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# Rural Problem Areas Need Better Schools

By William S. Folkman

*Education of the youth is recognized by workers in rural development as one of the most hopeful means of achieving satisfactory adjustment in low-income rural areas. Some writers have concluded that inadequacies in this regard represent one of the major causes for the persistence of problems in low-income areas. It is relatively easy to ascertain the quantity of education received by rural youths in low-income rural areas, that is, at 10-year intervals, when census data are available. But it is more difficult to ascertain the quality of education available to low-income rural youth. While factors for which data are available do not directly measure quality of education, it is generally conceded that in our commercially oriented society, there is a rather close relationship between expenditures for school operation and level of education provided. This report brings together and consolidates the information available for the nine generalized problem areas delineated in the Department's report to the President. It is hoped that this will aid workers in rural development to evaluate their own local school situations more effectively. The report is intended also to help them recognize more fully the necessity for improving educational opportunities as an element in community programs.*

**F**ARM PEOPLE in low-income areas in the United States have lower-than-average educational facilities, according to various studies and compilations of data examined for this analysis. U.S. Department of Agriculture report, *Development of Agriculture's Human Resources*,<sup>1</sup> shows that education among farm people 25 years of age and over in 1950 was below average in low-income areas. While other farm people in the Nation averaged over 8½ years of school completed, and more than 1 in 4 was a high school graduate, farm people in problem areas averaged little better than 7 years of schooling and only slightly more than 1 in 10 was a high school graduate (fig. 1).

There was considerable variation among the generalized areas (table 1). The average number of years of schooling completed ranges from 5.5 in the Mississippi Delta to 9.0 in the Cascade and Rocky Mountain areas. In the Delta, nearly 3 in 4 had completed fewer than 8 years of schooling. In the Mountain area, only 1 in 5 had had so little schooling.

In educational achievement, the farm population generally has lagged behind the rest of the population. The average number of years of schooling completed in 1950 by the total U.S. population in this age group was 9.3. Only one State—South Carolina—had as low an average as that of the combined figure for the low-income

areas (7.6). At the other extreme, the population of Utah had an average of 12.0 years of school completed.

Table 1 shows that the educational accomplishment of the adult rural-farm population in those areas classified as serious and substantial problem areas is considerably less than such accomplishment in those considered moderate problem areas. The difference between serious and substantial areas, however, was not large.

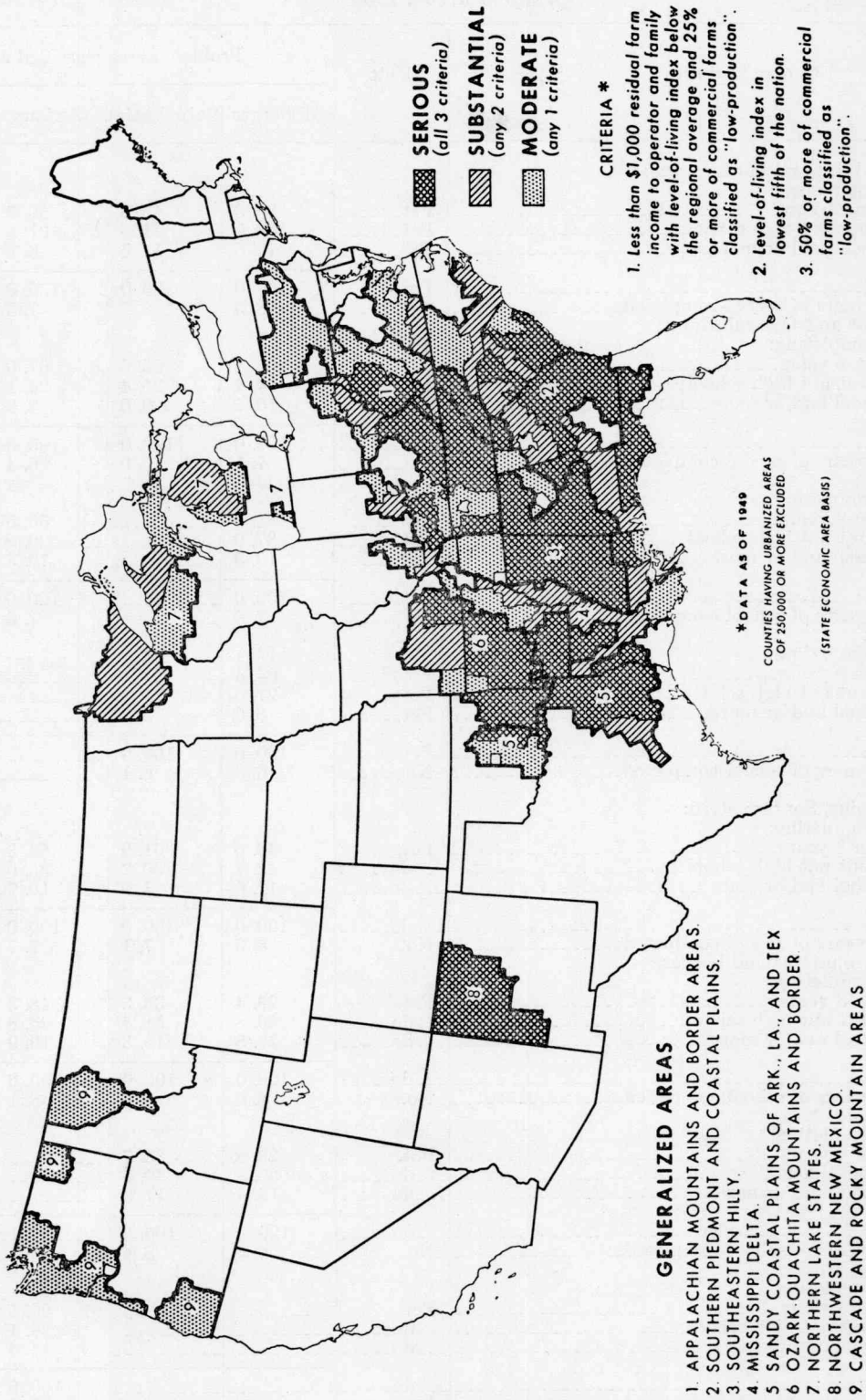
The proportion of pupils who discontinue school attendance before graduating from high school is distressingly high. Although, unfortunately, current data are not available to permit a separate examination of the situation among the young people in low-income rural areas, the situation is generally conceded to be worse in these areas.

However, a student need not drop out of school permanently for his education to suffer. Excessive absenteeism also has a disruptive effect on the educational process. The relationship of average daily attendance (ADA<sup>2</sup>) to enrollment provides an indicator of the prevalence of this condition. Table 2 shows that some of the low-income areas fall considerably below the average for all rural counties as well as the national average. By this measure, the Mississippi Delta and Cascade and Rocky Mountain areas have the lowest figures. Portions of the areas in which the

<sup>1</sup>*Development of Agriculture's Human Resources. A Report on Problems of Low-Income Farmers. Prepared for the Secretary of Agriculture. U.S. Department of Agriculture. April 1955.*

<sup>2</sup>The ADA for a given school is the sum of the days present of all pupils when school was actually in session, divided by the number of days school was actually in session.

# LOW-INCOME AND LEVEL-OF-LIVING AREAS IN AGRICULTURE



PREPARED BY AMS AND ARS

U. S. DEPARTMENT OF AGRICULTURE

NEG. 1804-55 (9) AGRICULTURAL MARKETING SERVICE

Figure 1.

TABLE 1.—*Educational attainment of the rural-farm population, 25 years of age and over, in low-income problem areas, 1950*

Generalized area	Unit	Problem areas classified as			
		Moderate	Substantial	Serious	Average
<b>Appalachian Mountains and border areas:</b>					
Percentage completing:					
Less than 8 years	Pct.	39.8	43.6	59.3	49.4
8 years but not high school	Pct.	43.7	41.8	31.8	37.9
High school and/or more	Pct.	16.5	14.6	8.9	12.7
Total	Pct.	100.0	100.0	100.0	100.0
Median years of school completed	No.	8.3	8.2	7.3	8.0
<b>Southern Piedmont and Coastal Plains:</b>					
Percentage completing:					
Less than 8 years	Pct.	65.1	65.6	67.0	65.9
8 years but not high school	Pct.	24.4	25.4	24.1	24.8
High school and/or more	Pct.	10.5	9.0	8.9	9.3
Total	Pct.	100.0	100.0	100.0	100.0
Median years of school completed	No.	7.1	6.9	6.4	6.8
<b>Southeastern hilly:</b>					
Percentage completing:					
Less than 8 years	Pct.	51.8		60.5	58.7
8 years but not high school	Pct.	37.9		29.2	31.0
High school and/or more	Pct.	10.3		10.3	10.3
Total	Pct.	100.0		100.0	100.0
Median years of school completed	No.	7.8		7.0	7.2
<b>Mississippi Delta:</b>					
Percentage completing:					
Less than 8 years	Pct.	64.4	71.1		73.4
8 years but not high school	Pct.	27.6	17.0		20.1
High school and/or more	Pct.	8.0	5.9		6.5
Total	Pct.	100.0	100.0		100.0
Median years of school completed	No.	6.6	5.1		5.5
<b>Sandy Coastal Plains, Southwestern:</b>					
Percentage completing:					
Less than 8 years	Pct.	40.5	61.9	54.3	53.1
8 years but not high school	do.	42.7	30.2	35.0	35.6
High school and/or more	do.	17.0	7.9	10.7	11.3
Total	do.	100.0	100.0	100.0	100.0
Median years of school completed	No.	8.3	7.1	7.7	7.8
<b>Ozark-Ouachita Mountains and border:</b>					
Percentage completing:					
Less than 8 years	Pct.	29.4	33.3	48.3	41.7
8 years but not high school	do.	50.8	51.4	40.8	45.0
High school and/or more	do.	19.8	15.3	10.9	13.3
Total	do.	100.0	100.0	100.0	100.0
Median years of school completed	No.	8.6	8.4	8.1	8.3
<b>Northern Lake States:</b>					
Percentage completing:					
Less than 8 years	Pct.	29.8	33.7		31.5
8 years but not high school	do.	50.8	49.3		50.1
High school and/or more	do.	19.4	17.0		18.4
Total	do.	100.0	100.0		100.0
Median years of school completed	No.	8.5	8.4		8.5
<b>Northwestern New Mexico:</b>					
Percentage completing:					
Less than 8 years	Pct.			60.5	60.5
8 years but not high school	do.			24.1	24.1
High school and/or more	do.			15.4	15.4
Total	do.			100.0	100.0
Median years of school completed	No.			6.4	6.4



TABLE 1.—*Educational attainment of the rural-farm population, 25 years of age and over, in low-income problem areas, 1950—Continued*

Generalized area	Unit	Problem areas classified as			
		Moderate	Substantial	Serious	Average
<b>Cascade and Rocky Mountain areas:</b>					
Percentage completing:					
Less than 8 years.....	Pct.....	20.3	-----	-----	20.3
8 years but not high school.....	Pct.....	48.5	-----	-----	48.5
High school and/or more.....	Pct.....	31.2	-----	-----	31.2
Total.....	Pct.....	100.0	-----	-----	100.0
Median years of school completed.....	No.....	9.0	-----	-----	9.0
<b>Problem areas, total:</b>					
Percentage completing:					
Less than 8 years.....	Pct.....	45.3	60.0	59.3	55.1
8 years but not high school.....	Pct.....	26.4	29.8	31.0	33.3
High school and/or more.....	Pct.....	28.3	10.2	9.7	11.6
Total.....	Pct.....	100.0	100.0	100.0	100.0
Median years of school completed.....	No.....	8.2	7.2	7.2	7.6
<b>Remainder of U.S. rural-farm:</b>					
Percentage completing:					
Less than 8 years.....	Pct.....	-----	-----	-----	27.4
8 years but not high school.....	Pct.....	-----	-----	-----	46.2
High school and/or more.....	Pct.....	-----	-----	-----	26.4
Total.....	Pct.....	-----	-----	-----	100.0
Median years of school completed.....	No.....	-----	-----	-----	8.7
<b>U.S. total:</b>					
Percentage completing:					
Less than 8 years.....	Pct.....	-----	-----	-----	27.5
8 years but not high school.....	Pct.....	-----	-----	-----	38.2
High school and/or more.....	Pct.....	-----	-----	-----	34.3
Total.....	Pct.....	-----	-----	-----	100.0
Median years of school completed.....	No.....	-----	-----	-----	9.3

Compiled from U.S. Census of Population, 1950.

low-income problem was of "moderate" severity, on the average, showed up more favorably than did those in which the problem was more serious.

### Quality of Education

Although an occasional well-qualified and dedicated teacher continues to serve without regard for salary, generally there is a continual loss of teachers from districts that offer low pay to better paying districts and occupations. The quality of recruits to the profession also suffers. All of this, of course, affects the quality of education. Thus, the scale of teachers' salaries provides a rather effective measure of the level of education maintained in a given area.

The Census of Governments provides data from which teachers' salaries for 1957 can be computed. The average monthly salary paid full-time teachers in the nine generalized problem areas in April 1957 was \$329. This compares with an average for the whole country of \$406. The average April

salary paid full-time teachers in California, the highest State, was \$510. The lowest average salary of any State that year was Arkansas; it was \$255. The average among the areas varies from a low of \$280 in the Southeastern hilly area to the high averages of \$394 in the Northwestern New Mexico area and \$392 for the Northern Lake State areas (table 3).

The data for the rest of the analysis are taken primarily from the Biennial Survey of Education in the United States, 1954-56, but unfortunately separate data for all counties that make up the nine generalized problem areas are not available. Rural schools that were *not* part of a county-unit school system or were not in a rural county<sup>3</sup> were

<sup>3</sup> The Office of Education used the following criteria to identify counties as rural. To be selected, (1) 60 percent or more of the total population of the county had to be rural, i.e., live outside centers of 2,500 or more; (2) in any county with only between 60 and 85 percent of its population reported as rural, at least half of the rural population had to live on farms.

TABLE 2.—Average daily attendance as percentage of enrollment in low-income problem areas, 1955-56

Generalized area	Problem areas classified as—			
	Moderate	Substantial	Serious	Average
	Percent	Percent	Percent	Percent
Appalachian Mountains and Border areas.....	90.0	90.3	88.2	89.0
Southern Piedmont and Coastal Plains.....	87.8	86.4	83.0	85.2
Southeastern hilly.....	90.1	84.3	84.3	85.4
Mississippi Delta.....	86.4	82.1	83.5	83.5
Sandy Coastal Plains, Southwestern.....	91.4	86.4	89.7	89.5
Ozark-Ouachita Mountains and border.....	85.4	85.2	87.8	86.8
Northern Lake States.....	91.1	88.9	88.0	89.9
Northwestern New Mexico.....	84.5	88.0	88.0	88.0
Cascade and Rocky Mountain areas.....	84.5	85.8	86.1	84.5
Problem areas, total.....	88.7	85.8	86.1	86.6
All rural counties.....				87.4
U.S. total.....				89.0

Compiled from Biennial Survey of Education in the United States, 1954-56, Ch. 3, secs. III and IV.

not reported separately. Of the 1,209 counties included in the low-income delineation, data were available for 926, or 77 percent. Data were available for a higher proportion of the counties designated as "serious" than for those classified as "moderate" problem areas—85 percent for the serious counties, 60 percent for the moderate ones. Eighty percent of the counties in the "substantial" category were included. This shows how rural location, or the absence of urban centers, relates to the low-income problem. The main point to be remembered, however, is that in the ensuing presentation the most seriously affected counties are overrepresented.

### Size of School

The size of a school has a bearing on a variety of its aspects. It affects the diversity of the program that can be offered, and the cost per pupil is related to size of enrollment. The character of the relationship a pupil has with the school and its personnel is affected also. Large schools present one set of advantages and problems, small ones a different set, and within certain broad limits, one cannot say with finality which is better. Considering the maturity level of the pupils, many of our elementary schools are probably too large. On the other hand, Conant<sup>4</sup> has indicated that many of our high schools are too small to be able to pro-

<sup>4</sup> Conant, J. B. *The American High School Today*. McGraw-Hill Book Co., New York. 1959.

vide an adequate program. His contention is that a graduating class of at least 100 is necessary to support such a program—this criterion is rapidly becoming accepted as a yardstick.

Rural schools are often pictured in the popular mind as one-room, one-teacher affairs. However accurate this may have been at one time, it is hardly a valid characterization of most rural areas today. Reorganization of school districts and consolidation have brought about widespread changes. The average 1955-56 per-school enrollment of elementary and secondary pupils among the 1,760 rural counties in the United States was 120. The average enrollment for the 926 counties in the generalized problem areas was 166 (table 4). Only the Northern Lake States and the Ozark-Ouachita Mountains and border areas had enrollments below the national average of the rural counties.

The smallness of schools in terms of enrollment is not so much a problem in the Southeast, the area in which most low-income counties are located, as it is in the sparsely populated sections of the Great Plains. In Nebraska, North Dakota, and South Dakota, for example, the average rural school enrollment was about 30 pupils. However, schools in the "serious" counties were considerably smaller than those in the "moderate" counties. Counties where the problem was classified as "substantial" fell into an intermediate position.

We have seen that the average school in the problem areas was considerably larger than the average for all rural counties, but the average enrollment per school for all public schools in the

TABLE 3.—Average April salary of full-time teachers in low-income problem areas, 1957

Generalized area	Problem areas classified as—			
	Moderate	Substantial	Serious	Average
	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
Appalachian Mountains and Border areas.....	346	357	313	333
Southern Piedmont and Coastal Plains.....	330	326	290	314
Southeastern hilly.....	277	-----	281	280
Mississippi Delta.....	341	362	-----	355
Sandy Coastal Plains, Southwestern.....	353	321	341	342
Ozark-Ouachita Mountains and border.....	292	300	296	296
Northern Lake States.....	388	395	-----	392
Northwestern New Mexico.....	-----	-----	394	394
Cascade and Rocky Mountain areas.....	386	-----	-----	386
<i>Problem areas, total</i> .....	346	343	306	329
<i>U.S. total</i> .....	-----	-----	-----	406

Compiled from 1957 Census of Government, vol. 2, No. 1.

Nation was 239. To provide wider perspective, a comparison might be made with urban schools. The smallest city group—population 2,500 to 9,999—had an average enrollment per school of 354. For cities of 25,000 or more, the average was 685.

The size of staff is another related aspect of school quality. A wide variety of courses and services is needed to provide a modern educational program. The necessary talents and skills are less likely to be provided by a small staff, and problems of scheduling are greater. The variation among the generalized areas is rather large; staffs range from 4.5 teachers per school in the Ozark-Ouachita Mountains and border areas to 9.8 in the Southern Piedmont and Coastal Plains area (table 5), which is also the average number of teachers per school for the country as a whole. By degree of seriousness of the low-income problem, the most serious counties, on the average, have a smaller teacher-school ratio; those with a "moderate" problem have a larger ratio.

In many schools in the Plains and Rocky Mountain States, the small number of pupils per teacher produces a serious problem of high per-pupil costs and of restricted programs of instruction. This problem is less serious in areas designated low income. With the typical pattern of settlement found in the South, the density of population is generally such as to provide a sizable school-age population within a given area, provided local school districts are not inordinately small. The average daily attendance (ADA) of 23.5 pupils per teacher is fairly close to the U.S. average of

21.8 (table 6). In general, it would seem that the pupil-teacher ratio does not represent as great a problem for the low-income rural areas as it does for the areas of sparse rural population. Hidden by these averages, however, are undoubtedly some individual schools located in areas where out-migration has resulted in ratios of pupils to teachers that are inefficiently low. In other schools, teachers are probably attempting to cope with excessively large classes. The standards often cited suggest 30 pupils per teacher in the elementary grades and 25 in the secondary grades.

### Expenditures for Education

As indicated earlier, a close relationship exists between amount spent for education and quality of the service provided. Measures of expenditure per pupil, more than most other measures, reveal the weakness of schools in the low-income areas. Current expenses for the U.S. average \$294 per pupil in ADA (table 7). This is almost \$50 more per pupil than that expended in the rural counties, and more than \$100 greater than the average expenditures in low-income counties. Expenses per pupil for instruction (table 8) follow a similar pattern. The amount expended per pupil generally varies inversely with the degree of severity of the low-income problem. Table 8 also shows considerable variation from one area to another. These differences are partly explained by differences in such factors as size of school, pupil-teacher ratio, and so forth, previously discussed. In many of the biracial counties, the relatively small tax income available for the schools is



TABLE 4.—*Enrollment per school in low-income problem areas, 1955-56*

Generalized area	Problem areas classified as—			
	Moderate	Substantial	Serious	Average
	<i>Pupils</i>	<i>Pupils</i>	<i>Pupils</i>	<i>Pupils</i>
Appalachian Mountains and Border areas.....	212	160	125	154
Southern Piedmont and Coastal Plains.....	374	252	264	278
Southeastern hilly.....	158	-----	155	155
Mississippi Delta.....	282	239	-----	253
Sandy Coastal Plains, Southwestern.....	89	132	162	149
Ozark-Ouachita Mountains and border.....	141	94	123	116
Northern Lake States.....	113	114	-----	113
Northwestern New Mexico.....	-----	-----	131	131
Cascade and Rocky Mountain areas.....	176	-----	-----	176
<i>Problem areas, total</i> .....	194	175	149	166
<i>All rural counties</i> .....	-----	-----	-----	120
<i>U.S. total</i> .....	-----	-----	-----	239

Compiled from Biennial Survey of Education in the United States, 1954-56. Ch. 3, secs. III and IV.

TABLE 5.—*Teacher-school ratio in low-income problem areas, 1955-56*

Generalized area	Problem areas classified as—			
	Moderate	Substantial	Serious	Average
Appalachian Mountains and border areas.....	8.4	6.1	4.5	5.8
Southern Piedmont and Coastal Plains.....	13.3	8.7	9.4	9.8
Southeastern hilly.....	5.7	-----	5.3	5.3
Mississippi Delta.....	9.1	6.8	-----	7.5
Sandy Coastal Plains, Southwestern.....	4.2	6.1	7.1	6.0
Ozark-Ouachita Mountains and border.....	5.5	3.7	4.7	4.5
Northern Lake States.....	5.0	5.0	-----	5.0
Northwestern New Mexico.....	-----	-----	6.0	6.0
Cascade and Rocky Mountain areas.....	8.3	-----	-----	8.3
<i>Problem areas, total</i> .....	7.5	6.2	5.5	6.1
<i>U.S. total</i> .....	-----	-----	-----	9.8

Compiled from Biennial Survey of Education in the United States, 1954-56. Ch. 3, secs. III and IV, and 1957 Census of Government, vol. 2, No. 1.

TABLE 6.—*Pupil-teacher ratio (ADA) in low-income problem areas, 1955-56*

Generalized area	Problem areas classified as—			
	Moderate	Substantial	Serious	Average
Appalachian Mountains and Border areas.....	23.2	24.8	24.6	24.2
Southern Piedmont and Coastal Plains.....	26.0	23.9	22.4	23.6
Southeastern hilly.....	25.1	-----	24.3	24.4
Mississippi Delta.....	24.8	24.3	-----	24.4
Sandy Coastal Plains, Southwestern.....	19.5	18.8	20.7	20.5
Ozark-Ouachita Mountains and border.....	21.8	21.9	23.0	22.6
Northern Lake States.....	20.6	20.5	-----	20.5
Northwestern New Mexico.....	-----	-----	21.8	21.8
Cascade and Rocky Mountain areas.....	18.1	-----	-----	18.1
<i>Problem areas, total</i> .....	23.6	23.7	23.3	23.5
<i>U.S. total</i> .....	-----	-----	-----	21.8

Compiled from Biennial Survey of Education in the United States, 1954-56. Ch. 3, sec. III and IV, and 1957 Census of Government, vol. 2, No. 1.



TABLE 7.—Annual expense for instruction per pupil in ADA in low-income problem areas, 1955-56<sup>1</sup>

Generalized area	Problem areas classified as—			
	Moderate	Substantial	Serious	Average
	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
Appalachian Mountains and Border areas.....	139	139	110	122
Southern Piedmont and Coastal Plains.....	129	134	140	136
Southeastern hilly.....	110		113	112
Mississippi Delta.....	117	131		126
Sandy Coastal Plains, Southwestern.....	176	198	172	174
Ozark-Ouachita Mountains and border.....	129	131	121	124
Northern Lake States.....	185	189		187
Northwestern New Mexico.....			209	209
Cascade and Rocky Mountain areas.....	233			233
<i>Problem areas, total</i> .....	137	138	128	133
<i>All rural counties</i> .....				160
<i>U.S. total</i> .....				198

<sup>1</sup> Includes expenditures for supplies, free textbooks, libraries, and other instructional expense in addition to amounts used for salaries and wages of classroom teachers, supervisors and principals, librarians, guidance personnel, and other instructional staff. It does not include operation and maintenance, transportation, or other school services.

Compiled from Biennial Survey of Education in the United States, 1954-56. Ch. 3, Secs. III and IV.

TABLE 8.—Total annual current expenses per pupil in ADA in low-income problem areas, 1955-56

Generalized area	Problem areas classified as—			
	Moderate	Substantial	Serious	Average
	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
Appalachian Mountains and Border areas.....	203	210	153	175
Southern Piedmont and Coastal Plains.....	171	180	186	181
Southeastern hilly.....	157		152	153
Mississippi Delta.....	180	196		191
Sandy Coastal Plains, Southwestern.....	259	264	249	251
Ozark-Ouachita Mountains and border.....	206	219	173	188
Northern Lake States.....	299	312		306
Northwestern New Mexico.....			261	261
Cascade and Rocky Mountain areas.....	358			358
<i>Problem areas, total</i> .....	201	197	175	187
<i>All rural counties</i> .....				246
<i>U.S. total</i> .....				294

Compiled from Biennial Survey of Education in the United States, 1954-56. Ch. 3, secs. III and IV.

further dissipated by the inefficiencies of a dual school system. Also involved are differences in ability and desire to expend more for schools.

### Conclusion

Schools in low-income rural areas share many of the problems faced today by all U.S. schools. Such conditions as rising costs, scarcity of personnel, and population movements affect all schools in some degree. Problems associated with sparsity of population are not so pressing for the low-income area schools as they are for those

in part of the Plains States. On the other hand, problems of adequate school financing are most pressing in these low-income areas.

Other studies show that most of the low-income States expend a higher percentage of their income on education than do some of the more affluent States. Yet these same studies show that the low-income States do not use as high a proportion of their wealth for educational purposes as do some other States that are only slightly more affluent. A significant variable seems to lie in a difference in the value placed on education in relation to other things. Another factor is found in the

prevalent feeling that funds used for educational purposes represent consumption expenses. If they are recognized to be a capital investment, the question of whether the group can afford the expenditure no longer exists—they cannot afford *not* to make the investment.

Whatever decision is made concerning the sources of funds for education, it can be assumed as true that the character of education provided in a local community is of central importance to any plan for its lasting economic and social development.