Economic opportunities in nonmetropolitan/rural areas have declined during the 1980s, reversing the trend of net immigration during the 1970s. Moreover, those leaving rural areas are disproportionately the young and the better educated, which further diminishes the rural resource base and exacerbates the competitive disadvantage of rural areas to attract industry and provide jobs. Increasingly, those left behind do not possess the required skills to move to metropolitan areas and successfully compete for jobs.

Funding of education, training and employment programs for adults and out-of-school youth in the United States is quite small compared to other industrialized nations, and nonmetropolitan areas receive a relatively small share of those funds. Further, the recent trend toward employer-provided basic education and skill training is concentrated in large firms not typically located in rural areas.

In order to improve the human resource base in rural areas, we recommend:

1. Increased funding for the two major programs aimed at increasing human capital among the out-of-school population—the Job Training Partnership Act (JTPA) and the Adult Basic Education Program (ABE);

2. Expansion of these programs in rural areas so that the nonmetropolitan population receives at least its proportionate share of the program funds;

3. A special set-aside in Title III of JTPA—the Dislocated Worker Program—for nonmetropolitan residents.
The Rural Human Resource Base

Population Size and Regional Distribution

In 1986, almost one quarter of the U.S. population lived in non-metropolitan counties. According to provisional population estimates published by the U.S. Bureau of the Census, 23.4 percent or 56.6 million persons lived in nonmetropolitan counties. This proportion has remained virtually unchanged since 1970. The regional distribution of the nonmetropolitan population, however, is very uneven (Table 1). Almost one-half lives in the South, about a third in the Midwest, 15 percent in the West and about one-tenth in the Northeast. The regional distribution of the nonmetropolitan population differs from that of the total population, indicating differential levels of urbanization among regions. The Northeast has a much larger share of the total population (21 percent) than of the nonmetropolitan population (10 percent) and thus is more highly urbanized than other regions. In contrast, the South and Midwest are more rural and rural human resources in these two regions deserve special attention.

Table 1. Regional Distribution of the Nonmetropolitan Population, 1986

<table>
<thead>
<tr>
<th>Region</th>
<th>Total Population</th>
<th>Total Nonmetropolitan</th>
<th>Share of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>50,019</td>
<td>5,632</td>
<td>20.8</td>
</tr>
<tr>
<td>Midwest</td>
<td>59,313</td>
<td>17,356</td>
<td>24.6</td>
</tr>
<tr>
<td>South</td>
<td>82,983</td>
<td>25,363</td>
<td>34.4</td>
</tr>
<tr>
<td>West</td>
<td>48,717</td>
<td>8,274</td>
<td>20.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>241,033</td>
<td>56,625</td>
<td>100</td>
</tr>
</tbody>
</table>

1Numbers in thousands; may not add due to rounding.

Source: Current Population Survey

Nonmetropolitan Population Growth Since 1970

Dramatic changes in the structure of economic activities and their geographic location have been occurring since the late 1960s, resulting in unprecedented and unexpected shifts in the urban-rural and metropolitan-nonmetropolitan distribution of population. During the 1960s and 1970s, rural and small-town areas competed successfully with more highly urbanized areas in attracting or creating manufacturing and service-based jobs. Even though many of these jobs were relatively routine and low paid, they provided economic opportunities in areas in which few nonagricultural activities had previously existed. This employment growth, in conjunction with other economic and noneconomic factors, helped rural and small-town areas attract labor-force-age population from other areas and retain their own workers. As a result, net outmigration of labor-force-age persons from nonmetropolitan areas was substantially reduced in the 1970s compared with earlier decades. At the same time, nonmetropolitan areas had positive net migration in every age segment.
except the 20- to 29-year-old category. Hence, for the first time in the twentieth century, the nonmetropolitan population grew more rapidly than the metropolitan population.

In contrast, rural economic distress in the 1980s has coincided with a substantial reduction in the rate of nonmetropolitan population growth. This economic downturn appears to be associated with a restructuring of the nation's rural economy and, especially, with reduced international competitiveness in goods production. The early and mid 80s were characterized by severe financial stress in agriculture, a contraction of employment in mining and energy extraction and very slow growth in manufacturing. Service jobs accounted for most of rural employment growth during this period, but the rate of change in this sector lagged behind metropolitan service growth and growth was particularly slow in high-skill, high-wage service industries.

The return to slower nonmetropolitan population growth since 1980 is surely associated with these factors and with the closer ties that now bind the nation's economy together and expose all local economies to the business cycle, to macroeconomic events and policies, and to global competition. The resumption of slower nonmetropolitan population growth is displayed in Table 2. These annualized data show that while population growth in metropolitan areas increased slightly from 1.0 to 1.1 percent, the nonmetropolitan growth rate fell from over 1.3 percent per year during 1970–80 to 0.8 percent during 1980 to 1983 to only 0.4 percent during 1983–86.

Migration is the principal determinant of residential differences in population growth in the United States today. As Elo and Beale have shown, the nonmetropolitan rate of natural increase was only slightly lower than the comparable rate in metropolitan areas during 1980–86 (.63 percent and .74 percent respectively, largely because of a higher crude death rate in nonmetropolitan areas). In contrast, nonmetropolitan areas have experienced a resurgence of outmigration to metropolitan areas during this period. The data in Table 3 show that, similar to the growth data in Table 2, this migration loss did not begin until after 1983. However, the loss accelerated greatly at this time. The estimated migration loss for 1985–86 of more than 600,000 is larger than the annual average loss of either the 1950s or 1960s, and a marked turnaround from the 1970s when nonmetropolitan areas had a net migration gain of more than 350,000 persons per year.

Nonmetropolitan America is exceedingly diverse, so these trends do not characterize all areas. For example, nonmetropolitan areas with high net immigration of retirement age persons have far exceeded the metropolitan growth rate since 1980 (1.75 percent per year vs. 1.10 percent per year). But, decline or slow growth is characteristic of most other areas and especially those in which goods production provides a substantial share of jobs and income. Mining and farming
<table>
<thead>
<tr>
<th>No. of Counties</th>
<th>POP 1970</th>
<th>POP 1980</th>
<th>POP 1986</th>
<th>70-80</th>
<th>80-86</th>
<th>Annualized Change/100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>3,097</td>
<td>261,543</td>
<td>232,251</td>
<td>241,033</td>
<td>1.08</td>
<td>-99</td>
</tr>
<tr>
<td>Metro</td>
<td>714</td>
<td>155,717</td>
<td>172,117</td>
<td>184,408</td>
<td>1.00</td>
<td>-89</td>
</tr>
<tr>
<td>Nonmetro</td>
<td>2,283</td>
<td>47,555</td>
<td>55,190</td>
<td>66,625</td>
<td>1.34</td>
<td>63</td>
</tr>
</tbody>
</table>

Note: Numbers in thousands; may not add due to rounding. Annualized growth rates per 100 calculated on full numbers. Metropolitan designation based on 1980 census, updated by OMB in 1983.

Table 3. Metropolitan-Nonmetropolitan Migration in the U.S., 1980–86

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro-to-nonmetro</td>
<td>2,350</td>
<td>2,366</td>
<td>2,066</td>
<td>2,258</td>
<td>1,807</td>
</tr>
<tr>
<td>Nonmetro-to-metro</td>
<td>2,156</td>
<td>2,217</td>
<td>2,088</td>
<td>2,609</td>
<td>2,439</td>
</tr>
<tr>
<td>Net to nonmetro</td>
<td>194</td>
<td>149</td>
<td>-22</td>
<td>-351</td>
<td>-632</td>
</tr>
</tbody>
</table>

Note: For 1980–83, metropolitan areas are as defined in 1970; 1984 metropolitan definition used thereafter (noninstitutionalized population).


dependent areas as a group have lost population since 1983 and manufacturing areas grew very slowly (Elo and Beale). New job opportunities are not developing in these areas, unemployment is high and many displaced farmers, miners and industrial workers need training to be employable in new industries.

**Population Composition**

The size, geographic distribution and growth rate of the rural population are critical factors in conceptualizing policies and designing programs for human resources. However, information on population characteristics, the distribution of persons by age, educational attainment, labor force status and other relevant attributes is also important for designing human resource policies, especially for identifying areas and population subgroups with special needs, for targeting assistance to the truly needy and for tailoring programs to fit particular situations.

Thirty years ago rural America was characterized by economic disadvantage and widespread poverty. This situation was publicly recognized in 1967 with the creation of a National Advisory Commission on Rural Poverty. The Commission’s final report concluded that, “rural poverty is so acute as to be a national disgrace.” Today, the general level of living and socioeconomic well-being of the rural population have improved and rural-urban disparities, while still notable, have diminished. Still, a disproportionate share of the nation’s poverty and underdeveloped human resources are concentrated in rural areas. Similar to the situation with population size and growth, these human resource problems are not spread evenly across rural America, but tend to have recognizable regional patterns.

The comparative profile of population characteristics contained in Table 4 shows that the nonmetropolitan population is older, has lower levels of educational attainment, lower labor force participation, higher unemployment rates, lower household income and higher individual poverty.

**Age Composition.** The nonmetropolitan population contains a lower proportion of persons in the prime working ages and a larger proportion of elderly people than the metropolitan population. The social and economic meaning of this statistic is now somewhat am-
Table 4. Profile of Metropolitan and Nonmetropolitan Populations

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Metropolitan</th>
<th>Nonmetropolitan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pct. Completed at least 4 yrs. high school(^1) (1983)</td>
<td>74.8</td>
<td>63.9</td>
</tr>
<tr>
<td>Pct. High School Dropout(^3) (1985)</td>
<td>10.4</td>
<td>11.1</td>
</tr>
<tr>
<td>Labor Force</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pct. will Work Limiting Disability (1980)</td>
<td>4.3</td>
<td>5.7</td>
</tr>
<tr>
<td>Labor Force Participation Rate—Male(^4) (1988)</td>
<td>77.3</td>
<td>73.3</td>
</tr>
<tr>
<td>Labor Force Participation Rate—Female(^5) (1988)</td>
<td>57.3</td>
<td>52.5</td>
</tr>
<tr>
<td>Unemployment Rate—reported (1985)</td>
<td>6.9</td>
<td>8.4</td>
</tr>
<tr>
<td>Unemployment Rate—adjusted(^6) (1985)</td>
<td>9.9</td>
<td>13.0</td>
</tr>
<tr>
<td>Level of Living</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median Household Income (1986)</td>
<td>$26,692</td>
<td>$19,667</td>
</tr>
<tr>
<td>Pct. of Persons in Poverty (1986)</td>
<td>12.3</td>
<td>18.1</td>
</tr>
</tbody>
</table>

\(^1\)Population 25+.
\(^2\)Population 25+.
\(^3\)Pct. of 16-19-yr-olds not enrolled in school and not high school graduates.
\(^4\)Population 16+, second quarter of year.
\(^5\)Population 16+, second quarter of year.
\(^6\)Adjustment of underemployment (discouraged workers and half of the workers employed part time for economic reasons).


Traditionally, a higher percentage of elderly was viewed as an indicator of economic dependence and of aging-related social problems. Now, however, social security and other transfer and pension programs have provided a floor protecting the elderly's income. And the elderly are remaining vigorous and healthy into their old age making them available to use their skills and experiences in community service activities. Regardless of these facts, older persons need and demand a different mix of public and private services. These demands accelerate as older persons reach their 80s and become more frail. Accordingly, both costs and benefits are associated with a higher percentage of elderly persons, and the balance of these costs and benefits probably shifts as the older population ages.

**Educational Attainment.** Virtually all discussions of local economic development emphasize the importance of an educated work force for attracting, retaining and upgrading jobs and incomes. The data in Table 4 show persisting educational differentials between metropolitan and nonmetropolitan areas, especially at the college level. Moreover, education-specific migration data for persons 25 to 64 years of age show that nonmetropolitan areas are experiencing a 2 percent annual loss of college educated persons during the 1980s (McGranahan). This indicates that the nonmetropolitan human resource disadvantage is becoming greater and that nonmetropolitan economies will be at an even greater competitive disadvantage in at-
tracting high skill jobs in the future. Persons with low educational attainment are concentrated in the nonmetropolitan South. This region will have particular difficulty replacing smokestacks with high tech industries and it in particular, and nonmetropolitan America more generally, must upgrade its work force if it hopes to compete for economic development in the future.

**Labor Markets.** Almost three quarters of nonmetropolitan men and more than half of nonmetropolitan women participate in the labor force. Still, these rates continue to lag behind corresponding rates for metropolitan areas. The difference for women may be associated with lingering attitudes in opposition to work for pay outside of the home, but more probably it is associated with insufficient opportunities in rural labor markets.

In 1985, for example, the nonmetropolitan unemployment rate was 8.4 percent, compared with 6.9 percent in metropolitan areas. This difference is even greater if the rates are adjusted for underemployment (discouraged workers and workers on involuntary part-time schedules.) In addition, data presented elsewhere show that nonmetropolitan economies contain a disproportionate share of low-wage, low-skill jobs. Even within the so-called high tech industrial categories, a disproportionate share of nonmetropolitan workers occupies low-skill occupations (Fuguitt, et al.). The opportunity structure of rural labor markets, at least as portrayed by these indicators, lags seriously behind opportunities found in more highly urbanized parts of the country. More and better jobs are needed to improve the economic well-being of rural workers and their families. At the same time the human capital endowment of the rural work force must be upgraded. Three population groups should be targeted—new generations of workers joining the work force for the first time, current workers who wish to maintain or upgrade their economic well-being and displaced farmers, miners or factory workers who need new skills to make effective transitions to new jobs.

**Poverty.** Area-wide poverty is associated with an interrelated set of conditions including the demographic, human resource and labor market factors discussed above. It is not surprising, therefore, that the nonmetropolitan poverty rate of 18 percent is half again as much as the metropolitan rate, which stands at 12 percent. Much of the rural poverty is concentrated in the South. In addition, the characteristics of the nonmetropolitan and metropolitan poor populations differ from each other. For example, a greater proportion of nonmetropolitan poor families has one or more workers and a greater proportion contains an intact marriage. Accordingly, assistance to the nonmetropolitan poor must be targeted somewhat differently than is true of assistance to metropolitan poor persons. Metropolitan and nonmetropolitan poverty is very similar in one important aspect—in both instances about 40 percent of the poor is persistently poor, while a little more than 60 percent is temporarily poor because
of sudden life changes such as loss of a job or spouse, marital break-up or illness (Ross and Morrissey). These two groups, the persistently and the temporarily poor, have distinctly different types of assistance needs. The persistently poor are particularly low in human capital and would benefit from an upgrading of both basic literacy and technical skills.

Summary. The data presented in this section of the paper indicate that the nonmetropolitan population is concentrated in the South and Midwest; that nonmetropolitan areas are once again losing migrants—especially younger persons and persons with higher education—to metropolitan areas; that nonmetropolitan human resource problems—low educational attainment, high poverty rate, etc.—are concentrated in the South; and that nonmetropolitan labor markets do not include enough high-skill, high-wage jobs to retain or attract highly skilled workers. This situation further diminishes the rural human resource base and exacerbates the competitive disadvantage of rural labor markets in providing adequate jobs and incomes.

Human Capital Development Programs

Three major national programs are aimed primarily at improving the human capital of three groups, members of which lack the basic skills to compete effectively in the labor market and which make up a disproportionate part of the rural labor force. This includes young high school dropouts, adults who have not completed high school, and dislocated workers—adults who need training in a new skill to become gainfully reemployed.

The three major national programs targeted on these groups are the Job Training Partnership Act (JTPA), Adult Basic Education (ABE) and the Work Incentive (WIN) program.

Job Training Partnership Act

JTPA is by far the largest program providing education and training for adults, with federal appropriations of about $3.8 billion in 1988. It encompasses several different programs. About half of the funds are for training low-income youth and adults (Title IIA). Another fifth of the funds are devoted to providing summer jobs for low-income youth (Title IIB). About five percent of the funds are for retraining dislocated workers, which can include the self-employed (Title III); however, the Administration has proposed a fourfold expansion of this program next year.

All of these programs are funded through grants to some 600 plus Service Delivery Areas (SDAs). However, 25 percent of the funds are set aside for discretionary use by the Secretary of Labor for special projects. Ross and Rosenfeld (1987) reported that "approximately 20 states have established special programs for displaced farmers" using monies from this set-aside (p. 15-13).
Of the grants to SDAs, eight percent of Title IIA funds—or about $150 million—is allocated to governors of states to be used for literacy training, dropout prevention and enrollment services, school-to-work transition programs and coordination of education and training services.

JTPA also funds some federally-administered programs, including the Job Corp, Native American programs, migrant and seasonal farmworker programs and veterans' employment programs. Of these, the most relevant to the rural population are the Native American and migrant and seasonal farmworker programs, which each receive less than two percent of JTPA funds (around $60 million per year).

**Services Provided.** Levitan and Gallo report that in 1985 about a third of JTPA participants were in classroom training lasting three to four months; eight percent were in work experience; 24 percent were in on-the-job training; and a third were in job search training lasting typically two weeks or less or received only counseling.

Classroom training is primarily oriented towards job skills; however, JTPA provides basic skills training to a significant proportion of enrollees. While it is not known what proportion of these funds are spent on remedial education, 63,365 JTPA terminees (9.6 percent of all terminees) had received basic education or a combination of basic education and skills training in 1985, according to unpublished Department of Labor data, and the number has probably increased.

**Rural Share.** Because of reduced requirements for program reporting, it is not possible to calculate the proportion of JTPA dollars or training slots that go to rural residents. However, the allocation of funds is not that different from CETA, under which it was estimated that metropolitan areas in 1980 received 2.6 times the funds received by nonmetropolitan areas on a per capita basis (Ross and Rosenfeld). Also, Ross and Rosenfeld note that “A GAO analysis estimates that possible underestimates of unemployment in rural counties may have cost small communities as much as $129 million in JTPA funds in 1984” (p. 15–13). And it is likely that displaced worker programs are disproportionally aimed at urban industrial workers who lost jobs due to the closing of large plants. So, while the evidence is scant, what evidence there is suggests that the rural population is not getting its fair share of JTPA funds.

**Adult Basic Education Program**

The state-administered ABE program is aimed at individuals who are beyond compulsory school age (age 16) but who lack sufficient basic skills to enable them to function effectively in society or who have not completed high school. The program has a three-dimensional thrust responding to the needs of three distinct groups
in the population. It provides instruction in (1) Level I education for those who have completed eight or fewer years of education, (2) Level II education (often referred to as Adult Secondary Education) for those who have completed nine but less than twelve years of education, and (3) English as a Second Language (ESL) for persons who are not fluent in English.

The ABE program, with about $100 million of federal funding and a required 10 percent state match, operates through formula grants to the states. Federal funds are allocated to State Education Agencies (SEAs) on the basis of the number of persons within the state who have not completed a high school education. The SEAs, in turn, dispense these funds to various agencies and organizations designated through a state-wide planning process, with each state permitted to use its own discretion in dispensing the funds. The SEA has the option of dispensing the funds through the Local Education Agency (LEA), the city and/or county board of education, or it can elect to bypass the LEA and award the funds to alternative subgrantees or the units responsible for actually delivering the ABE service.

While only a 10 percent state match is required, a survey of adult education directors by the Education Commission of the States indicated that 80 percent of the states provide funds beyond the required match, with the average contribution being about $4 million (Holmes, et al.). Thus, state funding of the ABE program exceeds that of the federal government with states spending, on average, an additional $24 million on other adult literacy programs that are not part of the ABE program.

Services Provided. The U.S. Department of Education estimates that 3.1 million individuals were enrolled in classes in 1985–86, distributed among the three types of programs as follows: 900,000 in Level I courses, 900,000 in Level II courses, and 1,300,000 in ESL (Pugsley). It is significant to note that ESL participants, who constituted 32 percent of the total student enrollment in 1977, increased to 57 percent in 1985–86.

According to the U.S. Department of Education's Division of Adult Learning, 50 percent of the participants attended classes in a school building, nearly 25 percent in learning centers, 10 percent in institutions (such as penitentiaries) and the remainder in other locations (National Center for Education Statistics). Thus, the public education system is deeply involved in the provision of adult basic education. Much remains unknown about the ABE program, including how it is structured at the sub-state level and how funds are allocated to local areas. Thus it is impossible to determine the proportion of either federal or state funds that go to nonmetropolitan areas.

Work Incentive Program

WIN is a federal program for welfare recipients that assists them
in becoming economically self-sufficient. States have the latitude to use these funds for a variety of activities, including job search training, work experience, remedial education, skill training, child care, transportation, counseling, etc.

Data are not available on the amount of WIN funds used for adult basic education and skill training. It is expected that the proportion of federal funds used for this purpose is small, however, because federal funding for the WIN program has declined by 75 percent over the past seven years (1988 federal funding was a little more than $90 million). However, some states (notably California and Massachusetts) are substantially augmenting federal WIN funds in order to provide remedial education to welfare recipients, and others (e.g., Missouri and Wisconsin) are requiring education of recipients who lack a high school diploma or a GED.

Because there is scant reporting of the use of federal funds in the WIN program and because substantial monies are provided by the states, there is no basis to estimate the share of funds that go to rural areas.

**Improving Rural Human Capital**

The most serious human capital problem in rural areas is the lack of basic skills. As indicated earlier, over a third of the adult population has not completed high school, and the drop-out rate among young people still exceeds that in urban areas. Basic skills are important because they are a prerequisite for learning vocational skills. JTPA typically tests applicants in reading and math, and most of those without a high school education fail the tests and are not allowed to enter skill training. Similarly, programs for training dislocated workers have found that many older workers, even those who had completed high school, did not have the basic skills to acquire the training in a new skill. Moreover, there is increasing evidence that employers are willing to provide job training for new employees, but they want employees with good basic skills. For example, a recent survey of firms asked what kinds of individual characteristics they associated with success in entry level positions. The vast majority of employers valued basic skills—general literacy, problem solving, communication skills—over specific job-related skills. The responses were similar for large and small firms, across industries, and for both semi-skilled and skilled jobs. Marsha Levine, American Enterprise Institute, Washington, D.C., the author of this yet unpublished study, concluded that businesses want employees to have the basic skills that will facilitate their continued learning.

Moreover, the growth of the service sector has placed a premium on such basic skills as interpersonal relations, verbal skills and personal appearance. Increasingly, job search training is emphasizing these skills.
The challenge is: How can basic skill training be directed at the rural population so that they can either compete more effectively for jobs in urban areas or offer a more skilled labor force to industries willing to locate in rural areas? We offer three recommendations.

The first recommendation is to substantially increase funding for the JTPA and ABE programs. Most of this increase should come from federal sources because the states with the poorest and least skilled rural populations (primarily those in the South) lack the resources to supplement these programs in any significant way. With the likelihood of reduced funding for commodity programs, there may be an opportunity to redirect some of these savings into JTPA. Compared to other industrialized nations, the United States ranks near the bottom in funding education, training and employment programs for out-of-school youth and adults. As one example, Canada spends nearly seven times the amount we do per capita for its counterpart to our JTPA program—the Canadian Jobs Strategy (CJS) program.

The second recommendation is to ensure that the rural population receives its fair share of these program funds. There is ample evidence that rural areas do not receive their proportionate share of funding for federal programs (Reid and Dubin). Some of this inequity is inevitable, such as in defense spending, but it should not persist for education and training programs. The metropolitan/non-metropolitan shares of funding for the JTPA, ABE, Vocational Education programs and targets established for states to follow in distributing funds among local areas should be analyzed.

This approach met with surprising success in Canada. The Department of Health and Welfare, concerned that welfare recipients were not getting their fair share of CJS funding, conducted a study revealing that (1) the fair share of CJS slots going to welfare recipients was about 30 percent and (2) the current number of welfare participants was about 8 percent. In response to public outcry targets for the number of welfare recipients served by CJS were negotiated with each province based on their “fair share.”

The third recommendation is to establish a target or set-aside of Title III of JTPA—the Displaced Worker Program—for displaced rural workers, including farmers and other rural self-employed. A higher proportion of the rural population is self-employed. And, given the likely urban bias of such programs and the bias to wage workers over the self-employed, rural displaced workers should be given special treatment to insure that they get their fair share of these funds.

We believe that the implementation of these recommendations would be a positive and significant step in improving the human resource base in rural areas.

How can these recommendations be implemented? We offer sev-
eral suggestions. First, a national-level small area (substate) data base should be constructed so that accurate estimates of program participation by region, race, gender and metropolitan-nonmetropolitan residence can be produced. This type of analysis is required so that program resources can be accurately targeted to the areas and population subgroups with the greatest need. But establishing this study will take time, and meanwhile the rural disadvantaged are falling further behind and becoming less and less competitive for good jobs in the changing economy. Accordingly, we recommend that a preliminary indication of the magnitude and location of access problems to these programs be gained through cooperative extension agents and local government officials.

Second, the land grant university system could be mobilized in favor of rural development. This would require a significant direction of resources and program activities from the present focus on agriculture that characterizes most states. Extension agents at the county, multicounty and state levels; research professors; and land grant administrators could organize effective, high profile networks in support of rural human resource development. Moreover, just as resources are redirected from agriculture to human resources at the state level in the land grant university system, these state-level rural development networks could recommend, directly and through their congressional delegations, that the U.S. Department of Agriculture (USDA) redirect some of its resources (including some of those saved from commodity programs) into human capital programs.

Third, the USDA should aggressively implement the government-wide leadership role in rural development specified for it in the Rural Policy Study of 1980. Without that leadership only marginal changes can be expected at the national level. However, this change by the USDA will not likely happen without grassroots encouragement from state and local government officials, national organizations representing states and local areas, and state-wide networks of cooperative extension agents and faculty at land grant universities.

Clearly, these recommendations require a basic change in philosophy by the USDA, the land grant system and especially by cooperative extension. Purely agriculture issues are of declining salience in most of rural America. Agriculture is but one of the industries that comprise most rural economies and, in many instances, it is a small one at that. Cooperative extension and the land grant system need to look to new constituency groups if they are to remain relevant in the 1990s and beyond. Extension's constituency includes all rural people. The extension network can be an effective proponent for enhanced investment in rural human resources. Moreover, extension itself could focus more of its educational efforts on the knowledge needs of rural people, farm and nonfarm alike, so that they can obtain and retain jobs in the changing American rural economy.
REFERENCES


