



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

The Attitudes of Rural Residents Toward the Expansion of Natural Resource Based Economic Activities: A Comparison Between Recent In-migrants and Long-time Residents

Nancy Stout-Wiegand, Steven D. Bulman, and Dennis K. Smith

Rural residents, particularly recent in-migrants, are often characterized by preferences for a tranquil rural lifestyle based on the attributes of an open countryside. A survey of residents of an isolated rural county in West Virginia was conducted to explore the proposition that recent rural in-migrants are more opposed to the growth of natural resource based activities which are detrimental to the rural countryside than are long-term residents of the County. The hypothesis was not supported, as both recent in-migrants and long-time residents strongly favored economic development of the County's natural resources over preservation of the natural countryside.

Recently, rural development research and policy in the United States has undergone a major change in emphasis as the Nation has shifted from a decade long rural-to-urban migration and rural area population decline in rural area population growth during the 1970's (Beale, February 1981).

Historically, migration patterns have been most reliably predicted by economic differentials between places. However, as rural areas have experienced recent employment and income growth, the economic differentials between rural and urban areas have diminished. Consequently, noneconomic or quality-of-life considerations have become increasingly important in residents' locational preferences (Wardwell, 1982). The literature suggests that a major reason for rapid population growth in rural areas is that people living in large cities have increasingly changed their residential preference to that of smaller towns and open rural territory (Wardwell, 1982; Zelinsky, 1978; Zuiches and Rieger, 1978. Recent stud-

ies have found that noneconomic quality-of-life conditions, including clean air and water, have become highly valued with regard to residential preference, and may be of greater importance than improvements in income or occupational opportunities (Stevens, 1980; Zuiches, 1982).

With this "rural population reversal," many attendant rural area problems have emerged; including questions of rural services adequacy, changing rural manpower bases, the adequacy of rural employment opportunities, and the impacts of changing rural demographic and social characteristics (Beale, January 1981; Colyer and Smith, 1982; Colyer, et al. 1982).

To address these issues, a sample survey based study of a rural West Virginia county was undertaken in the Summer of 1981 (Bulman, 1982). The portion of that study that focused on the County residents' attitudes toward the expansion of economic activities based on the County's natural resources is the subject of this paper. The proposition explored is that recent rural in-migrants place a higher value on an undisturbed and scenic open countryside than do long-time residents and thus are more opposed to the growth of natural-resource based activities which are detrimental to the rural countryside's perceived attributes.

The authors are, respectively, Research Associate, Graduate Student, and Associate Professor, Department of Agricultural Economics Division of Resource Management West Virginia University Morgantown, WV 26506.

Published with the approval of the Director of the West Virginia Agricultural and Forestry Experiment Station as Scientific Article # 1840. This research was supported with funds appropriated under the Hatch Act.

The Study Area

Webster County, WV was the geographic unit chosen for this study. The County is located in East-Central West Virginia. It is a relatively "isolated rural county" which experienced a population decline of 45.2 percent from 1940 to 1970; but its population increased by 24.8 percent during the 1970's resulting in a population of 12,245 residents in 1980 (U.S. Bureau of the Census, 1982). The County's population was classified as 100 percent "rural" by the U.S. Bureau of the Census in 1980 with the largest town located in the County having a population of only 939 persons (U.S. Bureau of the Census, 1982). Webster County's original economic base was centered on a mineral springs resort hotel which was destroyed by fire and not rebuilt during the early part of this century. Agricultural, mining and forestry activities have provided only minimal economic opportunities for County residents during recent decades, with forest products related activities being the most important contributor to economic opportunities in the County.

In the Summer of 1981, a sample survey of Webster County households was conducted using the personal interview technique. A systematic sample of 182 households was drawn from detailed county maps and a road count of non-vacant housing units. The sample was stratified by incorporated versus unincorporated areas. Incorporated areas—which contain just 17 percent of the County housing units—were double sampled (using a sampling interval of 10 versus a sampling interval of 20 for unincorporated areas) to provide sufficient data for comparisons. Personal interviews were conducted with a household member age 18 or older, and lasted about two hours. Of the 182 households contacted, 167 interviews were completed for a response rate of 92 percent (Bulman, 1982).

Migration Characteristics

Of the respondent households, about one-third had moved during their lifetime into the County from elsewhere; 19.0 percent of these households had moved to Webster County from outside the State and 13.0 percent had moved into the County from another county in West Virginia. Eighteen percent of the sample had moved into the County during the 1970's, thus, there was a substantial in-migration into

the County during the 1970's which contributed to its relatively high population growth rate. In terms of the in-migrants of the 1970's, three major reasons emerged for their move to Webster County: (1) "Return to Family Home," (2) "Significant Life Change" such as poor health, death of spouse, retirement, or divorce, and (3) "Need for Employment." These categories were cited by in-migrants as "first response reasons" by 25.9 percent, 25.9 percent and 20.4 percent of the in-migrant respondents, respectively. The "life-change" migration reasons, especially poor health and retirement, have been commonly associated with the "rural population revival," but the "need for employment" reason is not as widely recognized. Furthermore, the "return to family home" reason, if further refined, may contain substantial components of the "employment need" and "life-change" reasons. Due to the open ended responses to this question, it was not possible to formulate response categories that were entirely mutually exclusive, however, these data do provide some insight as to why people have been moving to Webster County. The "employment need" reason needs further exploration, particularly as to whether it is a transitory or structural adjustment related to the national economy.

For the purpose of this analysis, two groups of respondents were identified based on their length of residence in Webster County: "Newcomers" are defined as those who had moved into Webster County from another county or state within the past 10 years, and "oldtimers" are those who have lived in the County for at least 10 years. This variable was computed from two questions: "When did you move to this location?" and "Where did you move here from?" The analysis is based on the 129 respondents who could be classified as "newcomers" or "oldtimers" according to the above definition.¹

In Table 1, these two groups are described in terms of age and occupation. Newcomers were much younger than oldtimers with 40 percent being less than 40 years old compared to only 6 percent of the oldtimers. Thirty-four percent of the oldtimers were over 65 years old compared to 13 percent of the newcomers. This finding was somewhat surprising consid-

¹ Those respondents who had moved to their present location from within the County during the past 10 years were excluded from the following analysis, as it was not possible to determine their length of residency within Webster County.

Table 1. Age and Occupation Distributions for Newcomers and Oldtimers

	New-comers		Old-timers		Total	
	N	%	N	%	N	%
Age						
< 40	12	40	6	6	18	14
40-55	9	30	24	24	33	26
56-65	5	17	35	36	40	31
> 65	4	13	34	34	38	29
	30	100	99	100	129	100
Occupation						
White Collar	6	20	16	16	22	17
Blue Collar/Service	2	7	17	17	19	15
Not in Labor Force (housewife, student, retired)	19	63	65	66	84	65
Unemployed	3	10	1	1	4	3
	30	100	99	100	129	100

ering the fact that nationally, the elderly constituted a higher proportion of urban-to-rural migrants in the 1970s than their proportion of the total rural population (Deavers and Brown, 1980).

There were also differences between the two groups in terms of occupational classification. More oldtimers held blue collar jobs than newcomers (17 percent versus 7 percent) and more newcomers than oldtimers were unemployed (10 percent versus 1 percent).

These age and occupation differences suggest that the group of newcomers is not composed generally of elderly people moving to Webster County to retire, but is characterized by a substantial number of younger people relocating to find employment.

Perception of Job Opportunities

The vast majority of the respondents felt that job opportunities in Webster County were inadequate (97 percent). Despite the fact that one-fifth of the recent in-migrants to the County cited, "need for employment" as the main reason they moved to the County, 90 percent of these newcomers felt job opportunities were inadequate (99 percent of the oldtimers felt job opportunities were inadequate).

The main reasons for the inadequacy of job opportunities, as perceived by the respondents, were: "high unemployment everywhere" (40 percent); "inadequate leadership" (22 percent); "resources underdeveloped" (15

percent) and "lack of industry" (12 percent). Respondents were asked which specific job opportunities they would like to see become available in Webster County. Fifty-six percent of the respondents wanted to see industry-related jobs become available and 44 percent desired coal mining jobs in the County. Frequently mentioned public service job opportunities desired were those reminiscent of the Great Depression ("WPA" and "CCC"), and those of recent presence in the County "CEDA").² A quarter of the sample mentioned a desire for "public service" jobs and 15 percent would like to see more job opportunities in forestry.

More than one-half of the respondents (54 percent) said these desired County job opportunities would fit the employment needs of their households. The remainder of the respondents said that job opportunities were not needed for their households due to the fact that the family member(s) were either employed, retired or disabled.

Income Limiting Factors

Respondents were asked whether or not there were additional factors, aside from job opportunities, which were limiting the income producing abilities of their households. One-half of the respondents listed other factors that limit their family's income. The most frequently stated factors were "health/age," mentioned by 35 percent of those responding, and "disability" cited by 20 percent. Other income limiting factors mentioned were "low education" (13 percent), "lack of county income" (12 percent), "retired" (11 percent), "care of dependents" (11 percent), and "commuting distance" (6 percent).

Attitudes Toward Expansion of Natural Resource-Based Activities

Respondents' attitudes toward the expansion of natural resource-based economic activities in the County were sought. First, respondents were asked to indicate on a scale of 1 to 5 how much they favored or opposed expansion of several natural resource-based economic activities. These activities included farming, forestry, surface mining, deep-mining, gas and

² The "CEDA" public program was employing young adults in part-time manual labor work in the County during the Summer of 1981.

oil extraction and tourism. As shown in Table 2, the mean response to each of these activities indicates that expansion of all of the natural resource-based activities was highly desired by all of the respondents. The activity which both groups most strongly favored was farming and the least favored activity was surface mining. (Although surface mining received the lowest marks in terms of favorability, it was still generally favored by the respondents.)

Oldtimers were more favorable than newcomers toward most of the activities. However, the only activity for which there was a significant difference between the two groups was forestry ($p < .02$) with oldtimers more strongly favoring the development of forestry-related activities than newcomers. Newcomers more strongly favored surface mining and tourism than did oldtimers (although these differences were not significant).

Next, respondents were asked what kinds of benefits and what kind of costs they expected to be associated with the expansion of these activities. "More employment opportunities" and "more income" were the two most important benefits stated by the residents (78 percent and 55 percent, respectively). The benefits of "more public services," "more consumer business" and "social improvements" were each mentioned by more than one-third of the sample, and "more tax revenue" and "increased population" were each cited as benefits by 16 percent of the sample.

The most important cost associated with expansion of these natural resource-based activities, as perceived by the respondents, was "damage to land and humans." Sixty-three percent of the respondents felt that expansion of the activities would "damage the land and the people." Thirty-five percent felt these activities would result in "social unrest," 24 percent said a "housing crunch" would result and 17 percent thought these activities would cause "higher cost of living." Other costs mentioned were "over-population" (15 percent), "worse services" (10 percent), and "tax burden" (8 percent).

Finally, respondents were asked whether or not they felt the benefits would outweigh the costs of these activities and why. Most respondents felt benefits were more important than the costs—63 percent. However, another 27 percent offered a conditional response—they felt benefits would outweigh costs only if the costs were controlled. Only 4 percent said benefits were less important than costs and 6

Table 2. Attitudes Toward Expansion of Natural Resource Based Activities for Newcomers and Oldtimers

	New-comers	Old timers	Total
----- (Means)* -----			
How strongly do you favor or oppose the expansion of:			
Farming	1.30	1.16	1.19
Forestry**	1.80	1.33	1.44
Coal Surface Mining	1.90	2.15	2.09
Coal Deep Mining	1.57	1.26	1.33
Gas & Oil Extraction	1.37	1.29	1.31
Tourism	1.43	1.45	1.44

* Response numerical values: 1 = strongly favor, 2 = favor, 3 = neutral, 4 = oppose, 5 = strongly oppose.

** Significant at the .05 level of significance.

percent didn't know. There was no statistical difference between newcomers and oldtimers on these benefit/cost attitudes. Of those who felt benefits would outweigh costs, the reasons most frequently cited for this perception were that "the County can only improve" (30 percent) and "growth can be controlled" (23 percent). Other reasons mentioned were "need for jobs in the County," "need for increased income" and "business and services will improve." The 4 percent of respondents who felt costs were more important than benefits cited reasons such as "low and fixed income people will be hurt" and "growth will not be controlled."

Attitudes Toward Possible Economic Changes in Webster County

The interviews concluded with a set of questions concerning attitudes toward possible economic changes in Webster County during the next ten years. Again, respondents were asked to indicate their degree of favorability or opposition to a number of possible economic changes. In Table 3, the mean responses to these proposed changes for each group is presented.

Although all of the listed changes were generally favored by the respondents, there were some differences between newcomers and oldtimers in terms of their degree of favorability. The change towards which newcomers were most favorable was development of a large shopping mall, while oldtimers most strongly favored an increase in farming activities and increase in small business activities. Both

Table 3. Attitudes Toward Economic Changes for Newcomers and Oldtimers

	Newcomers	Oldtimers	Total
	----- (Means)* -----		
How strongly do you favor or oppose these changes?			
Location of large manufacturing plant	1.50	1.27	1.33
Development of large shopping mall	1.17	1.32	1.29
Establishment of tourism activities	1.37	1.40	1.39
Opening large deep coal mine**	1.73	1.25	1.36
Increase farming activities**	1.23	1.09	1.12
Increase small business activities**	1.27	1.09	1.13
Increase small forest product plants	1.30	1.14	1.18
Increase gas & oil extraction	1.43	1.27	1.31
Opening large surface mine	1.93	2.18	2.12
Location several small manufacturing plants	1.33	1.19	1.22
Location large lumber mill	1.50	1.65	1.61
Clearing large areas for farming	1.70	1.36	1.44
Increase business in Webster Springs	1.23	1.37	1.34
Increase job training	1.30	1.23	1.25
Opening several small coal mines	1.73	1.63	1.65

* Response numerical values: 1 = strongly favor, 2 = favor, 3 = neutral, 4 = oppose, 5 = strongly oppose.

**Significant at the .05 level of significance.

groups were the least favorable towards opening of a large surface mine.

Oldtimers were more strongly favorable towards most of the proposed changes than were newcomers. Oldtimers were significantly more favorable than newcomers toward opening of a large deep coal mine ($p < .01$), increasing farming activities ($p < .05$), and increasing small business activities ($p < .02$).

The changes for which newcomers were more favorable than oldtimers (although not significant) were development of a large shopping mall, establishment of tourism activities, opening of a large surface mine, location of a large lumber mill, and increasing business activities in the town of Webster Springs.

Summary

In general, the residents of Webster County, both the long time residents and the recent in-migrants favored expansion of natural resource based activities and favored all possible economic changes that were presented to them. Oldtimers most strongly favored an increase in farming and small business activities, while newcomers were more in favor of developing a large shopping mall and increasing business activities in the town of Webster Springs.

The change toward which the respondents of this survey were the least favorable—although they still favored more than opposed—were increases in surface mining

activities. At the same time, respondents—particularly oldtimers—were quite favorable to deep mining activities and wanted to see more mining jobs become available in the County.

Webster County residents generally felt that increases in these activities would result in the benefits of increased employment opportunities and income. The most frequently expected cost of increased natural resource based activities was damage to land and people, which 63 percent of the respondents felt would be associated with these changes. The majority of respondents, newcomers and oldtimers alike, felt that the benefits of these activities were more important to them than the costs.

These data suggest that the residents of Webster County are concerned with the health and beauty of their land; however, they are more concerned, at least at the time of the survey, with their economic conditions. They are concerned that economic changes will damage their land and people, and of all potential economic opportunities they express the least enthusiasm for strip mining. However, more than one-half of the households were in need of employment opportunities and understandably, employment concerns tended to outweigh environmental concerns among the residents of this rural West Virginia County.

Differences between recent in-migrants to the County and long-time residents were much smaller than expected. The hypothesis that recent in-migrants to the County place a

higher value on undisturbed countryside and are more opposed to growth of natural-resource based economic activities than long-time residents, was not supported by the data. Both groups were strongly in favor of increasing activities related to oil and gas extraction, farming and forestry. Newcomers to the County were somewhat more interested than oldtimers in increasing business activities and expanding shopping facilities, as indicated by their strong favoritism towards a big shopping mall and increased businesses in Webster Springs. Oldtimers, on the other hand, tended to be more interested in increasing mining related activities. Overall, however, both groups generally favored any changes which might increase income and employment opportunities in Webster County.

Results of this study imply important policy considerations. Local policy makers should take note of the age and occupational distributions of newcomers to Webster County. Contrary to much literature on rural in-migration, newcomers in this study were not generally elderly people relocating to retire, but were much younger than the long-time residents of the County, and were much more likely to be seeking employment.

The findings of this study are inconsistent with other research results which indicate that quality-of-life conditions may be of greater importance with regard to residential preference than improvement in occupation or income opportunities (see Stevens, 1980; Zuiches, 1982). While quality-of-life considerations seem important to the residents of Webster County, they are not as important as economic opportunities. Both newcomers and oldtimers agree that the benefits of income and employment opportunities outweigh the costs of environmental damage.

These data pertain to what may be characterized as an "isolated rural county." A study of a similar West Virginia county in 1982 generated results very comparable to those of this study (Jallow, 1983). Thus, although the results of this study are not generalizable to rural areas in general, it appears that generalization to rural counties with similar socioeconomic characteristics may be warranted. These counties appear to have the characteristics and problems documented in the rural poverty studies of the 1960's (The President's National Advisory Commission on Rural Poverty, 1967). While rural income problems have not been alleviated in these type areas, the posi-

tive development attitudes may contribute to the formation of prescriptive policy measures.

References

- Beale, Calvin L. "Small Community and Rural Development Progress," *Implementation of the Small Community and Rural Development Policy*. United States Department of Agriculture, Washington, DC, January, 1981.
- Beale, Calvin L. "Rural and Small Town Population Change." Economics and Statistics Service Bulletin ESS-5, United States Department of Agriculture, Washington, DC, February, 1981.
- Bulman, Steven D. "The Location Objectives of the Rural Residents of Webster County, West Virginia." M.S. Thesis, Agricultural Economics, West Virginia University, Morgantown, WV, 1982.
- Colyer, D. and D. Smith. "Satisfaction with Public Services by Rural Residents in West Virginia." *Journal of the Northeastern Agricultural Economics Council*, XI(1982):79-83.
- Colyer, D., D. Smith, A. Ferrise, and E. Akamonu. "Characteristics of Rural Residents in Nine Counties of West Virginia." Staff Paper SP 82-1, Division of Resource Management, West Virginia University, Morgantown, WV, 1982.
- Deavers, K. L., and D. L. Brown. "The Rural Population Turnaround: Research and National Public Policy." In D. L. Brown and J. M. Wardwell (eds.) *New Directions in Urban-Rural Migration*. New York: Academic Press. 1980.
- Jallow, Saba. "An Analysis of Economic Development Factors in McDowell County, West Virginia." M.S. Thesis, Agricultural Economics, West Virginia University, Morgantown, WV, 1982.
- The President's National Advisory Commission on Rural Poverty. *The People Left Behind*. Washington, DC: U.S. Government Printing Office, 1967.
- Stevens, J. B. "The Demands for Public Goods as a Factor in the Non-metropolitan Migration Turnaround." In D. L. Brown and J. M. Wardwell (eds.) *New Directions in Urban-Rural Migration*. New York: Academic Press. 1980.
- U.S. Bureau of the Census. *1980 Census of Population, Number of Inhabitants*, West Virginia, PC 80-1-A50. Washington DC, 1982.
- Wardwell, J. M. "The Reversal of Non-metropolitan Migration Loss" In D. A. Dillman and D. J. Hobbs (eds.) *Rural Society in the U.S.: Issues for the 1980s*. Boulder: West View Press, 1982.
- Zelinsky, W. "Is Non-metropolitan America Being Repopulated?" *Demography* 15(1978):12-39.
- Zuiches, J. J. "Residential Preferences." In D. A. Dillman and D. J. Hobbs (eds.) *Rural Society in the U.S.: Issues for the 1980s*. Boulder: West View Press, 1982.
- Zuiches, J. J. and J. H. Reiger. "Size-of-Place Preference and Life Cycle Migration: A Cohort Comparison." *Rural Sociology* 43(1978):618-633.