Tobacco Grower Livelihoods During Agricultural Restructuring

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Abstract

In the summer of 2002, Kentucky tobacco farmers had undergone production cuts of more than 60%, and federal legislation had been proposed for a tobacco buyout. Semistructured interviews were conducted with 58 Kentucky farmers to learn how tobacco growers were responding to production cuts and/or engaging with tobacco restructuring more broadly. While tobacco restructuring could have been the catalyst toward a more diversified and sustainable agriculture, farm diversification had not taken place for the majority of Kentucky tobacco farmers. While farm diversification was fairly scarce, income diversification in response to tobacco restructuring was widespread. Outside of (mostly European) studies of pluriactivity, studies of livelihood and livelihood transition have traditionally focused on less-developed countries. In addition to the utilitarian lessons of this research, this study extends understanding of farmer livelihood transition in a developed country (the United States).

1.0 Introduction

In the summer of 2002, Kentucky tobacco farmers found themselves in the middle of agricultural restructuring. After cuts in production allotments (known as quotas) of more than 60%, after three years of direct crop sales to tobacco companies, and amidst speculation of a tobacco buyout (grounded in very real legislation in Congress), it seemed as though free-market tobacco would be an inevitable future. This research began as an attempt to learn what farm diversification was taking place, given the cuts in production and uncertain future of tobacco. This endeavor was based upon the premise that substantial reductions in tobacco production would cause, perhaps drastic, reductions in farmer income, and that economic stimulus would spur agricultural diversification. Surely, during such historic upheaval and in the throes of agricultural restructuring, farmers would reconfigure their operations in a way that presaged new and different agricultural and rural landscapes for the state, but they weren't.

While farm diversification may not have taken place for the majority of Kentucky tobacco farmers, many sought off-farm employment or relied more heavily on traditional agricultural enterprises like cattle. What follows is a livelihood study that centers around farmer engagement with tobacco restructuring, manifested most dramatically by 2002 in substantial quota cuts and the introduction of contracting. Outside of (mostly European) studies of pluriactivity, studies of livelihood and livelihood transition have historically focused on less-developed-country contexts. In addition to the utilitarian lessons of this research, this study

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extends understanding of farmer livelihood transition in a developed-country context (the United States).

While tobacco restructuring could have been the catalyst toward a more diversified and sustainable agriculture, what follows is a narrative of agricultural stability in the face of change. Perhaps it was more pragmatism that made many Kentucky farmers stay the course, quit farming altogether, or seek nonfarm income to offset tobacco losses. However one views it, this is their story.

2.0 Scholarly Context

2.1 Seventy Years of Government Support, Gone

In the 1930s the U.S. federal government instituted a system of price supports and production controls on tobacco as part of the Agricultural Adjustment Act during the New Deal. For the seven decades that followed, farmers took their crop to auction warehouses, where it was sold to the highest bidder (at or above the support price), or pooled for later sale if need be (Axton, 1975). Tobacco became the most profitable legal crop a farmer could grow, and *quota* (the amount you were allowed to grow, tied to the land) assumed its own value at the bank. Tobacco money and credit purchased farms, supported families, sent children to college, and provided security for farmers from year to year.

This is not to say that the tobacco program was without its drawbacks: Production limits had to be changed from an acreage system to a poundage system as growers increased yields through applying fertilizer and planting rows closer together, and arguments surrounding how fields were measured had been bitter. When the American public first learned the scientific evidence against smoking as a habit and its link to cancer in the 1950s, debates would intermittently flare about the appropriateness of government support of a potentially deadly crop. Still, the main changes in the U.S. tobacco economy from the 1930s until the new millennium revolved around (usually minor) quota changes from year to year. While talk about removal of the tobacco program through a buyout was not new, it was not until after the National Tobacco Settlement in 1998 (formally known as the Master Settlement Agreement, or MSA) that talk became serious legislative effort (Van Willigen and Eastwood, 1998).

In the three years following the Tobacco Settlement, government production limits (quotas) were cut by 60%, and tobacco companies introduced direct contracts for the purchase of tobacco. The tobacco buyout (formally called the Fair and Equitable Tobacco Reform Act of 2004) ended the federal tobacco program and mandated compensation for quota owners and growers of the crop. It contained no future geographic or poundage limits on tobacco production, and removed price supports for farmers. Anyone anywhere could grow any amount of tobacco in the new era of free-market tobacco (Fair and Equitable Tobacco Reform Act of 2004, 2004). Potentially the hardest hit regions would be traditional growing areas. Historically, Kentucky (growing burley tobacco) and North Carolina (growing flue-cured tobacco) account for the bulk of U.S. tobacco production (Womach, 2000), and the tobacco program had guaranteed their right and privilege to raise the crop by tying quota to agricultural land (Daniel, 1985). Tobacco restructuring during this critical juncture had the potential to drastically reconfigure the future of farm livelihoods in Kentucky.

2.2 Understanding Rural Livelihood

Since farm diversification was not as widespread as anticipated, a broader approach to understanding decision making and livelihood change by Kentucky farmers during tobacco restructuring was necessary. Often, this change involved forms of income diversification or reliance on other traditional agricultural pursuits like cattle. While these responses were unexpected, it is not surprising in an international or scholarly context: Nonfarm activities form an important part of livelihood strategies for rural households (including those who farm) in both developed and developing countries (Ellis, 1998; Reardon, Berdegué, and Escobar, 2001; Rigg and Nattapoolwat, 2001). According to Chambers and Conway (1992, p. 7), a livelihood includes the "assets (stores, resources, claims and access) and activities" needed to make a living. These assets, also referred to as capitals, can be further broken down into human, natural, physical, financial, and social capital (Chambers and Conway, 1992; de Haan, 2000; Ellis, 2000). Human capital refers to skills, knowledge, and creativity that people possess. Natural capital includes resources like land, water, and trees. Physical capital refers to machinery, household goods, tools, and improvements to land. Financial capital denotes money that has been saved and can be accessed for consumption or investment, as well as access to credit. Social capital "concerns the quality of relations among people" (de Haan, 2000, p. 344), and manifestations of it include mutual support and assistance. Thus, securing livelihood involves employing multiple strategies and assets to meet one's basic needs.[1]

The development studies literature has arguably done the best job of examining the complex configurations of livelihood in rural areas, although traditionally it has focused almost exclusively on the developing world (see, for example, Bebbington, 1999; Bryceson, 2002; de Haan, 2000; Orr and Mwale, 2001; Rigg and Nattapoolwat, 2001). A parallel line of inquiry in rural studies is the explosion of developed country case studies of pluriactivity, acknowledging the role of diverse income sources in (mostly western European) rural areas (e.g., Bateman and Ray, 1994; Blanc and MacKinnon, 1990; Campagne, Carrère, and Valceschini, 1990; Carter, 1999; Eikeland and Lie, 1999; Fuller, 1990; Shucksmith and Winter, 1990). While income diversification is an important livelihood strategy, these studies overlook other nonmonetary ways that people sustain themselves.

Discussions within development studies have shifted to encompass "sustainable livelihoods" (de Haan, 2000). Importantly, the focus on "sustainable livelihood" seems to be a common thread in studies of developed and developing countries, as evidenced by a rural sociology volume that includes case studies from Brazil, Argentina, the United States, South Africa, and Britain, among others (Almås and Lawrence, 2003b). Indeed, de Haan argues that the first world–third world dichotomy is now irrelevant for development studies, since people in every country are either included in or excluded from progress, thus making social inclusion synonymous with sustainable livelihood. De Haan defines sustainable livelihood as livelihood that "is adequate to satisfy self-defined basic needs and resilient to shocks and stress" (de Haan, 2000, p. 343).[2] Short-term responses to shocks to

[1]Although there is considerable overlap between them, typologies of assets considered in livelihood research vary. See, for example, Bebbington (1999) and Moser (1998) for alternative descriptions.
[2]De Haan views sustainable livelihood as an actor-level process, not a concept that is generalizable to a community or locale as a whole, since one actor's livelihood may

livelihood (like flood, drought, or other disasters) are seen as "coping" (Ellis, 1998), while more permanent forms of change in livelihood strategies are seen as "adaptation." Thus, coping strategies can become adaptive strategies if stressors are not removed. Likewise, adaptation produces a normal livelihood over time (de Haan, 2000). Still, it seems as though empirical studies of livelihood have been largely confined to the developing world, and studies of pluriactivity have had western Europe as their context. How, then, does one frame a study about farm livelihoods in the United States?

2.3 U.S. Livelihood Studies

Some studies of livelihood in the rural United States offer lessons for the study of Kentucky burley growers and quota owners. The first of these is Tigges, Ziebarth, and Farnham's (1998) study of four rural Wisconsin counties to determine how social relationships—elsewhere called social capital (de Haan, 2000)—affect people's experiences of local economic restructuring. The authors used group interviews in each *locality*, that is, the totality of a place and its social relationships, to understand how people had mediated livelihood impacts. Although Tigges and her colleagues chose a range of different research sites, they found that residents' experiences of restructuring were remarkably similar, across diverse economic contexts in their case-study areas.

Given the relative dearth of livelihood studies on the United States, Kentucky has received perhaps disproportionate attention in this area, due in no small part to a continuing preoccupation with livelihoods in Appalachia. In fact, two of the three works discussed here focus on Appalachian Kentucky rather than the state more broadly. Halperin's *The Livelihood of Kin* (1990) details the multiple livelihood strategies that rural Appalachians (in northeastern Kentucky and southern Ohio) employ, from agriculture and self provisioning to wage labor, informal economic activities, and support through kinship networks, to make a living. The study is a collaborative ethnography of people's lived experiences of day-to-day maintenance and as such provides one of the first accounts to pay explicit attention to rural livelihood in the United States. Halperin (1990) acknowledges that although she (like her study population) refers to these multiple livelihood strategies as the "Kentucky Way," the same types of strategies are found among rural people the world over. This follows in a tradition established by Brown during the 1940s, whose study of life in the Beech Creek neighborhood of Clay County (1988) was one of the first to examine social and economic organization in Appalachia. While much can be (and has been) learned by focusing on areas associated with persistent poverty, like central Appalachia, livelihood studies including research sites that are not chronically distressed serve to illustrate different patterns, aspects, and ways of dealing with economic restructuring. To overcome this limitation, counties with varied local economic and geographic contexts were selected for study.

The second study, Kingsolver (1991), describes how a central Kentucky community combined manufacturing work at Toyota with tobacco growing, thus defying the sectoral segregation intrinsic to many studies of rural economies mentioned above. Kingsolver's focus is on "discourses of development," and how

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structure or impinge upon that of another. Thus, any focus on sustainable livelihoods at a community level would require a different definition altogether, bordering more on principles of sustainable development, which are harder to operationalize (Almås & Lawrence, 2003a).

local residents use them to actively create their working future. Kentucky tobacco growers have long defied sectoral segregation, with full-time farming being the exception rather than the norm. With this in mind, perhaps it is not surprising that Kentucky farmers, confronted with the necessity of livelihood change, would not automatically envision for themselves an alternative agricultural future.

Lastly, Swanson (2001) uses semistructured interviews to examine the state of farm diversification among tobacco growers in two eastern Kentucky counties. Swanson also did not find much diversification, and his interviewees repeatedly stated there was "no substitute for tobacco." Swanson found that barriers to diversification for these farmers were similar to those found for other U.S. tobacco farmers and included "the lack of comparably profitable crops and the lack of reliable markets for sale of these alternative farm products" (Swanson, 2001, p. 111). He concluded that resistance to alternative crops was based on unrealistic expectations of return and predictability created by the tobacco program. Several areas of agreement or disagreement with Swanson's findings are cited in the discussion of research results below.

4.0 Methods

Semistructured interviews were conducted with 58 Kentucky farmers during the summer of 2002 to learn how tobacco growers were responding to quota cuts and/or engaging with tobacco restructuring more broadly. Three counties were chosen as research sites in different areas of the state (Figure 1) to try to understand the role of different geographic and agricultural contexts in farmer experiences of tobacco transition. Anderson County, located in central Kentucky, has agricultural traditions of raising cattle, growing corn or hay to feed cattle, and growing burley tobacco. Good cropland is somewhat limited because of the presence of rocky soils and rolling topography. Situated between urban centers, Anderson County has dramatically expanded as a bedroom community for Lexington and Frankfort, Kentucky. Many farms have been sold for development as subdivisions. Clay County, located in the southeastern portion of the state, is an Appalachian site historically characterized by subsistence agriculture to complement waged labor. Today tobacco is the main cash crop grown in Clay County, on what few farms remain. Conditions in Clay County are not considered favorable for agriculture, given the lack of good cropland in the mountainous terrain, the exhaustion and erosion of what little fertile soil was present, and difficulty accessing markets due to distance and poor transportation infrastructure. Daviess County, located in western Kentucky on the Ohio River, has traditionally boasted a diversified economy (including a strong manufacturing base), growing both burley and dark tobaccos in addition to grains in its flat, fertile land.

Snowball sampling was used, generating a contact list initially via contacts with county Cooperative Extension agents. Tobacco growers were then contacted by telephone and asked to participate in the study. If they agreed, a time and place was set for an interview. Interviews were tape recorded, averaged about an hour in length, and were conducted wherever was convenient for interviewees—in fast-food restaurants, in barns, in homes, on porches, and sometimes in moving trucks. Each interviewee was then asked to recommend additional farmers for the study. Most study participants chose to have their names used in reports of the study, wanting their stories to be told. A few chose to be interviewed confidentially, and in those cases pseudonyms have been used in the results that follow. In all cases, interviewees were given informed consent information regarding the study and their participation in it.[3]

Interview results were transcribed and subjected to content analysis, as well as coded and statistically analyzed using SPSS to produce the results that follow. Quantitative analysis of interviews was primarily used to describe and explore relationships that emerged during qualitative analysis and is not meant to imply causality or broader generalizability of statistical findings. Since the sample was one of convenience (and not normally distributed), any statistical tests exploring relationships were nonparametric.

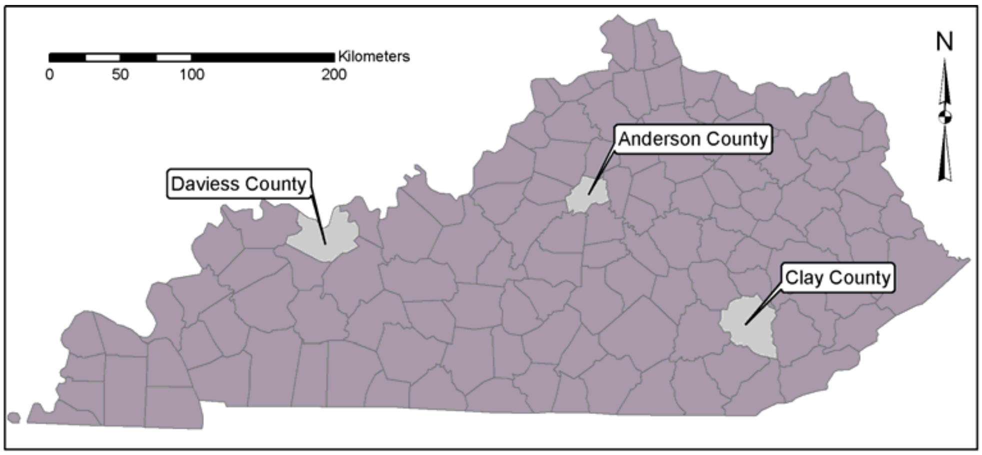

Figure 1. Case study counties in Kentucky. Map by Timothy S. Hare.

5.0 Tobacco's Role in Grower Livelihoods

Kentucky tobacco growers and quota owners responded to quota cuts in burley in a number of ways, including income diversification. Table 1 provides a summary of selected livelihood strategies employed by interviewees, both on and off farm. Livelihood strategies are divided into three categories: self and family other employment (a measure of off-farm income diversification), farm products for sale (on-farm income diversification), and production of goods that are used or consumed on the farm or by farm households (a measure of consumption or subsistence activity). These categories are intended to provide an overview of the state of income diversification on Kentucky farms, a preliminary idea of nonmonetary strategies (i.e., subsistence) that contribute to livelihood, and a notion of patterns in the practice of livelihood by county. Table 1 does not, however, give a complete accounting of livelihood strategies being employed by Kentucky tobacco farmers, nor should these activities automatically be assumed to constitute responses to tobacco restructuring. Rather, these data should be understood as the composition of livelihood for interviewees when they were interviewed in the summer of 2002. Which of these strategies were considered alternatives to tobacco will be discussed below.

[3] This research was approved by the Rutgers University Institutional Review Board (Protocol # 02-357M).

Table 1. *Selected Livelihood Strategies, by County*

Livelihood strategy	Daviess County *n* = 20	Anderson County *n* = 20	Clay County *n* = 18	Total *N* = 58
Other employment				
Full time	2	3	8	13
Prior full time	3	2	6	11
Part time	1	2	2	5
Seasonal	4	1	0	5
No	10	12	2	24
Family employment	*n* = 17	*n* = 14	*n* = 18	*N* = 49
Full time	6	4	9	19
Prior full time	1	1	4	6
Part time	5	3	0	8
Seasonal	1	0	0	1
No	4	6	5	15
Farm products for sale				
Burley tobacco	20	19	16	55
Dark tobacco	18	0	0	18
Hay	1	10	2	13
Corn	17	4	1	22
Soybeans	17	3	0	20
Vegetables	3	2	0	5
Fruit	0	1	0	1
Greenhouse	2	1	1	4
Wheat	9	1	0	10
Oats	0	1	0	1
Cattle	7	18	9	34
Horses	0	1	0	1
Eggs	0	0	0	0
Hogs	1	1	1	3
For home/farm use	*n* = 15	*n* = 20	*n* =17	*n* =52
Vegetables	13	11	16	40
Hay for livestock	6	16	8	30
Corn for silage	3	5	2	10
Horses	1	3	2	6
Cattle to eat	3	8	3	14
Eggs to eat	0	1	2	3
Hogs to eat	2	1	0	3

Full-time farmers were overrepresented in the interviewee population, and this is apparent from the 24 people who held no other employment than farming. The "Prior full time" category includes respondents who had either retired from other jobs and now farmed or who had worked previously full time, often until they could become established enough in a farming enterprise to support themselves and their families by farming. Either way, this category often reflects variation in employment status due to life stage. Clay County had the highest percentage of interviewees (44%) who worked full time, continuing the tradition of waged labor in combination with agricultural pursuits noted by Brown (1988), Halperin (1990), and Kingsolver (1991). Daviess County had the largest number of interviewees who worked seasonally, and this reflects employment in local tobacco auction warehouses. Fully 39% of interviewees had family members working full time at off-farm jobs. This was highest in Clay County, at 50%. Thirty-one percent of interviewees reported having no family members working off farm, relying only on farm income.

When examining farm products that are marketed commercially, variation in the agricultural contexts of these three counties is quite apparent. While the majority of interviewees grew burley tobacco for sale (which is not surprising, given that this was a criterion for their selection), only farmers in Daviess County grew dark tobacco. Dark air-cured tobacco is used to make snuff, and historically its production has been limited to Daviess and a few surrounding counties. Still, for most farmers in Daviess the importance of burley cultivation exceeded that of dark. The majority of farmers producing hay for sale were located in Anderson County. This finding points to the distinctive nature of each county's agricultural landscape: Most available ground in Daviess was used to grow grain, with the vast majority of corn and soybeans being grown there. In Clay, where the mountainous terrain substantially limits available cropland, tillable land was usually used for tobacco. While cattle are found in all three counties, they composed an integral part of Anderson's agricultural mix, with 18 of 20 farmers reporting some degree of involvement with cattle. Perhaps surprisingly, given Kentucky's reputation for thoroughbreds and horse racing and the bucolic images of horse farms in the Bluegrass State, only one interviewee derived any part of his farm income from horse-related enterprise. While there were several reports of farmers who sold hay, marketing it to "horse people," it is clear that horse people are by and large not tobacco farmers.

The final set of livelihood strategies pursued pertains to the degree of self-sufficiency or self-provisioning being engaged in by interviewees. This was documented in an attempt to overcome the limitations of pluriactivity studies that only examine income diversification, and to more fully understand the role of natural and physical capital in Kentucky farmer livelihoods. In every measure except consumption of hogs, Anderson County consistently engaged in more subsistence or nonmonetary livelihood strategies than Clay or Daviess. This was somewhat surprising, given the pervasive association of Appalachian Kentucky with subsistence activities historically (as in Brown, 1988, and Halperin, 1990). In part, Anderson's lead is due to the ubiquitous nature of cattle rearing, as 80% of interviewees in Anderson fed their livestock hay that they raised, and 25% grew corn for silage. The *vegetable* category is a measure of gardening, although it includes farmers who grew vegetables commercially and consumed some of them.

Vegetables regularly obtained from the gardens of family and neighbors were also included, since this is a nonmonetary livelihood strategy employed to meet basic consumption needs and is predicated upon local social relations, thus making use of available social capital (de Haan, 2000).

The question still remains as to which, if any, of the above livelihood strategies were responses to government-imposed reductions in quota between 1999 and 2002 or broader uncertainty in the tobacco economy and could thus be viewed as coping (Ellis, 1998). As shown in Table 2, only half (n = 29) of those interviewed reported engaging in income-generating activities that were explicitly considered to be alternatives to tobacco. For interviewees who were relying on other income sources as a response to quota cuts, main income-generating (coping) strategies are described below.

Table 2. *Tobacco Alternatives, On and Off Farm*

No. alternatives	No. interviewees	% interviewee sample[a]
0	29	50%
1	21	36%
2	4	7%
3	2	3%
4	2	3%

[a]Total does not equal 100 because of rounding.

First, however, it is important to note that not all interviewees had experienced loss of income due to quota cuts. Tobacco restructuring had not necessarily posed a livelihood shock (following Ellis, 1998, and de Haan 2000) for many farm households, as was widely assumed. Partly, this was because of the influx of direct payments to farmers from Phase II of the National Tobacco Settlement (MSA). These checks, commonly called “mailbox checks,” served to delay financial impact of reduced quotas for many. The other reason that some farmers had not lost income was that they relied on other income sources (both on and off farm) to make up for lost burley proceeds. Still, most reported that a smaller percentage of their farm-related income was from tobacco, as is shown in Table 3.

Table 3. *Change in % of Farm Income from Burley Tobacco, 1998 to 2002*

	Less income	Same income	Missing
Daviess n = 19	14	5	1
Anderson n = 18	13	5	2
Clay n = 18	6	12	0
Total	33	22	3

The growers interviewed were compensating for lost income by engaging in off-farm employment (which many refer to as "public work") or launching new businesses or by raising cattle, vegetables, or grains and dark tobacco.

While full-time farmers have long been the minority in Kentucky, restructuring in burley tobacco pushed even more farmers into off-farm employment. This was the case for David Catlett of Anderson County, a third-generation farmer who was farming full time and began working seasonally for a blacktop company. "I spend really more time there now [than on the farm].… They also have a farm implement dealership … and they started doing the blacktopping. They kind of felt like with tobacco going out they had to look at something else, too" (D. Catlett, personal communication, June 22, 2002). His wife, Deadra, expressed her frustration with the situation: "Well, he's workin' now an' he's a third-generation farmer an' he's the first one who's had to go an' get a job.…" (personal communication, June 22, 2002). Likewise, George Halmhuber was farming full time and began excavating half time:

> Everything over here was just about the right amount of work for what I wanted to do.… When they started cutting [quotas], I figured they were gonna cut more.… '99 was a drought and I had to sell off a whole lot of cattle.… I'd been thinkin' about startin' excavating anyway, so I took all that cattle money, bought dozers. (June 21, 2002)

Perhaps this is not surprising in Anderson and Clay counties, where combining off-farm employment and farming is common practice, but similar trends were present in Daviess County, where farming is big business. Murray Murphy farmed full time with his two sons, both of whom turned to off-farm income in the face of declining prospects for tobacco (personal communication, July 16, 2002). In 2002 they did backhoe and combine work on the side.

A few words need to be said about Clay County, when compared to Anderson and Daviess. First, Clay had the largest number of interviewees reporting that tobacco income constituted the majority of their farm income. This echoes an earlier point, that areas in eastern Kentucky may not grow as much tobacco as places in central or western Kentucky, but that their farm economies are typically more reliant upon it. As can be seen in Table 4, Clay also had the lowest number of interviewees who invested Phase II monies in their farm operations. In both Anderson and Daviess counties the majority of interviewees (78% and 80%, respectively) reported having put these monies back into farming operations. These two trends together do not bode well for the future of agriculture in Clay County. Whether or not these trends are representative of eastern Kentucky more generally remains unclear, but should be a matter of further investigation. Fortunately, perhaps, many interviewees in Clay (8 of 18) did not consider their main occupation to be farming. This highlights the continued importance of the availability of off-farm employment for Clay County farmers.

In Clay County some farmers started their own businesses in response to quota cuts. Tim Lunsford ran an agricultural supply business, in addition to working as a surveyor to supplement his farm income (personal communication, August 5, 2002). Shannon Robinson ran a local grocery store and raised tobacco and cattle (personal communication, August 1, 2002). Lunsford and Robinson, both in their thirties, were part of the young farmer cohort, in a state where the average farmer age was 55 (USDA NASS, 2002). For the few young people who wanted to farm, barriers to entry into full-time farming were more formidable than ever, with land and equipment prices making it impossible for most who did not inherit or become part of an established farming enterprise. And even most established farmers were finding it more difficult to make ends meet on farm income alone.

Table 4. *Tobacco Settlement Fund Reinvestment and Tobacco Reliance, by County*

	Phase II money into farm	>50% farm income from tobacco (2002)
Daviess (*n* = 20)	80% (*n* = 20)	32% (*n* = 19)
Anderson (*n* = 20)	78% (*n* = 18)	40% (*n* = 20)
Clay (*n* = 18)	44% (*n* = 18)	78% (*n* = 18)

Among farmers who were relying more on other sources of farm income to offset tobacco losses, cattle and (to a lesser degree) vegetables were among the most common tobacco alternatives. Cattle, though part of the traditional agricultural landscape in Kentucky, assumed new significance for farmers coping with quota cuts in burley. Nearly 60% of interviewees raised cattle to sell, with Anderson County clearly leading in this pursuit (see Table 5). Buddy Smith, in Anderson County, had developed a registered Angus herd. "I've developed pretty good registered bull sales; I've sold 19 bulls this year. Of course I've grown alfalfa hay, pick up a few more customers on that all the time … to make up for the money comin' in from where you don't have the tobacco.…" (personal communication, June 19, 2002). Mark Crabtree, a young farmer in Daviess County, got into cattle to offset tobacco losses. Even though he had 60 head of cattle, he said, if his wife "wasn't teachin' school, I couldn't farm full time. I'd have to work somewhere [laughs]" (personal communication, July 14, 2002).[4] Similarly, in Clay County, Mark Dezarn relied on cattle to replace his lost income (personal communication, August 2, 2002).

Table 5. *Interviewees (N = 58) with Cattle for Sale, by County*

County	Have cattle for sale	No cattle for sale
Daviess	7	13
Anderson	18	2
Clay	9	9
% Interviewees	59%	41%

[4]Many farmers reported that their spouses worked off farm, and in several cases this was as much for health insurance benefits as for the additional income. This corroborates a finding by Tigges, Ziebarth, and Farnham (1998) that Wisconsin farm wives worked for health insurance. There were multiple cases in Anderson County, particularly, where farm spouses drove school buses for the health benefits.

While there has been much talk of diversification of agriculture as a way to promote a more balanced and profitable farm economy in Kentucky, the reality has been an overwhelming designation of Tobacco Settlement funds toward programs that fund cattle-handling facilities, pasture and forage improvements, and bull genetics. These investments composed 72% of all expenditures of the Kentucky Agricultural Development Fund's monies for the 2001–2002 fiscal year, with the remaining 28% being divided amongst programs for "agricultural diversification," "goat diversification," and "county project investments" (Kentucky Agricultural Development Board, 2002, Appendix B). To its credit, expanding cattle herds and operations does not require farmers to learn a new skill set (augment their human capital) or purchase different equipment (enhance physical capital), both of which farmers nearing retirement are largely unwilling to do, and has already yielded financial benefits for some farmers. The long-term benefit of increasing reliance on a single agricultural commodity, however, is questionable. With the December 2003 discovery of mad cow disease in the United States and regular fluctuations in cattle prices, the livestock market may or may not ensure a robust agricultural economy in the state over the years to come.

Promotion of vegetable and fruit production by government and development bodies is a broader trend, and O'Brien et al. (2004) report that groundnut farmers in India are being encouraged to grow vegetables and fruit as alternative crops. While many Kentucky tobacco farmers have no desire to grow vegetables as a means of farm diversification, it has been attempted statewide with farmers selling through local farmers' markets or as part of vegetable cooperatives. In Kentucky, efforts to increase vegetable growing have met with limited success, partly because of unstable markets. Swanson documents two failed attempts to organize vegetable cooperatives in eastern Kentucky, the rise and fall of direct production of bell peppers and cucumbers for vegetable processors, and the more recent iteration of poor market access manifested in weakly organized farmers' markets and direct marketing via roadside sales (Swanson, 2001). My interviewees related similar past experiences with producing for vegetable processors, frustrations about farmers' markets, and concern about market saturation and stability. As shown in Table 1 (above), only five of the tobacco growers and quota owners interviewed were currently growing vegetables commercially, for marketing through any venue.

More common than the success stories were tales of farmers who have tried and abandoned vegetables as an income-producing strategy. Skepticism about the impact of farmers' markets ran deep among tobacco growers. "Anderson County, for instance, got this farmers' market goin out here. That's going to take care of about 10, 15 people, but that's about all. They're gonna be the small-time person that's got like five acres out here.…" (G. Edington, June 20, 2002). Swanson's (2001) findings support the notion that those benefiting from vegetable sales through farmers' markets are not usually tobacco growers. But dislike for vegetables runs even deeper: Many of the farmers interviewed (almost 40%) did not have a garden for their own use, preferring to purchase produce rather than grow their own. Many claimed that they were so busy, having had to expand their farming enterprise to stay afloat, that they had no time to grow a garden. Others said it was pointless to "fool with" a garden when high-quality produce could be purchased cheaply and more easily than it could be grown. Among those who have tried growing vegetables to compensate for lost tobacco income, the reaction is mixed at best. Joe Cleary, of Anderson County, was growing vegetables for the local farmers' market in addition to raising tobacco, hay, and cattle. Although he was on the board of the local farmers' market (which received Tobacco Settlement funds), he said,

> So far I'm not likin' it too much. See, Dennis [the extension agent, friend] and I were gonna grow an acre and a half of broccoli, and the plants came in messed up … so I got my half acre and he got about a half acre, and I got broccoli out there just rottin' where we can't sell it. I mean I got my expenses back, and maybe a little money, but nothin' like the money that shoulda been made off that half acre.… I've been one of the first [to market] with most of these vegetables. And it's like if I bring it in one day, the first day, it sells out. But if I bring it back the next day, it just kind of sits.… You know what happens is once you pick it, or cut it, or harvest it … at the end of the day you either have to take it home and eat it, freeze it, can it, or something, or throw it away.… So there's a lot … goin' to waste. (June 18, 2002)

Waste was a common frustration among farmers who had tried growing vegetables commercially and is a concern that is not confined to Kentucky vegetable growers.[5] Daviess County farmer Joe Elliott, a board member of the Western Kentucky Vegetable Cooperative (another highly touted expenditure of Tobacco Settlement funds), was just as frustrated about vegetable prospects as many other farmers. His daughter-in-law, Felicia, said that with vegetables

> you'd have to cut at least 30% off the top of any type of profit or yield … because of what's lost in the field. If it's got a bruise on it or if it's got any type of discoloration or anything it's not gonna be sold.… Of course it cuts into your profit, not that that's very much for vegetables.…We could feed at least two or three small third world countries on what we leave in the field. (July 10, 2002)

Concern about the profitability of vegetables is also a recurrent theme. Joe Elliott spoke on vegetables as a tobacco alternative:

> They're really tryin' to tell you that 20 farmers in Daviess County can put more food down there [at the Co-op] than they can possibly ship. So that's not an alternative crop when you've got 900 farmers that raises tobacco.… This last year they had a broccoli—perfect—but for some reason the Lord dropped the temperature one day about 30 degrees. And when it did, it actually turned it colors.… They wouldn't buy it. They already had it in the box, on the truck. So they ended up losin' 65 cents a box.… They actually lost money. (July 10, 2002)

Another factor is that vegetables, especially when compared to tobacco, are labor intensive. "The jalapeño peppers that we had … we picked 16 tons in about four

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[5]See Mascarenhas (2001) for a case study of fruit and vegetable growing in southeast Michigan. Issues with produce left in the field are discussed on page 394. Still, Kentucky farmers seem more disturbed by wasted product than those who regularly grow vegetables commercially. Swanson (2001) notes that a key obstacle to farm diversification is that burley growers constantly compare alternative crops with tobacco. This may be part of the negative reaction to vegetable waste, since there is relatively little with tobacco.

days and took 'em down here, and they was bringing us 1,200 dollars a load. It was 1,100 dollars' labor to get 'em picked" (Joe Elliott, 10 July 2002).

Sylvester Fischer, Daviess County farmer and supervisor of sales for Owensboro Tobacco Market during the winter, talked about his experience with tomatoes even before the quota cuts in tobacco:

> [F]or about five years we were raisin' 30, 60 acres of tomatoes.… That didn't work out too good.… They were a lot of work because … we had to spray 'em like every 7 to 10 days. They were quite expensive to raise and it wasn't nothin' to get 1,800 dollars an acre in 'em. The problem was we had to make 1,800 just to break even.… Some of the years we made some fairly decent money, and one year lost 12,000 dollars on 30 acres. (July 9, 2002)

James Sampley, also of Daviess County, tried another approach, a roadside market, and concluded that nothing could take the place of tobacco.

> Vegetables has always been a tough way to make it. We already have plenty of them, and to get a market we're goin' to have to rob somebody's market. It's a lot harder to fool with than tobacco.… You can have overproduction. Last year they had overproduction of sweet corn.… I couldn't sell hardly any of it.… They've got a co-op of course, here. I've thought about maybe tryin' [to sell vegetables through it], but I can't see it. I've talked to a lot of 'em that are in it, and they're not realizing any profit from it. (July 12, 2002)

The co-op's perspective on vegetables was a bit more optimistic, with Joe Cecil asserting that "the risk is quite a bit greater, but the rewards are greater also" (personal communication, July 11, 2002). Cecil said he believed that vegetables provided a way for tobacco growers to continue farming full time and for young farmers to get established. But optimism was not enough to make regular profit off of vegetables. In December 2005 WKGC closed, unable to make its loan payments ("Vegetable growers' cooperative closes," 2006). While vegetables may supply some income for some farmers some of the time, they are no panacea for the woes of Kentucky's tobacco-dependent agricultural economy. At best they are but one piece of the answer.

In Daviess County where grain and dark tobacco are part of the agricultural mix, these allowed many farmers to shift emphasis away from burley. Paul Fullenweider was raising grain and cattle. He said that burley quota cuts had not really affected him (personal communication, July 14, 2002). Sylvester Fischer relied more on dark tobacco, since increased prices in dark coincided with burley cuts (personal communication, July 9, 2002). With its fertile, flat cropland and diversified agricultural economy (when compared to the rest of Kentucky), Daviess County seemed to be taking tobacco quota cuts in stride. This apparent prosperity, though, could be illusory. Echoing several other Daviess County farmers, Steve Daugherty[6] said, "You take the government subsidies out of it, and most people would quit grain farming. At these prices there would be zero profit" (personal communication, July 16, 2002). Most grain farmers agree that grain farming would not be profitable without subsidies, a fact that so disturbed some that they quit growing grain altogether because it felt too much like welfare. This

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[6]Pseudonym.

certainly repaints the picture of a robust farm economy in Daviess; in an era when U.S. agricultural subsidies are coming under increasing scrutiny, grain farming could be subject to the same removal of government support as tobacco.

As is evident from the discussion above, burley growers were compensating for any lost income in several ways, many of which utilized skills (human capital) and/or infrastructure (physical capital) that they already had. For example, operating bulldozers, combines, and so on extended mechanical abilities (human capital) and machinery (physical capital) that many farmers already possessed, and expanding cattle operations did not usually require acquisition of new skills (human capital). Interestingly, there is a weak negative correlation between farmer age and the number of explicitly stated tobacco alternatives being attempted (shown in Tables 6, 7). This means that younger farmers were more likely to be involved in activities they viewed explicitly to be alternatives to tobacco. One explanation for this is the tremendous uncertainty about the future of burley tobacco (and farming more generally) that any younger farmer would face in this regulatory transition. Another could be that older farmers nearing retirement might be less likely to attempt new ventures.

Table 6. *Correlation Between Tobacco Alternatives and Age (N = 58)*

		Age
Tobacco alternatives (on and off farm)	Spearman's rho correlation	-.349
	Sig. (2-tailed)	.007

Table 7. *On- and Off-Farm Tobacco Alternatives by Age Range*

Age of interviewee	Tobacco alternatives employed, per capita
30–39 *n* = 9	1.22
40–49 *n* = 14	0.86
50–59 *n* = 16	0.63
60–69 *n* = 10	0.70
70–79 *n* = 9	0.33

6.0 Conclusion

As discussed above, income diversification is a common coping strategy among people the world over whose livelihoods are in transition. While farm diversification was fairly scarce, income diversification in response to tobacco restructuring was widespread among interviewees. This is congruent with the many examples of pluriactivity in the rural geography literature that emphasize the role of income diversification in other developed countries, as well as with Swanson's (2001) findings that farm diversification in Kentucky is generally lacking for tobacco growers. This research has described the situation of Kentucky farmers within a livelihood framework, focusing on how livelihood transition is experienced in a developed country context.

Income diversification strategies, both on and off farm, were essential for the sustained economic well-being of these tobacco farmers. The most commonly employed strategies for income diversification involved skills or assets (capitals) that farmers already possessed, whether operating machinery for money on the side, or utilizing farmland for expanded hay, grain, or cattle operations. Without diversifying into other crops or livestock, the future for farming in Clay County seems bleak. Low levels of investment of Phase II monies into farm operations do not signal the kind of transition that needs to occur if Clay is to retain any significant farm economy. In their own ways, Anderson and Daviess counties were coping with and/or adapting to tobacco transition. Whether it was through greater reliance on vegetables, grain, or cattle, or seeking off-farm employment, the farmers interviewed were making ends meet.

Aside from variations in local context (and the possibility that younger farmers might be more likely to engage in tobacco alternatives than older ones) there were more commonalities among interviewees' experiences of tobacco restructuring than differences, whether examined by age or farm size. Proactive efforts by burley growers to shape their farming futures were woefully lacking, partly because economic necessity had not yet provided the stimulus for many to act. Nor has it yet: The tobacco buyout in 2004 replaced Phase II payments (from the National Tobacco Settlement) with buyout payments over a 10-year period, which continues to delay financial impacts of the now liberalized tobacco economy for farmers. For many this money serves as a welcome retirement check or as a means to pay down debt. Some are using it to begin new enterprises or to expand landholdings. Kentucky tobacco production dropped in 2005, and showed a slight rebound in 2006 as farmers gained confidence in a free-market tobacco economy. While many small farmers and older farmers have exited production, a few have expanded holdings and some are considering re-entering production. Perhaps only after buyout payments have ended in 2014 will we know what the new shape of Kentucky's farm economy will be, and whether buyout funds have been used for new agricultural enterprises, invested in tobacco agriculture, or spent in other ways. This should be a matter for ongoing research, including examining the role of various capitals in livelihood (re)configuration for Kentucky farmers.

7.0 References

Almås, R., & Lawrence, G. (2003a). Introduction: The global/local problematic. In R. Almås & G. Lawrence (Eds.), *Globalization, localization and sustainable livelihoods* (pp. 3–24). Aldershot: Ashgate.

Almås, R., & Lawrence, G. (Eds.). (2003b). *Globalization, localization and sustainable livelihoods*. Aldershot: Ashgate.

Axton, W. F. (1975). *Tobacco and Kentucky*. Lexington: University Press of Kentucky.

Bateman, D., & Ray, C. (1994). Farm pluriactivity and rural policy: Some evidence from Wales. *Journal of Rural Studies, 10*(1), 1–13.

Bebbington, A. (1999). Capitals and capabilities: A framework for analyzing peasant viability, rural livelihoods, and poverty. *World Development, 27*(12), 2021–2044.

Blanc, M., & MacKinnon, N. (1990). Gender relations and the family farm in Western Europe. *Journal of Rural Studies, 6*(4), 401–405.

Brown, J. S. (1988). *Beech Creek: A study of a Kentucky Mountain neighborhood.* Berea, KY: Berea College Press.

Bryceson, D. F. (2002). The scramble in Africa: Reorienting rural livelihoods. *World Development, 30*(5), 725–739.

Campagne, P., Carrère, G., & Valceschini, E. (1990). Three agricultural regions of France: Three types of pluriactivity. *Journal of Rural Studies, 6*(4), 415–422.

Carter, S. (1999). Multiple business ownership in the farm sector: Assessing the enterprise and employment contributions of farmers in Cambridgeshire. *Journal of Rural Studies, 15*(4), 417–429.

Chambers, R., & Conway, G. (1992). *Sustainable rural livelihoods: Practical concepts for the 21st century*. Brighton, UK: Institute of Development Studies.

Daniel, P. (1985). *Breaking the land: The transformation of cotton, tobacco, and rice cultures since 1880*. Urbana and Chicago: University of Illinois Press.

de Haan, L. J. (2000). Globalization, localization and sustainable livelihood. *Sociologia Ruralis, 40*(3), 339–365.

Eikeland, S., & Lie, I. (1999). Pluriactivity in rural Norway. *Journal of Rural Studies, 15*(4), 405–415.

Ellis, F. (1998). Household strategies and rural livelihood diversification. *The Journal of Development Studies, 35*(1), 1–38.

Ellis, F. (2000). *Rural livelihoods and diversity in developing countries*. Oxford: Oxford University Press.

Fair and Equitable Tobacco Reform Act of 2004, Title VI of The American Jobs Creation Act of 2004 (2004).

Fuller, A. M. (1990). From part-time farming to pluriactivity: A decade of change in Rural Europe. *Journal of Rural Studies, 6*(4), 361–373.

Halperin, R. H. (1990). *The livelihood of kin: Making ends meet "the Kentucky way."* Austin, TX: University of Texas Press.

Kentucky Agricultural Development Board. (2002). *Cultivating rural prosperity: Kentucky Agricultural Development Fund Annual Report July 2001–June 2002*. Frankfort, KY: Office of Agricultural Policy.

Kingsolver, A. E. (1991). *Tobacco, Toyota, and subaltern development discourses: Constructing livelihoods and community in rural Kentucky.* Unpublished doctoral dissertation, University of Massachusetts, Amherst.

Mascarenhas, M. (2001). Farming systems research: Flexible diversification of a small family farm in southeast Michigan. *Agriculture and Human Values, 18*(4), 391–401.

Moser, C. O. N. (1998). The asset vulnerability framework: Reassessing urban poverty reduction strategies. *World Development, 26*(1), 1–19.

O'Brien, K., Leichenko, R. M., Kelkar, U., Venema, H., Aandahl, G., Tompkins, H., et al. (2004). Mapping vulnerability to multiple stressors: Climate change and globalization in India. *Global Environmental Change, 14*(4), 303–313.

Orr, A., & Mwale, B. (2001). Adapting to adjustment: Smallholder livelihood strategies in southern Malawi. *World Development, 29*(8), 1325–1343.

Reardon, T., Berdegué, J., & Escobar, G. (2001). Rural nonfarm employment and incomes in Latin America: Overview and policy implications. *World Development, 29*(3), 395–409.

Rigg, J., & Nattapoolwat, S. (2001). Embracing the global in Thailand: Activism and pragmatism in an era of deagrarianization. *World Development, 29*(6), 945–960.

Shucksmith, M., & Winter, M. (1990). The politics of pluriactivity in Britain. *Journal of Rural Studies, 6*(4), 429–435.

Swanson, M. A. (2001). *No substitute for tobacco: The search for farm diversification in Appalachian Kentucky.* Unpublished doctoral dissertation, University of Florida.

Tigges, L. M., Ziebarth, A., & Farnham, J. (1998). Social relationships in locality and livelihood: The embeddedness of rural economic restructuring. *Journal of Rural Studies, 14*(2), 203–219.

United States Department of Agriculture, N. A. S. S. 2002 Census of Agriculture.

Van Willigen, J., & Eastwood, S. (1998). *Tobacco culture: Farming Kentucky's Burley Belt*. Lexington, KY: University Press of Kentucky.

Vegetable growers' cooperative closes: Cold weather, gas prices blamed. (2006, January 1). *Courier Journal*.

Womach, J. (2000). *Tobacco price support: An overview of the program* (No. CRS Report for Congress, 95–129 ENR). Congressional Research Service: Library of Congress.