FORESTRY AND POVERTY IN ALABAMA'S BLACK BELT

John C. Bliss, Glenn R. Howze, Lawrence Teeter, and Conner Bailey

Abstract.—The rapid expansion of the southern forest and the industry built upon it has taken place in a region characterized by a high incidence of rural poverty. We examine relationships between forest-based economic activity and rural poverty in Alabama's Black Belt, a region which is forest-dependent, poor, and in which the state's African-American population is concentrated. We review the region's history, compare its socioeconomic status with that of other rural Alabama counties, and discuss current and possible roles for the forest products industry in the region's economic development.

INTRODUCTION

Alabama's most richly forested counties are also its poorest. While this correlation is striking and apparent to even the casual observer, causal relationships are far less clear. For forest-based economic development activities to have a positive impact on the social and economic conditions of these counties, these relationships must be better understood. In this paper, we examine data from Alabama's Black Belt, a 16-county region which is forest-dependent, poor, and in which the state's rural African-American population is concentrated. First, we discuss the historical transition from cotton to timber in the Black Belt. Second, we compare current indicators of social and economic well-being in the region with those of other rural Alabama counties. Next we outline the role of the forest products industry in the region's economy, with emphasis on employment. Finally, we discuss opportunities for, and constraints to, forest-based economic development in the region.

ALABAMA'S BLACK BELT

Definition

The term "Black Belt" historically has had two meanings, one referring to the trans-South band of rich soils upon which cotton plantations were based, and the other referring to the concentration of African-Americans still living in those former cotton counties (Molnar and Adrian 1980). In Alabama, the meanings overlap. The Black Belt counties average 58 percent African-American populations, while non-Black Belt rural counties average 13 percent (U.S. Dept. Commerce, Bureau of the Census 1992a). Our focus is on the 16 Alabama counties which are more than 35 percent African-American and at least 50 percent rural as defined by the Bureau of the Census. These counties lie in a band which closely approximates the physiographic and historical Black Belt, with the addition of adjacent counties in which cotton cultivation was formerly dominant, and the exclusion of largely urban counties (Figure One). Urban counties in Alabama's Black Belt (e.g. Montgomery, site of the state's capital) are sufficiently different from rural counties in terms of economic diversification and other characteristics to warrant their exclusion from this analysis.

Alabama's Black Belt Counties are among the poorest in the United States, and suffer from the social ills associated with poverty to a greater degree than do rural counties outside the Black Belt (Table One). Demographically, Black Belt counties are characterized by high rates of out-migration, high ratios of women to men, and high rates of unemployment (U.S. Dept. Commerce, Bureau of the Census 1992a). These indicators suggest an out migration of males looking for employment. As might be expected in this situation, a high proportion of children are raised in single parent homes, and the percentage of households receiving food stamps is greater than found in other rural Alabama counties. Like other poor regions of the world, the Black Belt is characterized by a high rate of natural increase (birth rate minus death rate), a high ratio of youth and elderly to those of working age, and a high rate of infant mortality. By any measure—per-capita income, median family income, or the percentage of households below the poverty level—Black Belt residents are poorer than other rural Alabamians (U.S. Dept. Commerce, Bureau of the Census 1988).

1Assistant Professor of Forestry, Professor of Rural Sociology, Associate Professor of Forestry, and Associate Professor of Rural Sociology, respectively, Auburn University, Auburn, AL.
FORESTS AND FORESTRY IN THE BLACK BELT

Forest Extent and Ownership

Since the peak of King Cotton in 1914, abandonment of agricultural fields, combined with growing investment in reforestation, has led to an immense boom in forest acreage. The Forest Service's 1990 inventory indicates that nearly 22 million acres, almost 68 percent of the state, is forested (Vissage and Miller 1991). The 16 Black Belt counties average 74 percent forest cover (Table Two) (Vissage and Miller 1991). Some 1.4 million acres in the Black Belt are occupied by pine plantations (Vissage and Miller 1991).

In Alabama's Black Belt counties, the forest products industry owns or leases about 35 percent of the forest. Non-forest industry corporations such as real estate companies, banks, and pension funds hold another 4 percent, and public lands account for an additional 6 percent of the forest (Figure Two). The remaining 55 percent is owned by nonindustrial private forest owners (Alabama Forestry Commission 1990). Just under four percent of the NIPF owners in the region own tracts larger than 500 acres. These 1300 owners together own about 41 percent of the NIPF acreage. The other 96 percent of the owners, some 36,536 individuals, own the remaining 59 percent of the NIPF acreage (Figure Three) (Alabama Forestry Commission 1990). This distribution of forest acres among NIPF owners is more skewed than that found in the other rural counties of Alabama, where 99 percent of the owners own 76 percent of the NIPF land in tracts of less than 500 acres. African-Americans own only four percent of the privately-owned forest acres in the state (Rosson and Doolittle 1987). It is likely that African-American forest ownership is, like the state's African-American rural population, concentrated in the Black Belt, however, no data exist to determine if this is the case.

Role of Forest Industry

The forest products industry is the largest manufacturing industry in the state, as measured by value added and value of shipments, and is second only to textiles in number of employees and size of payroll (Bliss and Muehlenfeld 1991). Forest products accounted for 20 percent of the value added by manufacturing in the state in 1987, and 18 percent of the value of shipments (U.S. Dept. Commerce, Bureau of the Census 1990). The 1987 Census of Manufacturers estimates that 49,300 Alabamians were employed in the forest products manufacturing sector in 1987, accounting for 14 percent of all employment in manufacturing in the state. Over 1 billion dollars were paid out by the sector in salaries and wages, 15 percent of the state's manufacturing total (U.S. Dept. Commerce, Bureau of the Census 1990). Although more people were employed in the lumber and wood products and furniture and fixtures categories, payrolls were higher in the paper and allied products categories. This is because of higher technical qualifications and wage rates among workers in these latter industries, and the presence of unionized labor. In contrast, most jobs in sawmills and pulpwood operations require only limited technical training, have lower wages, and are not represented by labor organizations.

On average, forest-based employment accounts for about 17 percent of total employment in the Black Belt counties, and 38 percent of manufacturing employment (U.S. Dept. Commerce, Bureau of the Census 1988). In contrast, forest-based employment accounts for only 20 percent of manufacturing employment in the other rural counties in the state. Thus, it is fair to say that the forest products industry in Alabama's rural Black Belt counties plays a dominant role in the local economy, and that this role is more important in this region than elsewhere in the state.

CONRAINTS TO FOREST-BASED ECONOMIC DEVELOPMENT

Political Economy of the Black Belt

Opportunities for economic development occur at several points in the process of transforming raw forest materials into consumer products. Three obvious opportunities are associated with growing and selling trees, harvesting and delivering cut trees to mills, and manufacturing logs into products. In the Black Belt, serious constraints to broader economic development exist in each of these activities.

Many constraints are deeply rooted in the social and political history of this region. After the Civil War, material conditions of life for freed slaves were little changed. Most of the land continued to be controlled by relatively few families, who used share tenancy relationships to maintain the necessary labor force for cotton production. Limited educational opportunities and upward mobility for the majority of the African-American population created conditions of persistent poverty which continue today. The combination of farm mechanization and shrinking acreages devoted to cotton and other row crops has reduced employment opportunities in the region. At the same time, the growth of manufacturing opportunities in the South as a whole that occurred during the early and mid-1970s had limited impact on rural Black Belt counties (Lyson 1989).

During the 1970s and 1980s, African-Americans came to play increasingly important roles in local government. However, this success was achieved at the high price of polarizing the white and African-American populations in community after community in the Black Belt. The combination of drastically different life chances and social class conditions, combined with recent conflict over political enfranchisement and school desegregation, has divided the Black Belt in a manner which seriously limits the ability of communities in the region to
address problems of the future. African-Americans and whites in this region live separate social lives. On a personal level, relationships often have qualities of warmth (perhaps tinged with paternalism and dependency), but as social collectivities the races are divided by distrust (Bailey and Faupel 1993).

Forest Ownership Distribution

The growth of African-American political power has done little to alter the fundamental reality of economic life in the Black Belt. To a large extent, those who control the region's economic resources are served by low taxes that favor such extensive land use patterns as timber growing and cattle grazing, and low wage rates that make pulpwooding and sawmilling profitable enterprises. As noted above, 41 percent of the private forest land in the Black Belt is owned or controlled by about 4 percent of the owners in tracts larger than 500 acres (Rosson and Doolittle 1987). This highly skewed pattern of land ownership has important consequences for the distribution of economic benefits from timber growing in Alabama's Black Belt. The bulk of the income from selling timber for processing as lumber or as pulp and paper will be earned by those who own larger holdings. This will be so not only because of the area they control, but also because these individuals have the resources to replant and manage their holdings in a more productive manner than owners of more limited acreages. Thus, the uneven distribution of income from selling stumpage is likely to continue into the future.

The Southern Wood Supply System

A second opportunity for forest-based economic development occurs in the harvesting and transporting of cut trees to the mill. This was formerly an important source of employment for the region's rural poor (Flynt 1990). When the pulp and paper industry moved South from the Northeast beginning in the 1920's, mills established relationships with key local individuals to serve as brokers (called "dealers," or the currently preferred term, "suppliers") for the procurement of wood from private forest lands (Flick 1985, Bliss and Flick 1991). Dealers in turn contract with producers to cut and haul the wood on the dealer's behalf. Often these producers have outstanding debts to their dealers incurred for the purchase of trucks and harvesting equipment. The dealer thus plays a key role as intermediary between the mill, local land owners, and labor. This system of timber procurement and labor mobilization not only fits comfortably within the local social system, it also fits the set of conditions found in many Third World settings. The relevance of this point is in understanding the underlying social nature of constraints to fundamental change in the Black Belt. Theorists from the Dependency school note similar patterns and relationships emerge when foreign corporations establish common cause with local elites to gain access to raw materials and labor (e.g., delany 1981). By its very nature, this alliance creates conditions that tend to hold down both wage rates and prices of raw materials.

Technological Changes in Timber Production

Technological changes in wood harvesting and transporting equipment represent a second constraint to wider participation by local labor in this economic activity. In the past, an entrepreneur of modest means could enter the pulpwood business with nothing more than a chainsaw and a used pickup truck. Since the 1960's, the development and adoption of highly mechanized logging equipment has dramatically changed the composition of the logging work force, putting small, unmechanized, uncapitalized businesses at a competitive disadvantage. To be a competitive timber producer today requires investments in equipment which can range from one-quarter to over one-half of a million dollars (Timber Harvesting 1993). At present, almost one half of the pulpwood contractors in the South run small operations, producing fewer than 100 cords of pulpwood per week. But these small businesses account for only 10 percent of the total wood production in the region (Watson et al. 1989), and their share is rapidly decreasing.

Forest Products Manufacturing

Manufacturing consumer products from raw forest materials provides perhaps the most significant opportunity for economic development in the Black Belt. The Black Belt is home to a large share of the state's primary forest products manufacturing facilities, including five of the state's 13 pulp or paper mills, six of 13 particle board or plywood mills, five wood treatment plants, eight chip mills, 45 sawmills, 20 specialty mills, and 5 veneer mills (Alabama Forestry Association 1992). These facilities are among the few (or are the only) employers in many Black Belt communities. This reliance upon primary manufacturing industries as the principal source of employment is typical of forest-dependent regions.

Development of secondary forest products manufacturing capability has lagged behind that of primary manufacturing throughout the state, but especially in the Black Belt. The reasons for this lag are many, but undoubtedly the political economy of the region (discussed earlier) is an important factor. In Alabama's rural non-Black Belt counties, 59% of forest industry employment is involved in secondary products manufacture. Moreover, 61% of these counties have more than half of their forest products employment in secondary manufacturing. In contrast, only 30% of forest products employment in the Black Belt is in secondary manufacturing, and only 19% of Black Belt counties have more than half of their workers involved in secondary products manufacturing (U.S. Department of Commerce, Bureau of the Census. 1992b).
Development of secondary manufacturing facilities in the Black Belt holds promise for increasing the contribution made to economic development by the forest products industry. Secondary forest products manufacturing jobs in Alabama are more stable and, on average, wages paid are 30-35% higher than those in primary forest products manufacture. Higher wages result in more discretionary income that can be spent in the community, further increasing the pace of economic development. Moreover, as secondary manufacturing capacity grows, demand for supplies required in the manufacturing process increases. This demand induces expansion of the supplying businesses, which in turn hire more employees, thereby further stimulating the local economy.

CONCLUSION

Poverty in the Black Belt will not be alleviated through forest-based economic development alone; its causes are too complex for any single solution. However, development in the region is not likely to occur without significant involvement of the forest products industry. Such development faces serious constraints, including the political economy of the region, the forest ownership distribution, social and technological characteristics of the wood harvesting and transportation system, and obstacles to investments in secondary manufacturing capability. It is hoped that recognizing these constraints will contribute to overcoming them.

ACKNOWLEDGEMENT

The authors gratefully acknowledge the support of the U.S.D.A. Cooperative State Research Service's National Research Initiative Competitive Grants Program, and the Alabama Agricultural Experiment Station.

LITERATURE CITED


### Table 1. Social and economic characteristics of rural Black Belt and rural non-Black Belt counties in Alabama, various years (U.S. Dept. Commerce, Bureau of the Census 1988, 1992a).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Black Belt (n = 16)</th>
<th>Non-Black Belt (n = 31)</th>
<th>t-test</th>
<th>1-tail level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Population change, 1950-1990</td>
<td>-24.04 (12.44)</td>
<td>24.48 (50.42)</td>
<td>-3.77</td>
<td>.005</td>
</tr>
<tr>
<td>Rate of natural increase, 1980</td>
<td>5.57 (2.41)</td>
<td>3.82 (2.49)</td>
<td>2.31</td>
<td>.02</td>
</tr>
<tr>
<td>Sex ratio, 1990</td>
<td>88.59 (2.67)</td>
<td>94.38 (3.23)</td>
<td>-6.16</td>
<td>.0005</td>
</tr>
<tr>
<td>% Children in single-parent families, 1990</td>
<td>37.00 (9.04)</td>
<td>17.91 (3.86)</td>
<td>10.10</td>
<td>.0005</td>
</tr>
<tr>
<td>% Population 18 years or under, 1990</td>
<td>30.54 (2.11)</td>
<td>25.84 (1.32)</td>
<td>9.22</td>
<td>.0005</td>
</tr>
<tr>
<td>% Population 65 years or older, 1990</td>
<td>15.12 (1.37)</td>
<td>14.28 (2.21)</td>
<td>1.39</td>
<td>.10</td>
</tr>
<tr>
<td>Infant mortality (rate per 1000), 1984</td>
<td>14.91 (9.00)</td>
<td>10.17 (6.16)</td>
<td>2.13</td>
<td>.05</td>
</tr>
<tr>
<td>Median family income, 1985</td>
<td>$11,805 (1,563)</td>
<td>$14,727 (1,696)</td>
<td>-5.74</td>
<td>.0005</td>
</tr>
<tr>
<td>% Households below poverty, 1986</td>
<td>27.79 (5.84)</td>
<td>15.66 (2.83)</td>
<td>9.63</td>
<td>.0005</td>
</tr>
<tr>
<td>Average unemployment, 1990</td>
<td>9.92 (2.05)</td>
<td>7.86 (1.94)</td>
<td>3.37</td>
<td>.005</td>
</tr>
<tr>
<td>% Households on food stamps, 1990</td>
<td>25.55 (7.48)</td>
<td>9.88 (2.94)</td>
<td>10.30</td>
<td>.0005</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Measure</th>
<th>Black Belt (n = 16)</th>
<th>Non-Black Belt (n = 31)</th>
<th>t-test</th>
<th>One-tail level of Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>% County forested</td>
<td>74.26 (9.72)</td>
<td>68.34 (16.05)</td>
<td>1.35</td>
<td>.10</td>
</tr>
<tr>
<td>Forest-based employment/total employment</td>
<td>16.98 (12.01)</td>
<td>10.38 (11.72)</td>
<td>1.81</td>
<td>.05</td>
</tr>
<tr>
<td>Forest-based employment/manufacturing</td>
<td>37.71 (24.86)</td>
<td>19.77 (19.75)</td>
<td>2.7</td>
<td>.005</td>
</tr>
</tbody>
</table>

225
Figure 1. Rural Black Belt counties in Alabama, 1990 (U.S. Department of Commerce, Bureau of the Census 1992a)
Figure 2. Forest ownership in rural Alabama Black Belt counties, 1990 (Vissage and Miller 1991)

Figure 3. NIPF ownership distribution in rural Alabama Black Belt counties, 1990 (Alabama Forestry Commission 1990)