The Economic Impact of Tobacco Production in Appalachia

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Introduction

Tobacco production is critical to the economies of many Appalachian communities. However, various circumstances, including tobacco-related health concerns, growing competition from overseas tobacco producers, and proposed federal legislation, could cause tobacco production in Appalachia to substantially decrease in the next few years. Many of the largest tobacco-producing counties in the Appalachian Region are considered "distressed" by the Appalachian Regional Commission (ARC). In light of the growing number of threats to tobacco production in Appalachia, it is important to understand the economic significance of tobacco to many Appalachian communities and to consider alternatives to tobacco production in the Appalachian Region in the future.

Tobacco Production in the United States and Appalachia

Tobacco is the seventh largest cash crop in the United States. It is the most valuable crop on a per-acre basis and is significantly more lucrative than other crops (USDA National Agricultural Statistics Service 1998). For example, crops such as wheat, hay, soybeans, and corn all average $500 or less in gross receipts per acre, while tobacco averages approximately $4,000 in gross receipts per acre. Tobacco's high per-acre value generates a significant share of the incomes of many tobacco growers. Though tobacco is grown in about 20 states, North Carolina and Kentucky account for approximately 65 percent of total U.S. production, and four other states (Tennessee, Virginia, South Carolina, and Georgia) produce approximately 25 percent of all U.S. tobacco.

There are six major kinds of tobacco grown in the United States. Two types—flue-cured and burley—account for approximately 93 percent of total production (Womach 1996). Both flue-cured and burley tobacco are primarily used for cigarettes. More than 50 percent of all tobacco produced in the U.S. is flue-cured tobacco, most of which is grown on the flat lands of eastern North Carolina and South Carolina, where the topography allows harvesting by machine. A relatively limited amount of flue-cured tobacco is grown in Appalachia. Burley tobacco accounts for 40 percent of total U.S. tobacco production, and Appalachian states grow most of the burley produced in the U.S.—Kentucky grows more than 60 percent of the country's burley tobacco, and Tennessee produces about 20 percent. North Carolina, Ohio, Virginia, and West Virginia also grow significant amounts of burley tobacco (see Table 1).

- In 1997, 97 percent of total U.S. burley tobacco production was in Appalachian states, and ARC counties produced approximately half of the nation's burley tobacco.

- In 1997, 71 distressed counties produced burley tobacco, accounting for close to 18 percent of the nation's total burley tobacco production (see maps).

- In 1992, gross earnings from burley tobacco in distressed counties exceeded $181 million, and more than 19,000 farms in distressed counties produced tobacco (see Table 2).

The Federal Tobacco Program

Farms in Appalachia typically produce only three to five acres of tobacco. Such limited production is due to a variety of factors, including topographic constraints, burley tobacco production's labor-intensive methods, and, most important, the federal government's quota and price support program. During the 1930s, the era of the Great Depression and a time of extreme price volatility for many agricultural products, the federal government adopted agricultural policies that included price supports and mandatory supply controls for several major crops, including tobacco. The tobacco program was designed primarily to support and stabilize tobacco prices, guaranteeing a certain level of income for tobacco farmers. In general, the program assigns marketing quotas that act as a supply control mechanism. It also requires the federal government to guarantee prices to tobacco farmers. The program effectively limits production to areas where tobacco is currently and has historically been grown. While flue-cured and burley tobacco are both grown under the auspices of the federal program, other types of tobacco are not. Every three years producers of individual types of tobacco vote on whether or not to continue the program as it pertains to their type of tobacco. Burley producers have always voted in favor of continuing the federal program for burley.

For some types of tobacco, quotas are on an acreage allotment basis; for burley, however, quotas limit the pounds of tobacco that quota holders can produce. The burley quotas range from a few pounds to as much as 200,000 pounds, with average quotas around 3,000 pounds. While burley quotas limit pounds produced, they are actually tied to the land. In other words, burley quota holders can only grow tobacco on land to which the quotas have been assigned, and if a parcel of land is sold, the quota is sold along with it. Quota holders have the right to either grow tobacco or lease the rights to grow tobacco (on the same land) to another farmer. Large penalties for selling burley tobacco not grown under the quota system serve as an effective restraint to growing burley tobacco without owning or leasing a quota. In general, burley quota holders in Appalachia earn money from tobacco in one of two ways: either by growing tobacco on land that has been assigned a quota, or by leasing the land to another farmer.

Tobacco Income and Employment

Because of tobacco's high per-acre value, farming three or four acres of tobacco can provide significant earnings. Per acre, net tobacco receipts are generally one-third of gross receipts. However, in Appalachia, tobacco farms are more likely to be family operated, with much of the tobacco planting, harvesting, and drying done by family members with limited mechanization. As a result, the net receipts per acre are often much higher—as much as half of gross receipts, or approximately $2,000. Thus, a family growing three acres of burley tobacco in Appalachia could net $6,000 annually from tobacco production. Most burley tobacco farmers work off-farm and/or have other farm enterprises; nonetheless, tobacco earnings are a critical source of income to most burley tobacco farmers. While trends towards consolidation of tobacco quotas have continued in Appalachia and in other tobacco-growing states since the 1980s, small, family-owned farms are still the typical producers of burley tobacco in the Appalachian Region.

It is estimated that 30 to 40 percent of all burley tobacco is grown on leased land. Those who lease their quotas earn anywhere from one-tenth to one-third of the gross earnings from burley produced on their land. Thus, quota holders can earn a few thousand dollars a year by simply leasing their quotas. Many quota holders in Appalachia are elderly residents who no longer farm tobacco and rely upon earnings from leasing quotas as an important source of income. In all Appalachian states except for Tennessee, tobacco quotas can only be leased to residents of the same county. Thus, most earnings from burley tobacco production remain within the county in which the tobacco is produced. Indeed, receipts from tobacco are not only a critical source of income to quota owners and farmers, they are important to local communities as well. Several counties in Appalachia derive between five and seven percent of their total personal income from burley tobacco farming, and some earn as much as 10 percent. Furthermore, tobacco production helps support local dealers and manufacturers who supply products such as chemicals, fertilizers, and fuel, and income received by farmers and quota owners is spent on goods and services, generating revenues for local retail and service operations.

Kentucky is especially reliant on tobacco farming and would be particularly hard hit by a decline in tobacco production. The state's agricultural economy is the most tobacco-dependent in the nation. According to the University of Kentucky's Department of Agricultural Economics, every $1 million of tobacco production contributes $3.6 million to the Kentucky economy through direct, indirect, and induced effects (Snell 1996). Kentucky's Long-Term Policy Research Center, established by the Kentucky General Assembly in 1994, recently identified 15 counties in the state that are particularly reliant on tobacco production (Armstrong-Cummings 1996): 13 of the counties are in Appalachia, and 12 are considered distressed by ARC (see Table 3). In 1992, gross earnings from tobacco production in these counties ranged from $2.9 million to $13.2 million dollars (see Table 2). In that same year, there were approximately 39 distressed counties in the Appalachian Region earning more than $1 million in gross receipts from burley tobacco (see Table 2).

Though essential to jobs and local economies in Appalachia, tobacco farming is actually only a small part of a large, complex, multi-billion-dollar industry. Tobacco farming is the tobacco industry's least profitable sector. Tobacco companies do not profit any more from tobacco grown in Appalachia than they would from tobacco grown elsewhere; thus, their commitment to the Appalachian tobacco farmer or quota holder is dubious. The value of domestically grown tobacco represents only two cents of the domestic retail tobacco dollar. Considerable value is added to tobacco through manufacturing and wholesale and retail marketing. Value added in manufacturing accounts for the biggest share of the retail tobacco dollar—about 38 cents. Wholesale and retail marketing adds 27 cents, and approximately 26 cents of the tobacco dollar is collected by state, federal, and local governments as excise tax revenue (Gale 1997).

Tobacco wholesalers employ approximately 60,000 people throughout the country (USDA Economic Research Service 1995) but provide only 3,800 jobs in Appalachia. Tobacco manufacturing is limited to a few cities, primarily Richmond, Virginia, Winston-Salem, North Carolina, and Louisville, Kentucky; though many tobacco manufacturing jobs are located in Appalachian states, only 4,000 of the approximate 25,000 jobs in tobacco manufacturing (USDA Economic Research Service 1998) are in the ARC region.

Threats to Burley Tobacco Production in Appalachia

Various circumstances could have a detrimental impact on the future of burley tobacco farming in Appalachia. Perhaps the most important factor will be the federal government's decision either to continue or to abolish the federal quota and price support program. Without this program, tobacco prices would become more volatile, which would likely drive a lot of small tobacco farmers out of business. Moreover, quota holders would lose their current monopoly on tobacco production. In general, many small-scale tobacco farms in Appalachia would not be economically competitive, and tobacco production would likely increase outside of Appalachia, where it would be cheaper to produce. Many Appalachian communities would suffer a tremendous loss of income.

Some changes have been made to the federal tobacco price support program since its inception in the 1930s. An important change came in 1982, when, under the threat of legislative dissolution of the program, Congress passed the No-Net-Cost Tobacco Program Act. This legislation shifted the financial burden for tobacco program losses from the federal government to growers. The no-net-cost rule silenced some of the critics who had accused the federal government of subsidizing tobacco production. Even though taxpayer costs are now relatively small, the association between the use of tobacco products and health concerns has galvanized public opinion against continued government support of tobacco production. There are currently 50 bills in Congress that address tobacco issues, some of which threaten to end the federal support program. One proposal, a bill introduced by Senator Richard Lugar (S. 1313), would end the federal quota and price support program in 1999.

Flue-cured tobacco growers are generally in favor of ending the program. If the program is eliminated, many of the farms that currently grow flue-cured tobacco would probably further consolidate and become more mechanized, increasing production and profits. Burley tobacco producers and quota holders, especially those in Appalachia, are generally against ending the federal quota program—many of the smaller burley farms in the Appalachian Region would probably no longer find tobacco production economically viable if the program were eliminated. All current proposals contain substantial levels of compensation for both growers and quota owners if the federal program is abolished. Most analysts agree that while initial compensation for tobacco farmers would be significant, ending the quota program would have long-term negative impacts on many rural Appalachian communities.

While legislation may be the biggest threat to tobacco production in the Appalachian Region, other factors also contribute to its uncertain future in Appalachia:

- Growing awareness of tobacco-related health concerns is lowering domestic cigarette consumption.

- Rising cigarette costs are also lowering domestic consumption, and litigation in several states against the tobacco companies and the possibility of expensive settlements could result in tobacco companies' raising the price of cigarettes further.

- The quality of foreign burley is improving, and the costs of producing burley overseas are significantly cheaper than the costs of growing it in the United States. Increasing competitiveness of foreign tobacco has continued to erode U.S.-grown tobacco's share of the world supply.

- Tobacco leaf imports to the United States increased from 400 million pounds in 1990 to more than one billion pounds in 1993; import levels remain high but steady. In reaction to the surge in imports, Congress enacted a domestic content law that was later declared illegal by GATT. Congress then passed a Tariff Rate Quota that has continued to help protect domestic tobacco producers. The loss of such protection or future international trade agreements could result in increased imports of foreign tobacco (Capehart, *U.S. Tobacco Import Update,* 1997).

- Advances in technology and agricultural science continually expand production per acre and make tobacco production more profitable for larger producers, making it costly for small farmers to compete.

The Future of Burley Tobacco in Appalachia

While tobacco production has not been enough to pull many communities in Appalachia out of distressed status, it has helped sustain many communities whose economies would undoubtedly be much worse were it not for tobacco. Many communities that rely on tobacco production currently have relatively few off-farm opportunities. In general, counties in or adjacent to urban areas are in a better position to survive the loss of tobacco income, while those in more isolated rural areas are exceptionally vulnerable. If tobacco production significantly declines in such rural areas, local economies could suffer dramatically—many distressed counties in the ARC region would suffer the most. Current trends suggest that burley tobacco production in the ARC region will decline in the near future: even if the federal government program continues, there is reason to believe that market forces will erode the profitability of producing tobacco in Appalachia.

A few organizations, including the Commodity Growers Cooperative Association, the Burley Tobacco Growers Cooperative Association, and various state and university agricultural agencies and services, have begun exploring alternatives to tobacco production in the Appalachian Region. The USDA has researched alternative agricultural crop production in the Appalachian Region for a number of years. High-revenue crops such as fruits, vegetables, hemp, and horticultural products may provide viable alternatives for some farmers currently producing tobacco. While some farmers in the Appalachian Region have experimented with new crops, few have found economically equivalent replacements for tobacco.

Currently, infrastructure to support alternative crops is insufficient. Nevertheless, it is doubtful that any crop can replace the income generated by burley tobacco production in Appalachia, either on a per-farm, county, or regional basis. If the tobacco program is abolished, the federal government will likely compensate tobacco growers and quota holders; current estimates suggest that they could receive as much as $18 billion. It is important to begin considering how such money might be spent: there will be a real need for economic alternatives in tobacco-producing areas, whether in the form of alternative crops or something completely outside of the agricultural sector. Economic opportunities in the service and manufacturing sectors should be thoroughly explored.

To summarize, in light of the above findings, ARC may want to consider any or all of the following policy options as ways to address potential tobacco-related impacts:

- Help distressed counties, through the existing Area Development Program, to identify viable, long-term diversification options, including crop diversification or economic opportunities for business expansion, recruitment, or start-up in the manufacturing and service sectors.

- Advocate for the interests of the Region, particularly those of distressed counties that may be affected by any potential tobacco settlement legislation.

- In the event of the passage of tobacco legislation, play an advisory role for the Region in determining how to deploy any set-aside funding for economic diversification in tobacco-growing regions.

It is important to begin considering such options now, as already-distressed communities in the Appalachian Region could become even more impoverished in the near future if tobacco production significantly declines.

Table 1: Burley Tobacco Production in Appalachia (1997)

State	ARC Counties Producing Burley	Distressed Counties Producing Burley	Total State Production (pounds)	Total ARC County Production (pounds)	State Total as % of U.S. Production	% of State Production in ARC Counties	% of State Production in Distressed Counties
AL	1	0	33,893	33,893	-	100%	-
GA	4	0	128,852	128,852	-	100%	-
KY	45	36	556,733,824	186,311,902	63%	33%	18%
NC	23	2	37,243,567	37,241,189	4%	100%	3%
OH	16	9	29,994,040	29,886,886	3%	99%	42%
TN	49	10	177,374,903	129,491,787	20%	73%	12%
VA	15	5	39,690,800	38,990,052	6%	98%	36%
WV	20	9	7,772,634	7,772,634	1%	100%	52%
TOTAL	**173**	**71**	**848,972,513**	**429,857,195**	**97%**	**51%**	**19%**

Tobacco production is based on 1997 USDA data. Percentages have been rounded.

Distressed county status is based upon ARC fiscal year 1999 distressed county status.

Table 2: Burley Tobacco Production in Distressed Counties

More than 99 percent of the tobacco grown in the following distressed counties is burley tobacco.

Total Pounds of Tobacco Grown in Distressed Counties (1997): 157,081,350
Earnings from Tobacco in Distressed Counties (Gross - 1992): $181,829,000
Farms Growing Tobacco in Distressed Counties (1992): 19,820
Average Tobacco Earnings Per Farm in Distressed Counties (Gross - 1992): $9,174

County	Pounds	Gross Earnings	Farms Growing Tobacco	% of Crop Receipts	Tobacco Earnings Per Farm
Lincoln, KY	8,861,644	$13,150,000	1,088	80%	$12,086
Casey, KY	8,246,341	$9,858,000	1,133	82%	$8,701
Bath, KY	8,086,475	$12,742,000	714	90%	$17,846
Adams, OH	7,623,029	$8,594,000	976	64%	$8,805
Lee, VA	7,256,522	$7,761,000	970	91%	$8,001
Lewis, KY	6,497,420	$8,329,000	792	88%	$10,516
Russell, VA	6,113,927	$6,604,000	792	94%	$8,338
Morgan, KY	5,350,363	$6,594,000	676	93%	$9,754
Carter, KY	5,098,715	$6,283,000	749	90%	$8,389
Monroe, KY	4,898,901	$6,779,000	715	81%	$9,481
Rockcastle, KY	4,578,721	$5,369,000	655	89%	$8,197
Russell, KY	4,564,992	$6,116,000	796	77%	$7,683
Hancock, TN	4,525,757	$4,688,000	605	94%	$7,749
Jackson, KY	4,372,407	$5,456,000	661	84%	$8,254
Johnson, TN	4,369,967	$3,808,000	692	84%	$5,503
Cocke, TN	4,353,956	$4,640,000	654	63%	$7,095
Wayne, KY	3,985,062	$5,094,000	635	67%	$8,022
Clay, KY	3,686,629	$3,955,000	450	88%	$7,740
Gallia, OH	3,442,597	$4,092,000	425	73%	$9,628
Cumberland, KY	3,409,307	$4,428,000	502	88%	$8,821
Elliott, KY	3,147,882	$3,330,000	462	94%	$7,208
Clinton, KY	2,963,762	$4,027,000	549	80%	$7,335
Wolfe, KY	2,812,207	$3,502,000	420	92%	$8,338
Pickett, TN	2,765,001	$2,041,000	248	88%	$8,230
Clay, TN	2,678,610	$2,781,000	365	89%	$7,619
Magoffin, KY	2,654,603	$2,110,000	357	92%	$5,910
Owsley, KY	2,389,233	$2,869,000	301	96%	$9,532
Rowan, KY	2,381,166	$2,999,000	396	84%	$7,573
Lincoln, WV	2,321,360	$1,162,000	184	87%	$6,315

County	Pounds	Gross Earnings	Farms Growing Tobacco	% of Crop Receipts	Tobacco Earnings Per Farm
Estill, KY	2,188,191	$2,961,000	354	82%	$8,364
Menifee, KY	1,956,792	$2,993,000	327	94%	$9,153
Breathitt, KY	1,823,249	$1,733,000	229	93%	$7,568
McCreary, KY	1,762,795	*	*	*	*
Mason, WV	1,417,568	$1,384,000	264	25%	$5,242
Campbell, TN	1,417,129	$1,455,000	233	84%	$6,245
Knox, KY	1,400,503	$1,537,000	215	81%	$7,149
Powell, KY	1,320,970	$1,757,000	212	84%	$8,288
Johnson, KY	1,186,415	$904,000	133	79%	$6,797
Scioto, OH	1,174,523	$1,551,000	143	23%	$10,846
Lawrence, KY	1,167,855	$1,463,000	219	88%	$6,680
Fentress, TN	1,076,662	$773,000	124	27%	$6,234
Graham, NC	962,754	$540,000	88	82%	$6,136
Lee, KY	882,114	$812,000	128	81%	$6,344
Whitley, KY	871,123	$994,000	130	74%	$7,646
Meigs, TN	715,302	$574,000	76	52%	$7,553
Buchanan, VA	510,380	$326,000	61	84%	$5,344
Pike, OH	408,325	$280,000	43	6%	$6,512
Leslie, KY	218,112	(D)	12	*	*
Dickenson, VA	200,827	$132,000	28	(D)	$4,714
Swain, NC	154,298	$87,000	15	15%	$5,800
Perry, KY	131,906	$71,000	14	29%	$5,071
Wise, VA	128,291	$69,000	20	25%	$3,450
Wirt, WV	125,736	$50,000	14	3%	$3,571
Boone, WV	83,267	$15,000	7	28%	$2,143
Monroe, OH	82,012	$60,000	13	4%	$4,615
Roane, WV	68,722	$82,000	14	23%	$5,857
Scott, TN	39,175	$15,000	8	6%	$1,875
Meigs, OH	32,051	(D)	4	*	*
Logan, WV	20,482	18,000	4	*	*
Raleigh, WV	18,086	(D)	2	*	*
Bell, KY	17,045	(D)	2	*	*
Harlan, KY	16,105	$21,000	3	18%	$7,000
Athens, OH	16,051	$5,000	3	*	$1,667
Floyd, KY	14,502	$4,000	4	1%	$1,000
Grundy, TN	11,267	$2,000	3	*	$667

County	Pounds	Gross Earnings	Farms Growing Tobacco	% of Crop Receipts	Tobacco Earnings Per Farm
Letcher, KY	6,623	(D)	1	*	*
Vinton, OH	6,529	(D)	2	*	*
Ritchie, WV	4,129	(D)	1	*	*
Summers, WV	3,332	(D)	1	*	*
Martin, KY	2,502	(D)	2	*	*
Morgan, OH	1,094	*	0	*	*

*** Data inconsistent, unavailable, or suppressed.**

(D) Figure withheld to avoid disclosing data for individual farms.

USDA pound data is from 1997; all other data is 1992 data from the U.S. Department of Agriculture Census of Agriculture (most recent available data for all categories). Production in 1992 and 1997 was virtually identical. Distressed county status is based upon ARC fiscal year 1999 distressed county status.

Table 3: Kentucky Distressed Counties with High Dependence on Tobacco Income

County	ARC County	Distressed County	Tobacco as % of Total Personal Income	Poverty Rate (%)
Bath	*	*	9.9	27.3
Casey	*	*	7.0	29.4
Clinton	*	*	4.9	38.1
Cumberland	*	*	6.5	31.6
Elliott	*	*	7.1	38
Fleming	*		9.2	25.4
Hart			9.3	27.1
Jackson	*	*	5.3	38.2
Lewis	*	*	5.9	30.7
Lincoln	*	*	5.5	27.2
Menifee	*	*	6.1	35
Metcalfe			10	27.9
Morgan	*	*	6.1	38.8
Owsley	*	*	7.5	52.1
Wolfe	*	*	6.1	44.3

Sources: ARC; data from Karen Armstrong-Cummings, *Challenges Facing Kentucky's Agricultural Economy*; and "Kentucky Counties Particularly Dependent on Tobacco" as identified by Kentucky's Long-Term Policy Research Center, 1997.

Distressed county status is based upon ARC fiscal year 1996 distressed county status.

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