass	7.54	7.45	-1.2
South Central Kentucky	4.76	4.71	-1.1
Daviess, Hancock and Breckinridge Counties Kentucky	2.72	2.69	-1.1
Platte County Missouri	0.60	0.59	-1.7
East Tennessee and Virginia	9.61	9.67	+0.6
North Central Tennessee	4.67	4.66	-0.2
Eastern Kentucky	5.64	5.70	+1.1
Ohio and West Virginia	1.06 <sup>1</sup>	1.06 <sup>1</sup>	0
Jackson Purchase Kentucky	0.60	0.63	+5.0
South Central Indiana	0.21	0.21	0
Missouri, Ohio and Virginia Counties	0.29	0.31	+6.9
TOTAL	50.52	50.33	-0.4

<sup>1</sup>Estimated.

Source: Computed from Tobacco Acreages Allotted by States and Kinds, 1940-70, USDA, ASCS.



of the allotment program and the net downward movement in allotments during this period. Those areas with larger proportions of allotments of 0.5 acre or less gained in relative shares of total allotment during this period when allotments in total were decreasing.

There were no important legislative and administrative changes in the tobacco program for burley during 1960-65. The major legislative changes in 1955 had resulted in stricter control and heavier penalties for production outside allotments. Yield increases during 1955-65 had approximately paralleled the use trend for burley during this period. The impact of the release of the Report of the Surgeon General on Smoking and Health had not fully been felt by 1965 so that the only program changes of consequence during this period were the year-to-year allotment changes designed to retain reasonable balance between supplies to use. The effect of these changes during the years when allotments in total were reduced was to shift a relatively greater proportion of total allotments to the areas having the largest relative share of allotments of 0.5 acre or less which were protected from reduction.

#### Shifts in Acreage Allotments, 12 Representative Areas, 1965-70

Total acreage allotted to burley tobacco declined by 19.4 percent during 1965-70, the largest decline during any 5-year period analyzed except for the large acreage reduction in 1955 authorized in a special referendum among producers. Necessity for the reduction in total allotments of approximately 55,600 acres—from 286,601 to 230,947—arose during this period because of declining use of burley tobacco and a rapid increase in per acre yields. Allotments were reduced by 15 percent in 1966, remained constant during 1967, 1968, and 1969, and were reduced another 10 percent for 1970.

The net effect of the 19.5 percent reduction in total allotments was to reduce the producers with above-minimum allotments by a net of 23.5 percent.

Despite the drastic reduction in total acreage allotments during this period, the total supply of burley tobacco showed a decrease of only 5 percent between 1965 and 1970 while use declined by about 8 percent. Supplies relative to use increased from 3.25 years' supply on hand to a ratio of 3.37 years' supply.

Shifts in relative production among the 12 representative areas were substantial during this 5-year period and ranged from a decline of 4.7 and 4.4 percent in the relative share of allotments for the Inner Bluegrass and Outer Bluegrass regions of Kentucky, respectively, to an increase of 10.2 percent for Platte county Missouri, 9.7 percent in the Missouri, Ohio, and West Virginia counties, and 9.5 percent in the Jackson Purchase area of Kentucky (Table 7). Five of the 12 areas decreased in the relative share of allotments, while seven showed an increase in the relative share of total burley allotted acreage. The shift for the total included in the 12 representative areas was down by 1.3 percent to 49.66 percent of the national allotment.

In general, the shifts in relative share of total allotment followed the pattern that had prevailed since 1950 with those areas with smaller proportions of total allotments and a larger proportion of the allotments at minimum allotment levels gaining in share of the total allotment. Conversely, those areas having a relatively large share of allotment that were above 0.5 acre lost allotment relative to other areas and lost in the proportionate share of national allotment held.

#### Potential Shifts under Proposed Acreage-Poundage Program

Developing problems in controlling supplies of major types of cigarette tobacco

Table 7.--Proportion of National Burley Tobacco Allotment in 1965 and 1970 and Percentage Change in Importance, 12 Representative Areas

Representative Area	National Importance		Percentage Change in Importance
	1965	1970	
Inner Bluegrass	12.62	12.03	-4.7
Outer Bluegrass	7.45	7.12	-4.4
South Central Kentucky	4.71	4.53	-3.8
Daviess, Hancock and Breckinridge Counties Kentucky	2.69	2.60	-3.3
Platte County Missouri	0.59	0.65	+10.2
East Tennessee and Virginia	9.67	9.92	+2.6
North Central Tennessee	4.66	4.62	-0.9
Eastern Kentucky	5.70	5.84	+2.5
Ohio and West Virginia	1.06 <sup>1</sup>	1.10	+3.8
Jackson Purchase Kentucky	0.63	0.69	+9.5
South Central Indiana	0.21	0.22	+4.8
Missouri, Ohio and Virginia Counties	0.31	0.34	+9.7
TOTAL	50.33	49.66	-1.3

<sup>1</sup>Estimated.

Source: Computed from Tobacco Acreages Allotted by State and Kinds, 1940-70, USDA, ASCS.



led the Congress to approve legislation in April 1965 for changing the burley tobacco production control program from an average system to an acreage-poundage program.<sup>2</sup> This program was designed to provide more effective control over production by making the allotment in terms of both acreage and poundage. The poundage quota was to be established on the basis of the farm yield for the three highest yielding years during the five years 1959-63 inclusive. Yields thus established were subject to adjustment based on community average yields during the same 5-year period 1959-63 and subject to a "National average yield goal." Farm yields were adjusted upward or downward if they were less than 80 percent or more than 120 percent of the community average yield during 1959-63. Likewise, all farm yields were adjusted proportionally so that the average of all farm yields was equal to the "National average yield goal"—a yield designed to encourage the production of a desirable quality of burley tobacco.

The acreage-poundage program (for burley tobacco) (P.L. 89-72) was approved by Congress to be offered as an alternative to the acreage program upon (1) the determination by the Secretary of Agriculture, during the first or second years of a 3-year period for which marketing quotas on an acreage basis were in effect, that acreage-poundage quotas would result in a more effective marketing quota program and (2) approval of two-thirds or more of the producers voting in a referendum within 45 days of the announcement of marketing quotas on an acreage-poundage basis.

The acreage poundage legislation also provided that the Secretary of Agriculture should not later than Jan. 1, 1966, consult with representatives from all segments of the tobacco industry to determine the need for an acreage poundage program.

Quotas on an acreage-poundage basis were proclaimed for burley tobacco for the crops of 1966, 1967, and 1968, and a special referendum of growers was held on March 10, 1966. The acreage-poundage program as an alternative to acreage program was approved by 57.3 percent of those voting in the referendum (less than the required two-thirds majority) and acreage quotas were continued.

Acreage-poundage quotas were again proclaimed by the Secretary of Agriculture for the 1967, 1968, and 1969 burley crops and a referendum was held in March 1967 among producers. Producers again failed to approve the change to acreage-poundage quotas, and acreage allotments remained as the method for controlling burley tobacco production.

As a means of comparing the regional shifts that would have occurred had acreage-poundage controls been approved in the referendum of 1967, quotas were aggregated for the 12 representative areas used in this study, on a poundage basis, for comparative purposes (Table 8).

Had acreage-poundage been approved in the 1967 referendum, substantial shifts would have occurred in the geographic distribution of burley production. Generally the method of converting acreage allotments to poundage quota under the proposed program would have favored the Inner Bluegrass, South Central Kentucky, Eastern Kentucky, and East Tennessee areas at the expense of Western Kentucky and North Central Tennessee areas. The Jackson Purchase area of Kentucky and North Central Tennessee areas would have lost approximately 15 percent of their relative share of national allotment had the acreage-poundage program been approved in 1967.

Shifts in allotments between states that would have resulted from the acreage-poundage program are illustrated in Table 9. Kentucky, Virginia, and North Carolina would have been the states with greatest relative gain in share of allotment under acreage-poundage while Tennessee and

<sup>1</sup>Public Law (89-72).

Table 8.--Proportion of National Burley Tobacco Acreage Allotment in 1965  
Poundage Allotment Under Proposed Acreage-Poundage Program 1967, 12  
Representative Areas

Representative Area	National Importance		Percentage Change in Importance
	1965	1967	
Inner Bluegrass	12.62	13.04	+3.3
Outer Bluegrass	7.45	7.45	0
South Central Kentucky	4.71	5.05	+7.2
Daviess, Breckinridge and Hancock Counties Kentucky	2.69	2.51	-6.7
Platte County Missouri	0.59	0.55	-6.8
North Central Tennessee	4.66	4.00	-14.2
Eastern Tennessee and Virginia	9.67	10.26	+6.1
Eastern Kentucky	5.70	6.00	+5.3
Ohio and West Virginia	1.06 <sup>1</sup>	1.12 <sup>1</sup>	+5.3
Jackson Purchase Kentucky	0.63	0.53	-15.9
South Central Indiana	0.21	0.22 <sup>1</sup>	+5.3 <sup>1</sup>
Missouri, Ohio and Virginia Counties	0.31	0.33 <sup>1</sup>	+5.3 <sup>1</sup>
TOTAL	50.30	51.06	+1.5

<sup>1</sup>Estimated (data on pounds not available).

Source: Computed from Tobacco Acreages Allotted by States and Kinds, 1940-70, USDA, ASCS and data furnished by state ASCS offices in burley producing states.



Table 9.--Burley Tobacco Allotments, Acreage and Proposed Acreage-Poundage, 1967

Change ance	State	Acreage	Proposed Acreage	Percentage
			Poundage	Change
(Proportion of National Allotment)				
	Kentucky	63.81	65.09	+2.0
	Tennessee	21.22	19.68	-7.3
	Virginia	3.71	3.78	+1.9
	North Carolina	3.53	3.75	+6.2
	Ohio	3.19	3.21 <sup>1</sup>	+0.6 <sup>1</sup>
	Indiana	2.53	2.54 <sup>1</sup>	+0.4 <sup>1</sup>
	Missouri	0.97	0.90	-7.2
	West Virginia	0.95	0.96 <sup>1</sup>	+1.1 <sup>1</sup>
	Others	0.09	0.09 <sup>1</sup>	0 <sup>1</sup>
	TOTAL	100.0	100.0	

<sup>1</sup>Estimated based on acreage (data on pounds not available).

Source: Computed from Tobacco Acreages Allotted by States and Kinds, 1940-70, USDA, ASCS.

Missouri would have lost more than 7.0 percent of the share of allotment held.

#### Shifts in Burley Quotas, 12 Representative Areas, Under the Poundage Quota Program 1971

On April 14, 1971, legislation on burley tobacco previously approved by the Congress was signed by the President which brought about major changes in the burley tobacco control program. The changes in the burley program were in the form of an Amendment to the Agricultural Adjustment Act of 1938 and entailed the following major changes:

(1) A shift from production controls by acreage allotments to allotments on a poundage basis for all burley producers.

(2) Authorization for the leasing of burley allotments between producers subject to certain restrictions.

(3) Limitations on year-to-year adjustments in allotments that could be made by the Secretary of Agriculture with differential adjustments in 1972 and 1973, depending on the size of the allotment.

(4) Carry forward provisions for over and under marketings of quotas.

(5) Provisions of a referendum by growers to determine if burley producers preferred the new program to no marketing quotas and no price supports for the 1971, 1972 and 1973 burley crops.

The new law specified procedures for establishing individual farm marketing quotas based on yield history during the 5-year period 1966-70 and specified that preliminary farm poundage quotas established by yield history and 1970 acreage allotments would be adjusted uniformly (proportionally) in order to adjust the sum of individual farm quotas to the national quota of 555 million pounds of burley tobacco for 1971.

Lease and transfer of burley allotments were authorized under the provisions of the new program. However, the leasing provisions

of the new law limit leasing and transfer of quotas to other farms in the same county and limit the amounts of burley that can be leased and transferred to any farm to 15,000 pounds.

The new legislation limited the amount by which the Secretary of Agriculture could reduce quotas below the preliminary farm poundage quota to not more than 5 percent for the 1971 burley crop. For the 1972 and 1973 crops, the maximum amount by which the Secretary of Agriculture can reduce farm quotas from those of the previous year will be 5 percent for producers having allotments of more than 0.5 acre. For producers having allotments of 0.5 acre or less, quotas for 1972 and 1973 cannot be reduced by more than one-half the proportion that quotas of above-minimum acreage producers are reduced (not more than 2.5 percent per year). Beginning with the 1974 crop, all farm quotas will be adjusted proportionally as upward and downward adjustments are made in the national marketing quota for burley tobacco. However, the legislation provides that the Secretary of Agriculture cannot reduce a producers quota by more than 5 percent in any year.

The legislation provided that within 30 days following enactment the Secretary of Agriculture proclaim marketing quotas for burley for the three marketing years beginning October 1, 1971. Further, the legislation required the Secretary of Agriculture to conduct a referendum to determine if producers favored the program for burley tobacco. The Secretary of Agriculture proclaimed the quota on April 15, 1971, and conducted a referendum in which quotas were approved by producers on May 4, 1971.

The new program brought sharp changes in production quotas by geographic areas. Among the states, Kentucky's share of the national quota under the poundage system for 1971 was 66.67 percent of the total as compared with an average of 63.68 percent of



the acreage allotment during 1966-70. The gain of 2.99 percent on a national quota of 555 million pounds is equivalent to a shift of about 16.6 million pounds of burley tobacco, and the 66.67 percent of national allotment held by Kentucky is the largest share of the national allotment held by Kentucky since 1947.

Indiana, North Carolina, and Ohio allotments under the 1971 poundage quota program changed only very slightly (Table 10) compared with acreage allotments for the 5-years 1966-70 while the state of Tennessee lost heavily in terms of the relative share of U.S. allotment held. During 1966-70 approximately 21 percent of the total burley allotment for the nation was in Tennessee. This share dropped to 18.52 under the 1971 program. Virginia allotments increased from 3.73 percent of the U.S. total during 1966-70 to 3.83 percent in 1971—a gain of 0.10 percent of the national allotment or 2.7 percent of the share of allotment held by Virginia.

The interstate shifts in geographic location of burley allotments resulting from the program change were due to different yield levels during the 1966-70 period, the years used for converting acreage allotments into poundage quotas, and differences in yield variance on individual farms during these years. Legislation provided for using the three highest yielding years on the individual farms during the 1966-70 period for establishing allotments. Apparently differential yield variation patterns on individual farms existed across the Burley Belt to the extent that sharp and relatively heavy shifts occurred in addition to the shift related to differences in yield levels between states which were quite different in the years used for converting acreage allotment into poundage quotas (Table 11). In the three highest yielding years during 1966-70 the range in per acre yields by states was from a high of 2,627 pounds in Kentucky to a low of 2,143 pounds in Tennessee compared to a beltwide yield of

2,505 pounds. The sharp decline in the relative share of U.S. burley allotment allocated to Tennessee under the poundage program reflected the failure of yields to increase in Tennessee in recent years as much as in other states.

Among the 12 representative areas compared, wide shifts in relative shares of total allotment occurred with the change to the poundage program. Between 1970 and 1971 the range in change for the representative areas was from an increase of 12.7 percent in the Inner Bluegrass Area of Kentucky (Table 12) to a decrease of 21.7 percent in the Jackson Purchase Area of Kentucky. Generally, the areas with the largest shares of total allotment increase were in the heaviest producing areas of the burley belt. Apparently those producing areas where burley is more commercialized have been the areas with relatively high yields and, as a result, gained in the relative share of the national allotment held by the shift from acreage allotments to poundage quotas. The Inner Bluegrass, Outer Bluegrass, and South Central Areas of Kentucky increased their relative shares of the national allotment by 12.7, 10.4, and 12.1 percent, respectively, from 1970 to 1971. Eastern Kentucky, with an increase of 1.4 percent, was the only other area to gain in relative share of allotment. Seven of the areas lost in relative share of quota, with the heaviest loss being in the Jackson Purchase Area of Kentucky (21.7%), Ohio and West Virginia (20.0%), North Central Tennessee (13.9%), and Platte county Missouri (12.3%). In general, the areas that were the heaviest gainers during the 1950-70 period under the acreage program were the heaviest losers under the change to the poundage program. As downward adjustments occurred, those areas with larger shares of allotments protected under the minimum acreage provisions of the acreage program gained in shares of allotments, but apparently the producers in such areas did not increase yields to the extent that productivity

Table 10.--Share of National Burley Tobacco Allotment Held By States, 1966-70 Acreage Allotment and 1971 Poundage Quota

State	1966-70	1971 Poundage	Change Amount	Change Percent
	Acres - Allotment	Quota		
(Percent of National Allotment)				
Kentucky	63.68	66.67	+2.99	+4.7
Tennessee	20.94	18.52	-2.42	-11.6
Ohio	3.19	3.13	-0.6	-1.9
North Carolina	3.55	3.53	-0.2	-0.6
Virginia	3.73	3.83	+0.10	+2.7
Indiana	2.54	2.60	+0.06	+2.4
Other	2.02	1.72	-0.3	-14.9

Source: Computed from Tobacco Acreages Allotted by States and Kinds, 1940-70, USDA, ASCS and data furnished by State ASCS offices in burley producing states.



Table 11.--Average Yield Per Acre, Burley Tobacco, 1960-70

	Ky.	Tenn.	Va.	N. C.	Ohio	Mo.	Ind.	Total
	-----Pounds Per Acre-----							
1960	1,625	1,595	2,015	1,940	1,595	1,625	1,565	1,639
1961	1,800	1,855	2,135	2,090	1,530	1,535	1,900	1,820
1962	2,030	1,795	2,210	2,185	1,995	1,955	2,120	1,993
1963	2,325	1,920	1,965	2,285	2,245	1,965	2,205	2,231
1964	2,025	1,995	1,950	2,165	1,840	1,950	1,940	2,022
1965	2,160	1,985	2,290	2,030	2,035	1,815	2,215	2,116
1966	2,565	2,105	2,275	2,320	2,275	2,395	2,520	2,437
1967	2,385	1,935	2,315	2,010	2,355	2,215	2,385	2,274
1968	2,465	2,115	2,520	2,385	2,075	2,470	2,285	2,372
1969	2,605	2,085	2,590	2,570	2,580	2,420	2,500	2,488
1970	2,710	2,210	2,545	2,545	2,680	2,600	2,700	2,590
1965-70 Avg.	2,546	2,090	2,449	2,366	2,393	2,420	2,478	2,432
High 3 yrs. 1966-70	2,627	2,143	2,552	2,500	2,538	2,497	2,573	2,505
% of National Avg.	104.9	85.5	101.9	99.8	101.3	99.7	102.7	

Source: *Annual Reports on Tobacco Statistics and Crop Reports*, USDA, 1971 and earlier issues.

Table 12.--Proportion of National Burley Tobacco Allotment in 1970 and 1971 and Percentage Change in Importance, 12 Representative Areas

Representative Area	National Importance		Percentage Change
	1970	1971	
Inner Bluegrass	12.03	13.56	+12.7
Outer Bluegrass	7.12	7.86	+10.4
South Central Kentucky	4.53	5.08	+12.1
Daviess, Hancock and Breckinridge Counties Kentucky	2.60	2.59	-0.4
Platte County Missouri	0.65	0.57	-12.3
Eastern Tennessee and Virginia	9.92	9.73	-1.9
North Central Tennessee	4.62	3.98	-13.9
Eastern Kentucky	5.84	5.92	+1.4
Ohio and West Virginia	1.10	0.88	-20.0
South Central Indiana	0.22	0.20	-9.1
Missouri, Ohio and Virginia Counties	0.34	0.32	-5.9
Jackson Purchase Kentucky	0.69	0.54	-21.7
TOTAL	49.66	51.22	+3.1

Source: Computed from Tobacco Acreages Allotted by States and Kinds, 1940-70, USDA, ASCS and Tobacco Allotted by Counties and by Kinds, 1971, USDA, ASCS.



increased in other producing areas. The result was that the change to poundage quotas based on yield history tended to result in a shift in

quota back toward the areas with larger allotments and more commercialized producing centers.

#### SUMMARY AND CONCLUSIONS

This study was designed to determine the shifts that have occurred in the geographic distribution of burley tobacco quotas during the 1950-71 period. Throughout this period burley tobacco has been produced under a system of quotas for individual farms—acreage quotas for 1950-70 and poundage quotas in 1971. An earlier study by Thompson and Johnson indicated that the burley tobacco control program during 1933-50 resulted in a general movement of burley allotments from the more established producing areas to those areas where burley allotments were smaller and production less dense. Results from this study indicated a continued dispersal of allotments toward the outer areas of the burley tobacco belt occurred during 1950-70. No basic policy changes were made in the tobacco program during 1950-70 and the shifts in geographic patterns of production resulted mainly from the necessity for large reductions in acreage allotments over this period. In total, burley tobacco allotments were reduced from 418,250 acres in 1950 to 230,947 acres in 1970—a reduction of about 45 percent over this 20-year period. Those areas with a large share of allotments protected from reductions by the minimum acreage provisions of the program (0.7 acre from 1950-54 and 0.5 acre from 1955-70) did not experience the declines in allotments that occurred in other areas. Consequently, more commercialized areas of burley production lost in relative share of national allotment while the less dense areas gained relatively.

With the change in the burley program to poundage quotas in 1971 and the conversion of acreage allotments to poundage quotas based on yield history of individual

farms during 1966-70, a sharp reversal in geographic movement of allotments was observed due to the different yield levels in the areas. The shift under the new program was sharply toward those areas that had more dense production and larger allotments, and the movement in quota to these areas was about equivalent to relative losses under the acreage program over the 20 years 1950-70 (Table 13).

Under the provisions of the present tobacco program future geographic shifts will be negligible. Minimum allotment producers receive preferential treatment in the establishment of 1971 and 1972 quotas (minimum allotments cannot be reduced by more than 2.5 percent in either of these years while above-minimum allotments can be reduced as much as 5 percent per year). But the effect of this preferential treatment will be very slight on geographic patterns of allotment. After 1972 all quotas will be adjusted upward and downward in the same proportion as the national allotment changes and no further program-oriented geographic shifts will occur unless the program is changed.

This study illustrates clearly that programs of production control and price support that are designed to increase and stabilize prices may have very marked allocative effects over geographic areas if procedures for adjusting quotas are not uniformly applied. Likewise, the findings illustrate the impact that program changes may have on allocation of production by geographic areas. Geographic shifts in production occur constantly for most of the agricultural commodities in the absence of

Table 13.--Proportion of National Burley Tobacco Allotment, 12 Representative Areas, 1935-71

Representative Area	1935	1940	1945	1950	1955	1960	1965	1970	1971
	-----Percent-----								
Inner Bluegrass	17.30	15.53	15.90	12.09	11.77	11.76	11.58	11.05	12.48
Outer Bluegrass	10.11	9.14	8.40	7.76	7.50	7.54	7.45	7.12	7.79
South Central Kentucky	5.73	5.56	4.90	4.87	4.74	4.76	4.71	4.53	5.07
Daviess, Hancock and Breckinridge Co.'s Ky.	3.24	3.20	2.90	2.82	2.72	2.72	2.69	2.59	2.60
Platte Co. Missouri	0.90	0.82	0.76	0.40	0.59	0.60	0.59	0.65	0.57
East Tennessee & Virginia	4.67	4.60	4.70	3.72	3.67	3.70	3.69	3.65	3.10
North Central Tennessee	8.98	8.88	8.70	9.50	9.58	9.61	9.67	9.92	9.73
Eastern Kentucky	3.75	4.57	4.60	5.39	5.62	5.64	5.70	5.84	5.93
Ohio and West Virginia	1.49	1.25	0.91	1.02	1.06	1.06	1.10	1.10	0.87
South Central Indiana	0.20	0.24	0.57	0.63	0.64	0.60	0.63	0.69	0.54
Mo., Ohio and Va. Co's.	0.27	0.27	0.17	0.20	0.21	0.21	0.21	0.22	0.20
Jackson Purchase Ky.	0.09	0.22	0.28	0.28	0.29	0.29	0.31	0.34	0.31
Total	56.73	54.78	52.73	48.69	48.40	48.49	48.33	47.70	49.19



production controls, and such shifts are in response to economic and technological forces. While most production control programs tend to freeze existing patterns of production, features of the programs such as those that have prevailed in the burley tobacco program tend to result in program oriented shifts in production that are not

related to economic forces.

The findings of this study should be of use in policy development and policy changes for all agricultural commodities in that the findings illustrate the marked shifts that may occur in the operation of a given program and in a change in type of program for a given commodity.

Table 2. Comparison of Actual Sales Tobacco Allotment, 12 Representative States, 1965-66

State	1965	1966	1967	1968	1969	1970	1971	1972
Alabama	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.55
Arkansas	0.80	0.85	0.90	0.95	1.00	1.05	1.10	1.15
California	1.50	1.55	1.60	1.65	1.70	1.75	1.80	1.85
Florida	1.00	1.05	1.10	1.15	1.20	1.25	1.30	1.35
Georgia	1.10	1.15	1.20	1.25	1.30	1.35	1.40	1.45
Illinois	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25
Indiana	0.70	0.75	0.80	0.85	0.90	0.95	1.00	1.05
Iowa	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95
Kentucky	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85
Mississippi	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75
Missouri	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65
Nebraska	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55
North Carolina	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45
North Dakota	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
Ohio	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50
Oklahoma	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
South Carolina	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
South Dakota	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
Tennessee	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45
Texas	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
Virginia	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
Washington	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
West Virginia	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
Wisconsin	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
Wyoming	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40
<b>Total</b>	<b>56.75</b>	<b>54.78</b>	<b>52.73</b>	<b>48.68</b>	<b>48.40</b>	<b>48.68</b>	<b>48.68</b>	<b>48.68</b>

in a change in type of program for a given commodity. The findings illustrate the marked shifts that may occur in the operation of a given program and for all agricultural commodities in that the use in policy development and policy changes related to economic forces.

production controls and such shifts are in response to economic and technological forces. While most production control programs tend to these existing patterns of production, features of the programs such as those that have prevailed in the past, tobacco program tend to result in program oriented shifts in production that are not



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